

A

a or **an** A prefix meaning without or absent.

abaxial (ab-AXE-ee-al) On the side away from the axis.

abbreviatus, -a, -um (a-bree-vee-AY-tus) Shortened; abbreviated.

aberrant (ab-AIR-ant) Unusual or exceptional; a plant or structure that varies from the normal or typical.

abortion (a-BORE-shun) Premature bud or flower drop or poorly developed organ.

abortivus, -a, -um (ab-or-TYE-vus) Imperfectly formed or rudimentary; abortive.

abruptus, -a, -um (ab-RUP-tus) Broken off, or ending suddenly; abrupt.

Acacallis (a-ka-KALL-iss) Now considered synonymous with *Aganisia*, a genus of 3 species from northern South America related to *Zygopetalum*, described by Lindley in 1839.

Acampe (a-KAM-pee) A genus of about 7 tropical Asian and African orchids related to *Vanda* and described by Lindley in 1853, the name derived from the Greek in reference to the brittle rigidity of the small flowers.

Acanthephippium (a-canth-eh-FIP-ee-um) A terrestrial genus of about 15 species from tropical Asia. Blume first described the genus in 1825. He coined the generic name from two Greek words meaning "thorn" and "saddle," probably a reference to the unusual lip.

acaulous (a-kawl-ESS-ent) Stemless, or apparently stemless. *Dendrobium purpureum* has acaulous flowers

acaulis, -e (a-KAW-lis) Having no stem, or only a very short stem.

accessory buds (AK-cess-ORE-ee buds) Buds in addition to those in axils.

acrescent (a-KREE-shent) Said of floral segments enlarging with age.

aceriform (uh-SEER-uh-form) Having leaves similar to those of maple trees.

acerose (as-uh-rohs) Shaped like a needle.

achene small, dry indehiscent fruit derived from a unicarpellate pistil (e.g. *Clematis*)

achlamydeous (ak-luh-MID-ee-uhs) Having no corolla or calyx.

achlorophyllous lacking chlorophyll

Acianthus (A-SEE-an-thus) The 21 terrestrial species in this genus range from Australia north to the Solomon Islands. The genus was first described by R. Brown in 1810. The name comes from the Greek and means "needle flower," a reference to the slender, acuminate sepals and petals.

acicularis, -e (a-sik-yew-LAIR-is) Pointed; needlelike.

acinaciformis, -e (a-sin-a-si-FORM-is) Shaped like a curved sword or scimitar.

Acineta (a-sin-EE-ta) A pendent-flowered genus of about 18 species allied to *Peristeria*, founded by Lindley in 1843, the name referring to the immobility of the lip.

aclandiae (ak-KLAN-dee-eye) In compliment to the late Lady Ackland, wife of Sir Thomas D. Ackland, of Killeton, near Exeter, by whom the *Cattleya* so named was introduced from Brazil.

Acoridium (A-KOR-id-ee-um) There are approximately 60 epiphytic species of this genus native to the Philippines. Nees and Meyen founded the genus in 1843 and used the diminutive for acorum because the leaves resembled those of *Acorus* in the Araceae. The species in this genus are now considered to belong to *Dendrochilum*.

acotyledonous (A-kot-el-EED-un-us) Having no cotyledons.

Acriopsis (AK-ree-op-sis) The seven epiphytic species of this genus are wide spread from Australia to Nepal and east to the Solomon Islands. Blume, in 1825, described the genus and coined the generic name from the Greek word for "locust" to describe the unique column.

acrotonic (ah-KROW-tawn-ik) Developing at the tip.

actinomorphic (AK-tin-O-more-fik) Said of a symmetrical flower capable of bisecting in two or more planes into like halves.

aculeatus, -a, -um (ak-yew-lee-AY-tus) Prickly; sharp-pointed; aculeate.

acuminatus, -a, -um (ak-yew-min-AY-tus) Tapering into a long narrow point; acuminate.

acutus, -a, -um (ak-YEW-tus) With a sharp but not tapering point; an angle of less than 90 degrees; acute.

Ada (AY-da) A genus of 16 species from Central and northern South America, allied to *Brassia* described by Lindley in 1853. The name refers to Ada, sister of Artemisia in Caria, a historical character.

AD/AOS An American Orchid Society award denoting an Award of Distinction, which is given once to a cross, exhibited individually or collectively, representing a worthy new direction in breeding.

adaxial (add-AXE-ee-al) Toward the axis, upper surface.

adherent (ad-HEER-ent) Attached or joined (but not fused), though normally separate.

adnatus, -a, -um (ad-NAY-tus) Having one organ attached wholly or in part to a dissimilar organ; joined together; adnate.

aduncus, -a, -um (a-DUN-kus) Curved inward; hooked; aduncous.

adventitious (ad-ven-TISH-us) Referring to roots not directly derived from the embryonic root or radicle. All orchid roots are adventitious.

adventive (ad-VEN-tive) Growing spontaneously, but not native; an imperfectly or partially naturalized exotic.

aemulus, -a, -um (EYE-mew-lus) Rivaling; hence superior, very handsome.

Aerangis (ay-er-RANG-giss) An African genus of about 50 species related to *Angraecum*, established by Reichenbach in 1865, the name meaning "air vessel," probably in allusion to the long spur.

Aeranthes (ay-er-AN-theez) A genus of about 48 species of Sarcanthine orchids chiefly from Madagascar and adjacent islands, characterized by their complex flowers; the genus having been described by Lindley in 1824 and named in allusion to the epiphytic habit of the plants.

aerial roots (AIR-ee-al) Roots produced above or out of the growing medium.

Aerides (ay-air-EE-dees) A vandaceous genus of about 26 species from tropical Asia noted for their fragrant pendent racemes. The genus was first described by Juan Lourerio in 1790, who derived the generic name from Greek to describe these epiphytic plants.

Aeridovanda (ay-air-EE-doh-VAN-dah) A hybrid genus between *Aerides* and *Vanda* created in 1918.

aestival (eh-STEE-vuhl) Flowering or appearing in the summer.

aestivation (es-ti-VAY-shun) The arrangement of floral parts in the bud.

affinis, -e (af-FYE-nis) Related or similar to; often used in the sense of doubtful or ambiguous.

affinity (a-FINN-i-tee) A biological relationship among species or higher taxa dependent upon resemblance of general characters.

afoliate without leaves

africanus, -a, -um (af-rik-KAY-nus) Native of Africa; African.

Aganisia (ag-an-IZ-ee-ah) A genus of three tropical South American orchid species related to *Zygopetalum*, some of which are blue-flowered; it was founded by Lindley in 1839. *Acacallis* is now considered to be synonymous.

agar (AH-ger) Agar-agar; a gelatinous substance derived from certain seaweeds and used as a solidifying agent in culture media; the culture medium made from agar and used for germinating orchid seed, meristem tissue and the like.

agglomerate (a-GLOM-er-ayt) To gather together in a cluster or mass; collected into a mass but not coherent.

agglutinate (a-GLOO-tin-ayt) To unite together with some sticky or viscous substance; united as with a glue.

aggregatus, -a, -um (ag-greg-GAY-tus) Clustered in a dense mass; aggregate.

aianthous flowering constantly

ala (alae) A wing (wings).

Alamania (AL-ah-MAN-ee-ah) This monotypic (having only one species) epiphytic genus from Mexico was described by La Llave and Lexarza in 1825 and named in honor of their Mexican friend Don Lucas Alaman, a public official.

alatus, -a, -um (al-AY-tus) Winged; having wings or winglike parts; alate.

alba or *album* (AL-buh, AL-bum) White; often used to describe a white or pale phase of a species or hybrid whose flowers normally are colored.

albescens (al-BESS-senz) Whitish; becoming white.

albidofulvus, -a, -um (al-bid-oh-FULL-vus) Yellow and white.

albidus, -a, -um (AL-bid-us) Whitish.

albino (al-BYE-no) A plant with a marked deficiency in pigmentation.

albostrigatus, -a, -um (al-bo-strye-AY-tus) Striped with white.

albus, -a, -um (AL-bus) White.

ALEXANDER, H.G. (1875—1972) British orchid grower and hybridizer associated with the famous Westonbirt orchids, first as grower to Sir George Holford and, after Sir George's death in 1926, as head of firm of H.G. Alexander, Ltd.

alifolius, -a, -um (al-lee-FOH-lee-us) Winged-leaved.

allele (ah-LEEL) One of the alternate forms of a given gene, the alleles being dominant, recessive or incompletely dominant.

ALLEN, PAUL (1911—1963) American orchidologist with extensive knowledge of Costa Rican and Panamanian orchids, coauthored with L.O. Williams the *Orchidaceae of the Flora of Panama* (1946—1949).

alliaceous (al-ee-AY-shus) Smelling or tasting like garlic.

alliance (a-LIE-ance) A group plants associated by appearance, genetics or classification.

allopatric (al-O-PAT-rick) Being present in different areas that do not overlap.

allopolyploid (AL-loh-ployd) Individuals that arise after crossing two species or genera and contain genetically different chromosome sets from each of the parents; the chromosome sets are homoeologous (completely homologous in an ancestry) to each other. Each set being present either once (diploid) or in greater numbers (allopolyploid).

aloifolius, -a, -um (al-oh-i-FOH-lee-us) With leaves like an aloe.

alpestris, -e (al-PEST-ris) Of the lower mountains.

alpinus, -a, -um (al-PYE-nus). From high mountains; alpine.

alternate (awl-ter-NATE) Any arrangement of leaves or other parts not opposite or whorled; placed singly at different heights on the axis or stem.

altissimus, -a, -um (al-TISS-eh-mus) Very tall, or tallest of its congeners.

altus, -a, -um (AL-tus) Tall.

alveolatus, -a, -um (al-vee-oh-LAY-tus) Honeycombed, or pitted with angular separated depressions; alveolate.

AM/AOS An American Orchid Society flower award denoting an Award of Merit; given to an orchid species or hybrid that scores between 80 and 89 points out of a possible 100 points. If given by another society, e.g., Royal Horticultural Society (London), it would read AM/RHS. This is the way it appears on plant labels.

amabilis, -e (ah-MAH-bill-iss) Lovely.

ambiguus, -a, -um (am-BIG-yew-us) Doubtful, uncertain; ambiguous.

Amblostoma (am-BLOW-stow-ma) This South and Central American genus consists of nine species. Scheidweiler described this epiphytic genus in 1838 and coined the name from the Greek words for "blunt" and "mouth," a reference to the fact that the lip is attached to the column. This name is now considered to be synonymous with *Epidendrum*.

amboinensis, -e (am-boy-NEN-sis) Native to the island of Amboina in the Malayan archipelago.

ament usually pendulous spike-like inflorescence of unisexual, sessile to subsessile, apetalous flowers.

AMES, BLANCHE (1878—1969) Wife of Oakes Ames, noted for her fine illustration talent, she designed the Society's logo, which is rendered on the AOS Gold Medal of Achievement, which she received in 1924.

Amesiella (Ames-EE-el-ah) Originally thought to be an *Angraecum* until Garay validated it as a genus in 1972 and named in honor of Oakes Ames, a Harvard botanist. This epiphytic genus comes from the Philippines and contains three species.

AMES, OAKES (1874—1950) Prominent American orchidologist, author of numerous taxonomic works and papers, and recipient of the AOS Gold Medal of Achievement in 1924, he established the Oakes Ames Orchid Herbarium and Library at Harvard University where he taught and worked for more than 50 years.

amesianus, -a, -um (aims-ee-AY-nus) Commemorating a member of the Ames family.

amethystinus, -a, -um (am-eh-this-TYE-nus) Pale violet in color.

amethystoglossus, -a, -um (am-e-this-toh-GLOSS-us) Having an amethyst-colored lip.

Ammophilous Sand-loving

amoenus, -a, -um (am-EEN-us) Charming; delightful.

amorphous (a-MORE-fuss) Formless; of no definite or constant form.

amphigean (am-fi-JEE-an) Found in both hemispheres; of both Old World and New World; said of the distribution of plants.

amplexicaulis, -e (am-plex-i-KAW-lis) With leaves or bracts clasping the stem.

ampliatus, -a, -um (am-plee-AY-tus) Enlarged.

amplus, -a, -um (AM-plus) Large and thus fine, noble.

ampullaceus, -a, -um (am-pew-LAY-see-us) Flask- or bottle-shaped.

Anacamptis (AN-ah-CAMP-tis) There are twelve terrestrial species and numerous varietal forms and natural hybrids in this genus from Europe, Asia Minor and North Africa. Richard described the genus in 1818 and derived the generic name from the Greek word anakamptoin (to bend back) to describe the reflexed pollinia.

analogous (an-AL-o-gus) Related in function or use but not in origin.

anastomosing (a-NASS-toh-moh-zing) Netted; interveined; said of leaves marked by a network of veins, reticulated

anceps (AN-seps) Two-edged, such as in a flattened stem.

ancipitous (an-SIP-i-tus) Compressed or flattened, two-edged.

ancipital (an-SIP-i-tahl) Having two edges.

Ancistrochilus (an-siss-troe-KYE-luss) The 2 species in this genus are found in tropical Africa. The genus was first described in 1907 by Finet, who coined the generic name from two Greek words meaning "hook" and "beak," a reference to the hooklike rostellum found in these epiphytic species.

androgynous (an-DROJ-in-us) Having both male and female flowers on the same inflorescence; being both male and female; hermaphroditic.

androecium (an-DREE-see-um) The stamen-bearing or "male part" part of a flower; the stamens spoken of collectively.

aneuploid (an-EWE-ployd) A genetic aberration having a chromosome number that is not a multiple of the base number.

angiosperm (AN-jee-oh-spurm) Any plant of a class (Angiosperma) having the seeds in a closed ovary; a flowering plant.

angraecoid (an-GREE-koyd or an-GRYE-koyd) African orchids resembling *Angraecum* in habit.

Angraecopsis. A widespread tropical African and Madagascar genus of 16 epiphytic species first described by Kraenzlin in 1900. The generic name indicates that the plants look like *Angraecum*.

Angraecum (an-GREY-kum or an-GRYE-kum) A genus of over 200 species of African vandaceous orchids centered mainly in Africa and Madagascar, the name being Latinized from the Malay Angurek, which refers to all epiphytic orchids of similar habit. It was established by Bory in 1804.

Angranthes (an-GRAN-theez) A hybrid genus between *Aeranthus* and *Angraecum* created in 1975.

Anguloa (an-gyew-LOH-ah) A genus of nine species and numerous natural hybrids from the Andes, allied to *Lycaste*. It was named in 1794 by Ruiz and Pavon in honor of Don Francisco de Angulo, Director of Mines in Peru.

Angulocaste (an-gyew-low-CASS-tee) A hybrid genus between *Anguloa* and *Lycaste* created in 1903.

angustifolius, -a, -um (an-gus-ti-FOH-lee-us) Having narrow leaves.

Anneliesia (ann-eh-LEES-ee-ah) This Brazilian epiphytic genus was described by Brieger and Lueckel in 1903 and named in honor of Brieger's wife, Anneliese. It is now considered by many taxonomists to be synonymous with *Miltonia*.

annual (an-yew-ul) A plant that completes its life cycle from seed to death in one year.

annularis, -e (an-yew-LAIR-is) Ring-shaped.

annulatus, -a, -um (an-yew-LAY-tus) Furnished with rings.

Anoectochilus (ah-nek-toh-KYE-luss) A genus of about 51 species of "jewel orchids" found in Southeast Asia and Australia closely related to *Macodes*, described by Blume in 1825, the name referring to the open aspect of the lip.

anomalus, -a, -um (an-OM-al-us) Deviating from the normal or type; abnormal; anomalous.

anosmus, -a, -um (an-OZ-mus) Having no scent.

Ansellia (an-SELL-ee-a) A genus of one rather variable epiphytic or lithophytic orchid species from tropical Africa, named by Lindley in 1844 in honor of John Ansell, English botanist of the Royal Horticultural Society's Chiswick Gardens.

antenniferus, -a, -um (an-ten-IF-fer-us) Bearing antennae.

anterior (an-TEER-ee-or) On the front or forward end or side of an organ or flower.

anther (AN-ther) The part of a stamen containing the pollen; in orchids the top part of the column.

anthelate Having long branches bearing flowers.

anther cap (AN-ther kap) The covering of the pollen-masses on the flower's column; the operculum.

anthesis (an-THEE-siss) The period or state of expansion in a flower.

anthocyanin (an-THO-sigh-a-nin) A type of naturally occurring flavonoid pigment that is especially common within flowers and is responsible for red through blue colors; these pigments vary in color according to the pH of the cell sap, presence of metal ions and the concentration of co-pigments.

antipodal (an-TIP-oh-dal) On the opposite sides of the globe; diametrically opposite.

antrorse (an-TRORSS) Directed forward or upward (opposite of retrorse).

apertus, -a, -um (ap-ERT-us) Exposed; bare; open.

apetalous (a-PET-a-lus) Having no petals.

apex (AY-pex) The tip of an organ.

aphid (AY-fid) A plant-sucking insect that attacks soft tissue.

aphyllus, -a, -um (a-FILL-us) Without leaves, or nearly so; aphyllous.

apiatus, -a, -um (a-pee-AY-tus) Beelike.

apical (AY-pik-al) At or pertaining to the tip of any structure.

apiculatus, -a, -um (a-pik-yew-LAY-tus) Ending abruptly in a short sharp point; apiculate.

apicule (AY-pik-yewl) A short-pointed tip at the apex of a leaf or floral segment.

apiferus, -a, -um (a-PIFF-er-us) From *apis*, a bee, and *fero*, to bear; literally, bearing bees, alluding to the beelike shape of the flowers.

Aplectrum (ay-PLEK-trum) A monotypic genus from North America, related to *Corallorhiza* and *Hexalectris*. First described by Nuttall in 1818, the name is derived from the Greek meaning "without a spur," in allusion to the spurless lip of the flower.

apocarpous (ap-uh-KAR-puhs) Having separate carpels.

apogamous (ap-oh-GAM-us) Said of pods developing without fertilization.

apomixis (ap-oh-MIX-us) The production of seeds through asexual methods instead of the normal sexual means.

apomorphy (AP-oh-morf-ee) A cladistic term defining a derived character state.

appendage (uh-PEN-didge) An attached subsidiary or secondary part.

appendiculatus, -a, -um (a-pen-dik-yew-LAY-tus) Having appendages, such as a crest, hairs, etc.

appressus, -a, -um (ap-PRESS-us) Pressed close to, or lying flat against another organ.

approximate (uh-prox-eh-MATE) Situated near or close together.

apterus, -a, -um (ap-TER-us) Wingless.

AQ An American Orchid Society award denoting an Award of Quality, awarded once to a cross, exhibited by a single individual as a group of not less than 12 different clones or the inflorescences thereof, of a raised species or hybrid that may or may not have been made before, when the result is a sufficient improvement over the former type. At least one cultivar exhibited must receive, or have received, a flower quality award.

aquatic Growing or living in water.

Arachnis (a-RACK-niss) A genus of 11 tropical Asiatic orchid species related to *Renanthera* and *Vanda*, named by Blume in 1825 in reference to the spiderlike flowers.

arachnoid (a-RACK-noyd) Cobwebby, by way of soft and slender entangled hairs; also spider-like; similar to *Arachnis*.

arboreous (ahr-BORE-ee-us) Pertaining to trees.

arcuate (AR-kyew-ayt) Arched or curved like a bow.

aremiacus (Being fragrant.

areole (AIR-ee-ole) A small area on a surface; an interstice, such as between veins of a leaf.

Arethusa (air-eh-THEW-za) A genus of one bog orchid species from North America known to Linnaeus in 1753 but named earlier by Gronovius in dedication to the wood nymph Arethusa, who fled from the river god Alpheus, and entered Sicily as a fountain. At one time, a second species was described as *Arethusa japonica* however that species is now considered to belong to *Eleorchis*.

argenteus, -a, -um (ar-JEN-tee-us) Silvery.

argus (AR-gus) A specific name in reference to Argus, the hundred-eyed monster of Greek mythology sent to watch Io.

arietinus, -a, -um (a-ri-eh-TYE-nus) Shaped like a ram's head.

aristatus, -a, -um (a-ris-TAY-tus) Bearded; furnished with a long, bristle-like appendage; aristate.

armed (are-md) Provided with any kind of strong and sharp defense, such as thorns, spines, prickles, barbs, etc; also armature

armeniacus, -a, -um (ar-men-i-AY-kus) Apricot-colored.

Armodorum (are-mow-DOOR-um) South China, Southeast Asia and the Malay Peninsular are home to the four species of epiphytic or terrestrial orchids in this genus. The generic name was derived by Breda in 1827 from two Greek words meaning "crack in the wall" and "gift." The name indicates that these plants grow in cracks in rocks in their native habitat.

aromaticus, -a, -um (air-oh-MAT-ik-us) Fragrant; aromatic.

Arpophyllum (ar-poh-FILL-um) A genus of approximately four species of mostly Central American orchids often called "hyacinth orchids" because of the dense spike of rose-colored flowers, it is related to *Ponera*. It was described in 1825 by La Llave and Lexarza, the sickle-shaped leaves of the type species giving rise to the generic name.

articulatus, -a, -um (ar-tik-yew-LAY-tus) Jointed; articulate.

artificial hybrid (ar-ti-FISH-ul HYE-brid) The offspring of an artificial cross between two dissimilar parents, that is, parents not of the same species of hybrid grex; any plant progeny produced with man as the pollinating agent.

Arundina (air-un-DYE-na) A monotypic genus of orchids similar to *Sobralia*, described by Blume in 1825, the name referring to the reedlike stems. Native to Southeast Asia,

Arundina has become naturalized in many tropical countries.

ascendens (a-SEN-denz) Rising somewhat obliquely or curving upward; ascending.

Ascocenda (ass-koh-SEN-dah) A hybrid genus between *Ascocentrum* and *Vanda* created in 1949.

Ascocentrum (ass-koh-SEN-trum) A genus of about 13 compact-growing monopodial orchids from Southeast Asia and the Malayan Archipelago, allied to *Vanda* (the hybrid being *Ascocenda*), It was described by Schlechter in 1913, the name referring to the baglike spur at the base of the lip.

Ascoglossum (ass-koh-GLOSS-um) A monotypic genus from New Guinea and the Solomon Islands that was described by Schlechter in 1913. He derived the generic name from two Greek words meaning "bag" and "tongue" to describe the baglike lip with its pointed mid lobe.

asepalous (ay-SEP-a-lus) Having no sepals.

asexual (ay-SEK-shu-al) Sexless; without involving sex, such as a vegetative propagation.

Aspasia (a-SPAY-zee-a) A genus of about nine species in the *Oncidium* Alliance, described by Lindley in 1832, the name in tribute to Aspasia, wife of Pericles.

asper, -a, -um (AS-per) Rough.

asperatus, -a, -um (as-per-AY-tus) Roughened; asperate.

assurgent (ass-UR-gent) Ascending.

asymbiotic (ay-sim-bi-AH-tik) Without symbiosis; referring to a method of germinating orchid seed without the presence of fungi.

asymmetrical (ay-sim-MET-ri-kal) Not symmetrical; having no regular shape.

atratus, -a, -um (a-TRAY-tus) Blackish; dark.

atropurpureus, -a, -um (a-troh-pur-PUR-ee-us) Dark purple.

atorubens (at-roh-REW-benz) Deep reddish.

attenuatus, -a, -um (at-ten-yew-AY-tus) Narrowing to a point; attenuated.

augustifolius, -a, -um (aw-gus-ti-FO-lee-us) Having broad leaves.

augustus, -a, -um (aw-GUS-tus) Majestic; noble; august.

aurantiacus, -a, -um (aw-ran-tee-AY-kus) Orange-colored.

aureoflavus, -a, -um (aw-ree-o-FLAY-vus) Golden yellow.

aureus, -a, -um (AW-ree-us) Gold-colored; golden.

auricle (AW-rik-ul) A small earlike appendage or lobe.

auriculatus, -a, -um (aw-rik-yew-LAY-tus) Furnished with earlike appendages; auriculate.

australasia (aw-struh-LAY-shuh) A variably defined biogeographic area that includes Australia, New Guinea and associated biogeographic area, frequently identical to the area east of Wallace's line.

australis, -e (aw-STRAY-lis) Southern.

autogamy self-pollination, self-compatibility.

autophyte (AW-toh-fite) A green plant capable of manufacturing its own food, neither saprophytic nor parasitic.

autoploid (AW-toh-ployd) Individuals with chromosome sets characteristic of the species in question; the chromosome sets are homologous to each other. Each set being present either once (diploid) or in greater numbers (autopolyploid).

autotrophic (aw-TROW-fick) Having the ability to produce its own food.

autumnalis, -e (aw-tum-NAY-lis) Autumn-flowering; autumnal.

auxin (AWK-zin) A class of plant hormones responsible for regulating certain types of growth, e.g., apical dominance.

auxotroph (AWKS-oh-trohf) An organism that has nutritional requirements for specific substances, e.g. enzymes, proteins, carbohydrates.

awl-shaped (ahl-shaped) Narrow and sharp-pointed; gradually tapering from base to a slender or stiff point; subulate.

awn (awn) A bristlelike part or appendage; any small, pointed process.

axil (AK-sil) The angle between a branch or leaf and the stem or axis from which it arises.

axillaris, -e (ax-ill-AIR-is) Borne in the axil; axillary.

axis (AK-is) The main or central line of development of any plant or organ; the main stem.

azalea pot (uh-ZAYL-yuh pot) A proportionately broad, shallow pot, usually two thirds the height of a standard pot.

B

bacillaris, -e (bass-ill-AIR-iss) Stick- or stafflike.

backbulb (bak-buhlb) An old pseudobulb, often without leaves but still alive and bearing one or more eyes, frequently used for propagation, located behind the actively growing portion of a sympodial orchid.

back cross (bak-KROSS) A mating between hybrid progeny and one of the original parents.

bactericide (bak-TEER-i-side) A chemical substance that destroys bacteria.

bambusifolius, -a, -um (bam-boo-see-FOH-lee-us) Bamboo-leaved.

banded (BAN-did) Marked with crossbars or horizontal lines of color, or with very prominent ribs or other structure.

Baptistonia (bap-tist-OWN-ee-ah) A monotypic epiphytic genus endemic to Brazil founded in 1877 by Barbosa Rodrigues and named in honor of Dr. Baptista Caetano d'A Nogueira. This genus is closely related to *Oncidium* and many taxonomists now consider it to be a synonym of the latter. .

barb (barhrb) A short point or bristle; usually employed to designate points with reflexed or hooklike appendages.

barbatulus, -a, -um (bar-BAT-yew-lus) Somewhat bearded; the beard small.

barbatus, -a, -um (bar-BAY-tus) Bearded, i.e., provided or beset with long weak hairs or terminating in a mass of hairs, usually more or less straight and parallel. The negative is expressed by imberbis.

barbigerus, -a, -um (bar-BIJ-er-us) Bearded or bearing a beard, alluding to the fringed lip of many plants.

Barbosella (bar-bow-SELL-ah) A genus of epiphytic orchids ranging from Costa Rica south to Argentina. Schlechter described the genus in 1918. The name honors Dr. João Barbosa Rodrigues, a Brazilian botanist. Some taxonomists consider there to be as many as 70 or more species while the World Checklist of Monocotyledons recognizes 19.

barbulatus, -a, -um (bar-bew-LAY-tus) Somewhat bearded, or with fine or short beard; barbulate bark. The word is often used in a general way to designate the softer outer envelope of a stem or root. In this sense, it includes all that peels readily, as the bark of the hemlock and oak, used for tanning leather. In a stricter sense, it is applied to the corky layers formed on the outer surface of woody plants. It is formed from the active layer of tissue, the phellogen.

bare-root (bair-root) of or pertaining to a plant prepared for transplanting or repotting by having all or most of the medium removed from its roots.

Barkeria (bar-CARE-ee-ah) A genus of 15 Mesoamerican species with a diversity in Mexico, previously included in a broadly defined *Epidendrum*.

Barlia (BAR-lee-ah) A small terrestrial genus of two species from southern Europe and northern Africa. Parlatore described the genus in 1858, naming it in honor of the Italian botanist Sr, Barla, who collected the original material.

Bartholina (barth-oh-LEE-nah) The two terrestrial species in this genus can be found in Cape Town, South Africa. The genus was founded by Robert Brown in 1813 and named in honor of Thomas Bartholin, a Danish anatomist.

basal (BAY-suhl) At or close to the base.

basilaris, -e (bay-sil-AIR-iss) Pertaining to or at the bottom; basal.

basket (BASS-kit) A container for growing orchids, usually made of interlocked strips of wood, that offers maximum drainage and aeration of the growing medium.

basitonic (BASE-eh-tawn-ick) When the rostellum or viscidium are connected to the base of the anther.

BATEMAN, JAMES (1811—1897) An English orchidist and orchidologist, noted for his several outstanding books on orchids, particularly the elephantine volume *Orchids of Mexico and Guatemala*, published 1837—1843, and *A Monograph of Odontoglossum*.

Batemannia (bayt-MAN-nee-ah) A genus of epiphytic orchids with about five species from northern South America, closely related to *Lycaste*, *Zygosepalum* and *Promenaea*, it was founded in 1834 by Lindley in compliment to James Bateman.

Bauer, Franz Andreas (1758—1840) An outstanding botanical illustrator and artist who worked with Lindley on orchids.

beak (beek) A long, prominent and substantial point, applied particularly to prolongations of fruits and carpels.

Beallara (bee-ul-AH-rah) A former hybrid genus derived from *Brassia*, *Cochlioda*, *Miltonia* and *Odontoglossum*, it was created in 1970 and named after Beall's Nursery. With the reorganization of the Oncioidinae, this hybrid genus now becomes *Aliceara*.

beard (beerd) A long awn or bristle-like hairs.

bellus, -a, -um (BELL-us) Beautiful; handsome.

BENTHAM, GEORGE (1800—1884) An English botanist who was joint author with Dr. J.D. Hooker in the monumental work *Genera Plantarum*, a treatment of all genera of plants known at that time (Vol. III, Orchideae, pp. 460—636, 1883).

bi- or *bis-* (BYE, BISS) In Latin compounds, signifying "two" or "twice."

bialatus, -a, -um (bye-ah-LAY-tus) Two-winged.

bicalcaratus, -a, -um (bye-kal-ka-RAY-tus) Two-spurred; having two spurs; bicalcarate.

bicallosus, -a, -um (bye-kal-LOH-sus) Having two calluses, or hard projections on lip.

bicameratus, -a, -um (bye-kam-er-RAY-tus) Having two chambers; bicameral.

bicolor (BYE-koll-or) Two-colored.

bicornis, -e (bye-KORN-is) Two-horned; having two horns or hornlike spurs.

bicornutus, -a, -um (bye-kor-NEW-tus) Two-horned.

bictoniensis, -e (bik-toh-nee-EN-sis) Of Bicton, near Sidmouth, England and refers to the house of Lord Rolle.

bidens (BYE-denz) Two-toothed.

bidentatus, -a, -um (bye-den-TAY-tus) Having two teeth; bidentate.

biennial (BYE-en-ee-uhl) Of two seasons' duration from seed to maturity and death.

bifarious (bye-FAIR-ee-us) Arranged in two rows.

bifidus, -a, -um (BYE-fid-us) Split in two to the middle; divided into two equal parts; bifid.

bifoliate (BYE-foll-ee-it) Having two leaves; two-leaved.

biforate (BYE-for-ayt) With two openings, pores or apertures.

Bifrenaria (bye-fren-AIR-ee-a) A genus of about 21 species related to *Lycaste*, from Central and South America, described by Lindley in 1833, the name alluding to the two caudicles on the pollinia.

bifurcatus, -a, -um (bye-fur-KAY-tus) Two-forked or two-pronged; split into two branches; bifurcate.

bigeneric (bye-jen-AIR-ik) Involving two distinct genera in the parentage; applied to hybrids.

bigibbus, -a, -um (bye-GIB-bus) Having two small protuberances.

bilabiate (BYE-lay-bee-it) Two lips.

bilamellatus, -a, -um (bye-lam-ell-LAY-tus) Bearing or consisting of two plates; bilamellate.

bilateral (bye-LATT-er-al) Having a body composed of only two corresponding halves, each half a mirror image of the other.

bilobate (bye-LOH-bayt) Two-lobed; parted into two lobes; bilobed.

bilocular (bye-LOCK-yew-lar) Two-celled; with two locules or compartments.

bipartite (bye-PAR-tite) Divided into two parts; separated nearly to base.

bipinnatus, -a, -um (bye-pin-AY-tus) Twice-pinnate; when the primary divisions are pinnate.

bipunctatus, -a, -um (by-punk-TAY-tus) Having two dots or spots.

bisexual (bye-SEKS-yew-al) Two-sexed; with both stamens and pistils.

Bl See *Brassolaelia*.

blade (bleyd) The expanded portion of a leaf or floral segment.

blandus, -a, -um (BLAN-dus) Pleasing; charming; tempting; alluring.

Blc See *Brassolaeliocattleya*.

Bletia (BLEE-tee-a or BLAY-tee-ah) A genus of American terrestrial orchids comprising some 35 species with greatest diversity in Mexico, resembling *Spathoglottis*, described by Ruiz and Pavon in 1794 in honor of Don Luis Blet, a Spanish apothecary of the 18th century, who maintained a botanic garden in Algeciras.

Bletilla (blee-TILL-a or blay-till-ah) A genus of terrestrial orchids with around five species from (the region embracing China, Japan and Formosa), allied to the American genera of *Arethusa* and *Calopogon*, it was described by Reichenbach in 1853, the name implying its resemblance to the genus *Bletia*, to which it is only distantly related. Sold commercially as hardy Chinese orchid.

bloom (bloom) A white powdery covering on the surface, may be waxy. Also another name for a flower.

BLUME, KARL LUDWIG (1796—1862) An early Dutch botanist who worked extensively on the flora of the area now known as Indonesia. He described many orchids including *Phalaenopsis*.

boisduval scale (BWAS-doo-vahl skayl) A pernicious sucking insect characterized by white extruded waxy coatings.

boliviensis, -e (bo-liv-ee-EN-sis) Native of Bolivia; Bolivian.

Bolusiella (bowl-us-EE-ell-ah) There are about six epiphytic species in this tropical African genus. Schlechter named the genus in 1918 in honor of Sir Harry Bolus, a pioneer South African botanist.

Bollea (BOH-lee-a) A genus of 10 species of high-elevation South American epiphytic orchids allied to *Huntleya* and *Cochleanthes*. It was described by Reichenbach in 1852, being dedicated to Dr. Karl Bolle, a German patron of horticulture. This genus is now considered by many taxonomists to be synonymous with *Pescatorea*.

BOLUS, HENRY (1834—1911) A British botanist and student of the orchids of South Africa, author of the three-volume work *Orchids of South Africa*, published 1893—1913.

Bonatea (bone-AH-tee-ah) A tropical South African genus of approximately 17 species of terrestrial orchids. The genus was named by Wildenow in 1805 in honor of the Italian botanist M. Bonat.

borealis, -e (bor-ee-AL-iss) Northern; of the north.

boss (baws) A prominent center or projection on a flat and more or less circular surface.

botanical (bo-TAN-i-kul) A term designating any species, genus or orchid that is not grown commercially for its flowers.

bordered with the edge of a different color.

boss A protuberance or projection from a surface or organ.

Bothriochilus (both-ree-oh-KYE-liss) There are four species in this genus native from Mexico south to Panama. Lemaire described the genus in 1852, coining the name from two Greek words meaning "small hollow tip." The species in this genus may be epiphytic, terrestrial or lithophytes. The genus is now considered by many taxonomists to be synonymous with *Coelia*.

BOXALL, WILLIAM (1884—1910) A British orchid collector who worked extensively in tropical Asia, especially in the Philippines, and whose name is commemorated in numerous species.

Brachtia (brackt-EE-ah) This epiphytic genus was named in honor of an Austro-Hungarian military officer, Captain Bracht, who collected plants in northern Italy. H.G. Reichenbach described this genus of seven Andean species in 1850. It closely resembles *Brassia*

brachiatus, -a, -um (brack-ee-AY-tus) Branched or having arms; in *Brassia* it refers to the very long tails; brachiate.

Brachycorythis (brack-ee-ko-RYE-thiss) A genus of about 36 species of tropical African and Asian terrestrial orchids somewhat related to *Orchis* and to *Habenaria*. It was described by Lindley in 1838, the name derived from the Greek meaning "short helmet" in allusion to the shape of the flowers.

brachypetalus, -a, -um (brack-ee-PET-a-lus) Having petals like arms.

bract (brakt) A reduced leaflike or scalelike organ embracing the base of the flower stem or aggregation of flowers.

bracteatus, -a, -um (brack-tee-AY-tus) Bracted; having several or many bracts; bracteate.

bracteiform (BRACK-tee-form) Of the shape and form of a bract.

bracteole (BRACK-tee-ohl) A small bract.

bracteosus, -a, -um (brak-tee-OH-suss) With numerous or conspicuous bracts.

bractescens (brak-TESS-enz) Having very large bracts or a strong tendency to develop bracts.

brasiliensis, -e (brah-zil-ee-EN-siss) Native of Brazil; Brazilian.

Brassavola (bra-SAH-voh-lah) A genus of about 20 tropical American orchids closely allied to *Cattleya* and *Laelia*, described by Robert Brown in 1813 and dedicated to Sr. Antonio Musa Brasavola, a Venetian nobleman and botanist. Sometimes called "lady of the night" because of the nocturnal fragrance.

brassavolae (bra-SAH-voh-lye) Like a *Brassavola*.

Brassia (BRASS-ee-ah) A genus of about 35 species in the *Oncidium* alliance characterized by spiderlike flowers, described by Robert Brown in 1813 in honor of William Brass, an 18th-century botanical illustrator.

Brassocattleya (brass-oh-CAT-lee-ah) A hybrid genus between *Brassavola* and *Cattleya*, with the first artificial hybrid created in 1889.

Brassoepidendrum (brass-oh-ep-i-DEN-drum) A hybrid genus between *Brassavola* and *Epidendrum* created in 1906.

Brassolaelia (brass-oh-LEE-lee-ah; brass-oh-LYE-lee-ah) A hybrid genus between *Brassavola* and *Laelia* created in 1898.

Brassolaeliocattleya (brass-oh-LEE-lee-oh-KAT-lee-ah; brass-oh-LYE-lee-oh-KAT-lee-ah) A hybrid genus derived from *Brassavola*, *Laelia* and *Cattleya* created in 1897.

breaking (BRAY-king) Said when vegetative buds start to grow.

brevis, -e (BREV-is) Short; abbreviated.

brevifolius, -a, -um (brev-ee-FOH-lee-us) Short-leaved.

breviscapus, -a, -um (brev-ee-SCAY-pus) Having a short scape or flower stalk.

bristly (BRISS-lee) Bearing stiff strong hairs or bristles.

BROADWAY, WALTER E. (1863—1935) An English gardener and botanist who collected in Trinidad, Venezuela and French Guiana, devoting his major years to the flora of Trinidad, especially the orchids; his name now commemorated in several species.

Bromheadia (BROM-HEAD-ee-ah) Lindley established the genus in 1841, naming it in honor of Sir E.F. Bromhead, F.R.S, a student of botany and a friend of Lindley. There are about 28, mostly terrestrial, species ranging from Thailand south to northeast Australia and east to the Philippines.

Broughtonia (brow-TOH-nee-ah) A genus of about seven species, attractive epiphytic orchids from the island of Jamaica, related to *Laelia* and *Cattleya*. It was established by Robert Brown in 1813, being dedicated to Arthur Broughton, an English botanist who worked in Jamaica in the early 19th century.

BROWN, ROBERT (1773—1858) A prominent British botanist whose contributions include early observations on the cell nucleus and pollinaria in addition to numerous taxonomic descriptions.

brumalis, -e (broo-MAY-lis) Winter-flowering.

brunneus, -a, -um (BROON-ee-us) Brown; russet.

buccinator (BYEW-sin-ay-ter) Trumpeter; shaped like a crooked trumpet or shepherd's horn.

bucephalus (byew-SEFF-a-lus) From the Greek, boukephalos (ox-head) and refers to the appearance of an ox or bull's head.

bud (buhd) An incipient or nascent shoot; the rudimentary or beginning state of a stem; in common speech, a thickened and condensed resting stage of a shoot, a flower or a leaf before expanding.

bud initiation (buhd ih-nish-ee-AY-shun) The early stage of differentiation of the primordial flower stem and flowers.

bufo (Boo-foh) Resembling a toad.

bulb (buhlb) A thickened part in a resting state made up of scales or plates on a much shortened axis; an informal term for pseudobulb.

bulb pan (buhlb pan) A shallow pot, typically one third the height of a standard pot, commonly used for genera such as *Pleione*.

bulbiferus, -a, -um (bul-BIFF-er-us) Bulb-bearing.

Bulbophyllum (bulb-oh-FILL-um) A genus of some 1,000 species of orchids, primarily African and Asiatic, described by du Petit-Thouars in 1822, the name referring to the fleshy leaves borne singly on prominent pseudobulbs. See also *Cirrhopetalum*.

bulbosus, -a, -um (bohl-BOH-sus) Having bulbs; bulblike; with the structure or characteristics of a bulb; bulbous.

bulbiformis, -e (buhl-bi-FORM-is) Shaped like a bulb; bulbiform.

bullatus, -a, -um (bull-AY-tus) With a surface blistered or puckered, as the leaf of a Savoy cabbage; inflated; bullate.

BURGEFF, HANS (1883—1976) Professor of Botany and Director of the Botanical Institute at Würzburg, Germany, noted for his work on orchid mycorrhiza and orchid seed germination, and recipient of the American Orchid Society's Gold Medal of Achievement at the Third World Orchid Conference (1960).

BURRAGE, ALBERT C. (1859—1931) An outstanding patron of horticulture from Massachusetts who assembled one of the country's finest collections of orchids, he served as the first President of the American Orchid Society from 1921 to 1929.

bursicle (BER-sick-ul) A pouchlike receptacle.

bush house (boosh hous) A slat house.

BUYSSON, R. DU (1871—1893) French horticulturist and author of *Des Orchidees* (1878), commemorated by *Doritis buyssoniana*.

C

CBR/AOS An American Orchid Society award denoting a Certificate of Botanical Recognition, awarded to a cultivar of a species or natural hybrid deemed worthy of recognition for rarity, novelty and educational value.

CCE/AOS An American Orchid Society award denoting a Certificate of Cultural Excellence, awarded to the exhibitor of a specimen plant that scores at least 90 points, a plant with robust health and appearance and an unusually large number of flowers.

CCM/AOS An American Orchid Society award denoting a Certificate of Cultural Merit, awarded to the exhibitor of a specimen that scores between 80 and 89 points, a plant with robust health and appearance and an unusually large number of flowers.

CHM/AOS An American Orchid Society award denoting a Certificate of Horticultural Merit, awarded to a cultivar of a well-grown and well-flowered species or natural hybrid with outstanding esthetic appeal that contributes to the horticultural aspects of orchidology.

Cadetia (ka-DET-ee-ah) A principally Australasian genus of about 60 diminutive, caespitose epiphytic species previously included in a broadly defined *Dendrobium*.

caducous (kuh-DOO-cuss) Said of plant parts falling early.

caesius -a, -um (see-see-us) Bluish-gray.

caespitose (SESS-pih-tohs) Growing in small dense clumps or tufts.

caespitosus -a, -um (ses-pi-TOH-sus) Growing in tufts or dense clumps; forming a turf or mat. *Masdevallia Dracula* has this growth habit

calathiform (KAL-ih-thuh-form) Cup-shaped.

Caladenia (kal-a-DEN-ee-ah) A genus of about 100 species of terrestrial orchids from Australia, Indonesia, New Caledonia and New Zealand, often called the "Australian Spider Orchids." The genus was described by Robert Brown in 1810, the name referring to the rows of beautiful glandular hairs on the lip.

Calanthe (kal-AN-thee) A genus of terrestrial or semi-epiphytic orchids primarily from Africa, tropical Asia, Australia and the Pacific Islands. Related to *Phaius*, it was described by Robert Brown in 1821, the name derived from the Greek meaning "beautiful flower." One nondescript species, *Calanthe calanthoides*, is found in the New World.

calcaratus, -a, -um (kal-kar-AY-tus) Spurred; having a spur; calcarate.

calcareus, -a, -um (kal-KAIR-ee-us) Pertaining to or having a preference for lime; calcareous.

calcariformis, -e (kal-kair-i-FORM-iss) Spur-formed; shaped like a calcar or spur; calcariform.

calceolatus, -a, -um (kal-see-oh-LAY-tus) Having a slipper-shaped organ; shaped like a shoe; calceolate.

calceolus (kal-see-OH-lus) Shaped like a little shoe.

Caleana (kal-ee-AN-ah) A genus of terrestrial orchids from Australia and New Zealand. Popularly known as the "flying duck orchids," it was founded by Robert Brown in 1810, the name honoring George Caley, once superintendent of the Botanic Garden in St. Vincent, who greatly assisted Brown in collecting plants in the Sydney area.

californicus, -a, -um (kal-i-FOR-ni-kus) Of California; Californian.

callistus, -a, -um (kal-LISS-tus) Very beautiful.

callosity (kal-LOSS-i-tee) A thickened and hardened part; a callus.

callosus, -a, -um (kal-LOH-sus) Having a hard protuberance or thickening; thick-skinned; with calluses; callose.

callus (KALL-us) A hard protuberance or thickening (plural: calli)

calochilus, -a, -um (kal-oh-KYE-lus) Having a beautiful lip.

Calopogon (kal-oh-POH-gon) A genus of five species of terrestrial orchids restricted to the United States and Canada. Allied to *Bletilla* and *Arethusa*, it was founded by Robert Brown in 1813, the name adapted from the Greek meaning "beautiful beard," in reference to the brightly colored fringed crest on the lip.

Calyculate (kuh-LICK-yuh-late) Having bracts around the calyx resembling the outer calyx

Calypso (ka-LIP-so) A monotypic terrestrial genus widely distributed throughout the North Temperate Zone in both hemispheres. It was named by Salisbury in 1807, dedicated to the Greek sea-nymph, Calypso, suggesting its preference for secluded habitats.

calyptratus, -a, -um (kal-lip-TRAY-tus) Having a small cap-shaped hood; calyptrate.

calyptriformis, -e (kal-lip-tree-FORM-iss) Hood-shaped; like a cap pulled over; calyptriform.

Calypstrochilum (kuh-lip-trow-KYE-lum) In 1895, Kraenzlin identified this epiphytic genus from tropical Africa, coining the name from two Greek words for "veil" and "lip" in reference to the calyptrate condition of the lip. There are two known species in the genus.

calyx (KAY-lics) The outer of the two series of floral segments.

Camarotis (KAM-ah-ROE-tis) This epiphytic or lithophytic genus of 70 species, widespread in the Pacific basin from the Philippines south to Australia, was described by Lindley in 1833. He derived the generic name from the Greek word "arched" to denote the lip's chambered structure. This genus is considered by many taxonomists to be synonymous with *Micropera*.

campanulatus, -a, -um (kam-pan-yew-LAY-tus) Bell-shaped; cup-shaped with broad base; campanulate

campestris, -e (kam-PES-tris) Of the fields or open plains.

Campylocentrum (kam-pil-loh-SEN-trum) A genus of around 64 species of epiphytic orchids from tropical America, especially Brazil, notable for the many species that have no leaves. It was established by Bentham in 1881, the name derived from the Greek and meaning "crooked spur" in reference to the slender and sharply curved spur of the lip.

canaliculatus, -a, -um (kan-al-ik-yew-LAY-tus) Longitudinally channeled; striated, with longitudinal grooves; canaliculate.

candidus, -a, -um (KAN-did-us) Pure, lustrous white; shining or pure white.

canescens (kan-ESS-enz) With off-white or gray hairs; canescent.

canus, -a, -um (KAY-nus) Off-white; gray; ash-colored.

cant, -ed (kant) slanting or tilted position.

cap (kap) A sac-like removable covering of a part, as the operculum or anther-cap.

Capanemia (kap-an-EEM-ee-a) The 16 epiphytic species in this genus are found in Brazil, Paraguay and Argentina. Joao Barbosa Rodrigues described the genus in 1877, naming it in honor of Dr. G.S. Capanema.

capensis, -e (kape-EN-siss) From the Cape of Good Hope, South Africa.

capillaris, -e (kap-ill-AIR-iss) Hairlike; resembling a hair; very slender.

capillatus, -a, -um (kap-ill-AY-tus) Shaped like a head; growing on a head or dense cluster; capitate.

capitulum (ka-PIT-yew-lum) A little head; a close body of sessile flowers.

capsule (kap-sewyl) A dry dehiscent fruit composed of more than one carpel; the seed-pod.

Captan (KAP-tan) A fungicide used as a curative or preventive spray against bacterial and fungal diseases.

cardinalis, -e (kar-din-AY-liss) Scarlet; cardinal red.

carcinus, -a, -um (kar-i-SYN-us) Resembling a rushlike or grasslike plant or Carex; sedge-like.

carina (ka-RYE-na) A keel-like part or ridge on the surface of a leaf or floral segment; (plural: carinae).

carinatus, -a, -um (ka-ri-NAYT-us) Keeled; having a keel or keels; carinate.

cariniferus, -a, -um (ka-ri-NIFF-er-us) Having a keel; keel-bearing; cariniferous.

carneus, -a, -um (kar-NEE-us) Flesh-colored; deep pink; carneous.

carnosus, -a, -um (kar-NOH-sus) Fleshy; pulpy; carnose.

carotene (KAIR-oh-teen) A ruby-red crystalline hydrocarbon found as a pigment in many plants; by extension, any carotenoid hydrocarbon.

carotenoid. (ka-RA-ten-oyd) A type of naturally occurring fat-soluble pigment responsible for the yellow through orange shades of flower color.

carpel (KAR-pel) The cell of a simple fruit or pistil, or one of the cells of a compound fruit or pistil.

CARR, CEDRIC ERROLL (1892—1936) A famed collector of Borneo and New Guinea orchids and author of several papers, associated with the Singapore Botanic Garden.

carthagenensis, -e (kar-tha-jin-EN-sis) From Carthage, Colombia.

cartilaginous (kar-ti-LAJ-in-us) Hard and tough; resembling cartilage.

Castaneous (Kass-tane-ee-us) Dark brown, as in chestnut.

cataphyll (KAT-a-fill) An undeveloped leaf, as at the beginning of a growth; a rudimentary leaf form, as a bud scale, at the beginning of a growth.

Catasetum (kat-a-SEE-tum) A genus of around 100 species of chiefly epiphytic orchids from tropical America, allied to *Mormodes* and *Cycnoches*. It was established by L.C. Richard in 1822, the name derived from the Greek and referring to the antenna-like processes of the column of the flowers. The genus is unusual in having unisexual flowers.

Cattleya (KAT-lee-ah) A tropical American genus of about 45 species of showy-flowered epiphytic orchids related to *Epidendrum*, *Laelia* and *Brassavola*. It was founded by Lindley in 1824 and dedicated by him to William Cattley, of Barnet, England, an ardent horticulturist and patron of botany.

Cattleyopsis (kat-lee-OP-siss) A genus of eight species of dwarf epiphytes from the Antilles, especially Cuba, now considered to be synonymous with *Broughtonia*, it was described by Lemaire in 1853, the name indicating the resemblance of the flowers to those of the genus *Cattleya*.

Cattleytonia (kat-lee-TOH-nee-ah) A hybrid genus between *Broughtonia* and *Cattleya* created in 1956.

Caucaea. This epiphytic genus of about 10 species is from northern South America and was originally described as *Abola* by Lindley in 1853 and transferred to its present genus in 1934 by Mansfield, who derived the name from the Colombian province of Cauca.

cauda (KAW-da) A slender tail-like appendage (plural: caudae).

caudatus, -a, -um (kaw-DAY-tus) Furnished with a tail or tails; caudate.

caudicle (KAW-dik-ul) A slender stalk-like appendage of the pollinium or pollen mass.

Caularthron (kaw-AR-thron) The name given by Rafinesque in 1836 to a genus of four species of tropical American epiphytic orchids allied to *Cattleya* and *Schomburgkia*, until recently known by the later name of *Diacrium*, proposed by Bentham in 1881; derived from the Greek for "stem" and "joint" in reference to the jointed appearance of the pseudobulbs.

caulescens (kaw-LESS-enz) Having a tendency to develop stems; producing a visible stem; caulescent.

cauline (KAW-line) Of or on the stem; growing on a stem.

cavus, -a, -um (KAY-vus) Hollow; having a pit or excavation; cavity.

cebolleta (seh-boh-LEE-tah) The leaves of one *Oncidium*, which resemble those of the chive (*Allium schoenoprasum*), the Spanish name for which is cebolleta.

cell (sell) One of the ultimate compartments of which plants are composed; a cavity, compartment or locule or an ovary or anther.

cellular (sell-EWE-lar) Composed of cells; arranged in the manner of cells.

centimeter (SEN-ti-mee-ter) A measure of length equal to 0.3937 inch (2.54 cm = 1 inch) or 10 millimeters.

Central America (sen-truhl uh-MER-ih-kuh) Continental North America south of Mexico, comprising Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Panama and Belize; synonymous with Mesoamerica.

centrifugal (sen-TRIFF-uh-gul) Moving or directed outward from the center.

centripetal (sen-TRIP-uh-tul) Moving or directed toward the center.

centrum (SEN-trum) The central part of any structure; particularly the large central air space in hollow stems.

Cephalantheropsis (Sef-ah-lan-ther-OP-sis) A small terrestrial genus of about 4 species that is widespread from Japan to Thailand. Guillaumin founded the genus in 1960 and coined the generic name for its resemblance to *Cephalathera*.

cepiifolius, -a, -um (sep-i-FOH-lee-us) Having leaves resembling those of the onion.

cepiiformis, -e (sep-i-FORM-is) Onion-shaped.

ceraceus, -a, -um (se-RAY-see-us) Like wax; waxy; ceraceous.

Ceratostylis (ser-at-oh-STY-liss) Blume described this epiphytic genus of 60 species in 1825, deriving the generic name from the Greek words for "horn" and "style" to describe the column's hornlike appearance.

cereolus -a, -um (se-ree-OH-lus) Waxy.

cerinus -a, -um (seer-EYE-nus) Wax-colored; waxy.

cernuus -a, -um (ser-NEW-us) Somewhat pendulous, drooping, nodding.

chaff (chaf) Said of bracts and scales that become dry and membranelike.

Chamaengis (kam-ENG-is) Schlechter first described this epiphytic genus in 1915, deriving the generic name from two Greek words for "lowly" and "vessel" to describe the swollen vessel-like spur. There are about 15 species found in tropical Africa and the islands to the east of Africa.

channeled (CHAN-uld) Deeply grooved lengthwise; canaliculate.

chartaceous (kar-TAY-shus) Having the texture of writing paper; papery.

Chaubardia (shaw-BARD-ee-a) A small epiphytic genus of about five species native to tropical South America and Trinidad. H.G. Reichenbach established the genus in 1852, naming it in honor of M. Chaubard, a friend, and student of European flora.

Chaubardiella (shaw-BARD-ee-ell-a) In 1969, Garay removed five epiphytic species from *Chaubardia* because they had a distinct rostellum and lacked pseudobulbs. The generic name indicates the flowers' resemblance to *Chaubardia*

Chelonistele (kel-on-ih-STEE-lee) . This epiphytic or lithophytic genus of 12 species comes from Southeast Asia with the majority of the species found in Borneo. Pfitzer established the genus in 1907, coining the name from two Greek words for "turtle" and "column" to identify the winged column.

chemotaxonomy (kee-mo-tax-ON-oh-mee) The use of chemical evidence in elucidating taxonomic relationships.

Chiloglottis (kye-lo-GLOTT-is) Brown established the genus of about 23 Australian and New Zealand terrestrial species in 1810. He derived the generic name from two Greek words for "lip" and "gullet" as he felt the lip resembles the human throat.

Chiloschista (kyle-oh-SHISS-tah) About 20 epiphytic Asian and Australian leafless orchids, previously maintained in a broadly defined *Sarcochilus*.

chimaera (kime-AIR-a) A mythological monster that spouted fire; said of plants composed of mixed genetic tissues. Said of a plant having three pink and one white flower, the white flower being brought about by a chimaera.

chinensis, -e (chie-NEN-sis) From China. See also *sinensis*.

chiropteran: (adj) relating to or denoting bats, bat-like

Chloraea (klor-A-a) There are around 50 terrestrial species in this genus ranging across the midsection of South America. First described by Lindley in 1827, who coined the name from the Greek word meaning "pale green" to describe the flower color on the type specimen.

chloranthus, -a, -um (klo-RAN-thus) Having green or greenish yellow flowers.

chlorochilon (klo-ro-KYE-lon) Green-lipped; having a green lip.

chlorophyll (KLOR-oh-fill) The green pigment in plants that is essential in their manufacture of food.

chloroplast (KLOR-oh-plast) A plastid containing chlorophyll, developed only in cells exposed to the light, functioning in photosynthesis and starch formation.

chlorops (KLOR-ops) Pale green; green-eyed.

chlorotic (klor-OT-ik) Abnormally yellowed, due to a breaking down of the chlorophyll.

chocoensis (cho-ko-EN-siss) Native of the Colombian province of Choco.

Chondrorhyncha (kon-droh-RINK-ah) A genus of about 27 species of epiphytic orchids from the American tropics, related to *Cochleanthes* and *Kefersteinia*. It was described by Lindley in 1846, the name derived from the Greek for cartilage and beak, in reference to the beak-like rostellum.

chromogen (KRO-mo-jen) The color-generating material in a cell; genes for color.

chromoplast (KROH-mo-plast) A pigmented plastid containing red or yellow pigment, as distinguished from the chloroplast, which contains green pigment; the coloring matter of flowers and fruits.

chromosome (KROH-muh-sohm) One of the rodlike or beadlike bodies visible in the nucleus during division, which contain the genetic units or genes.

chrysanthus, -a, -um (cries-AN-thus) Golden-flowered.

chrysocrepis, -e (cries-oh-KREEP-iss) Golden-shoed.

Chrysocycnis (kry-so-SICK-nees) This epiphytic genus of four species is found in Central America and Andean South America. Linden and Reichenbach founded the genus in 1834, deriving the name from the Greek words for "golden" and "swan" as they likened the flowers to golden swans.

chrysothyrsus, -a, -um (cries-oh-THEER-sus) Golden-racemed, a compact lilac-like inflorescence (thyrses) of golden flowers.

chrysotis, -e (cries-OH-tis) Golden-eared.

chrysotoxus, -a, -um (cries-oh-TOKS-us) Golden-arched.

Chysis (KYE-siss) A genus of nine species of epiphytic orchids from tropical America bearing pendent, club-like pseudobulbs, founded by Lindley in 1837. The name is derived from the Greek meaning melting, in allusion to the appearance of the pollinia due to self-fertilization of the flowers before opening.

ciliaris, -e (sil-ee-AIR-is) Fringed with hairs; ciliate.

ciliatus, -a, -um (sil-ee-AY-tus) Marginally fringed with hairs that are usually stiff like eye-lashes; ciliate.

cinereus, -a, -um (sin-AIR-ee-us) Ash-colored; light gray.

cinnabarinus, -a, -um (sin-na-bar-EYE-nus) Vermillion-colored; cinnabar red.

cinnamomeus, -a, -um (sin-na-MOH-mee-us) Cinnamon-colored; brown, like cinnamon.

circinatus, -a, -um (sir-sin-AY-tus) Coiled; rolled up on the axis with the apex at the center of the coil; circinate.

circumboreal (sir-kum-BOHR-e-al) In northern regions around the world.

circumscissile (sir-kum-SISS-ul) Opening or dehiscing of a fruit or anther at a line around the circumference.

cirratus, -a, -um (si-RAY-tus) Equipped with tendrils or cirri; cirrate.

Cirrhaea (ser-A-a) To recognize the slender rostellum, Lindley used the Latin word for "tendrill" when he described this genus in 1825. There are seven epiphytic species in this Brazilian genus.

cirrhiferous (si-RIFF-e-rus) Tendril-bearing.

Cirrhopetalum (seer-oh-PET-al-um) A primarily Asiatic genus consisting of numerous species, considered by many taxonomists to be part of a broadly defined *Bulbophyllum*, usually characterized by flowers in umbels and hence their common name "daisy orchids." See *Bulbophyllum*.

cirrhus (SEER-rus) The tendril-like extension on lips of some *Phalaenopsis*, or other organs in other genera, such as the column of some species of *Catasetum* (plural: cirrhi; also, cirrus, cirri).

Cischweinfia (see-SHVINE-fee-ah) A genus of about 10 species of Neotropical orchids formerly included in *Aspasia* or *Trichopilia*.

citrinus, -a, -um (si-TRYE-nus) Lemon-colored.

citrosmus, -a, -um (si-TROZ-mus) Lemon-scented.

clade (kleyd) A taxon consisting of a single species and all its descendents.

cladogram (KLAY-doh-gram) A branching diagram depicting the successive points of species divergence from common ancestral lines without regard to the degree of deviation.

clasping (klasp-ing) Enveloping or embracing, such as a leaf surrounding a stem.

clavatus, -a, -um (klav-AY-tus) Club-shaped; solid cylindrical, slender at the base and gradually thickening upward; clavate.

clavellatus, -a, -um (klav-el-LAY-tus) Shaped like a small club; clavellate; diminutive of clavate.

clavicle A tendril.

claw (klaw) The long, narrow, stalklike base of a petal, sepal or lip.

clawed (klawd) Furnished with a claw.

cleft (kleft) Deeply cut.

Cleisostoma (kly-soh-STOH-mah) There are almost 100 epiphytic species in this small-flowered genus that is widespread from India to the Philippines and south to Australia. Blume founded the genus in 1825 and derived the name from two Greek words for "closed" and "mouth," a reference to the callus that almost closes the spur entrance.

Cleistis (KLY-steez) About 40 species of this terrestrial genus range from Florida south to Brazil. Although the genus was first named by Richards in 1818, it was not validly published until 1840 by Lindley. The name was derived from the Greek word for "closed," a reference to some species whose flowers never fully open.

cleistogamous (klise-TOG-a-mus) Self-fertilizing in the unopened or just opened flower.

clinandrium (kli-NAN-dree-um) The anther-bed, that part of the column in which the anther lies (plural: clinandria).

clone (KLOHN) An individual plant raised from a single seed, with all its subsequent vegetative propagations. Clonal names are designated by single quotes in the plant name. For instance, the

single seedling of the grex Slc. Hazel Boyd designated by the name Frae would be Slc.Hazel Boyd 'Frae'. All divisions of this seedling would also carry that clonal name.

clouded Blended with patches of another color.

CLOWES, REV. JOHN H. (1777—1846) An ardent orchid grower at Broughton Hall near Manchester whose fine orchid collection was bequeathed to Kew, his name being commemorated in a number of notable species such as *Miltonia clowesii*.

clypeatus, -a, -um (kli-pee-AY-tus) Shield-like; resembling a Roman shield; clypeate.

cm (see centimeter).

Coetaneous (ko-eh-TANE-ee-us) Said of plants flowering as their leaves emerge.

coalesce (koh-uh-less) To merge; to grow together, referring to similar parts of a flower.

coalescence (koh-uh-less-ence) The union of similar parts or organs, or of those in the same series, as stamens with stamens and petals with petals.

coarctatus, -a, -um (ko-ark-TAY-tus) Pressed or crowded together; coarctate.

coccineus, -a, -um (kok-SIN-ee-us) Bright scarlet.

Cochleanthes (kok-lee-AN-theez) A genus of about 13 species of tropical American epiphytic orchids formerly known as *Warscewiczella*, related to *Chondrorhyncha*, containing species until recently ascribed to *Zygopetalum* and allied genera. The genus was established by Rafinesque in 1836, the name alluding to the shell-like character of the flowers of the type species, described earlier in 1836 as *Zygopetalum cochleare* by Lindley.

cochlearis, -e (kok-lee-AY-ris) Spoon-shaped; shaped like one valve of clam shell.

cochleate (koke-ley-ate) Spiraled like a snail shell.

cochleatus, -a, -um (kok-lee-AY-tus) Shaped like a snail shell; spiral; cochleate.

Cochlioda (kok-lee-OH-dah) A genus of about nine species of epiphytic Andean orchids in the *Oncidium* alliance. It was described by Lindley in 1853, the name suggested by the shell-like calluses on the lip.

coelestis, -e (see-LESS-tis) Sky-blue.

Coelia (SEE-lee-ah) A genus of five species of epiphytic (occasionally terrestrial) orchids from Mexico, Central America and the West Indies that includes plants previously known as *Bothriochilus*. It was established in 1830 by Lindley based on a drawing by the botanical artist Bauer that incorrectly indicated a "hollow structure" to which the name refers in Greek.

Coeliopsis (SEE-lee-op-sis) This monotypic epiphytic genus comes from Costa Rica. H.G. Reichenbach described it in 1872 and derived the name from two Greek words for "hollow" and "appearance" due to its resemblance to *Coelia*.

Coelogyne (see-LOJ-in-ee) A genus of about 100 species of chiefly epiphytic orchids from tropical Asia, described by Lindley in 1822, the name suggesting the deeply excavated stigma.

coerulescens (see-roo-LESS-enz) Almost dark blue; becoming dark blue.

caerulescens (see-roo-LESS-enz) Having a tendency to blue; bluish.

caeruleus, -a, -um (see-ROOL-ee-us) Sky-blue.

coeruleus, -a, -um (see-ROO-lee-us) Dark blue.

co-evolution (ko-ev-uh-LOO-shun) The principle that biological organisms do not evolve independently from each other; sometimes applied to the tandem evolution of orchid flowers and their pollinators.

COGNIAUX, CELESTIN ALFRED (1841—1916) Eminent Belgian botanist who treated the orchids of Brazil, the West Indies and tropical America in general, and also wrote the text for Goossens' color-illustrated series Dictionnaire Iconographique des Orchidés.

coherent (koh-HEER-uhnt) Having similar parts united.

cohesion (ko-HEE-zhon) The union of two or more organs of same kind.

Colax (KOH-laks) See *Pabstia*.

colchicine (kohl-chi-SEEN) A carcinogenic compound used to double chromosome numbers artificially through the interference of microtubule function during mitosis.

collateral (kuh-LAT-er-uhl) By the side; standing side by side.

collinus, -a, -um (kol-LYE-nus) Pertaining to or from a hill.

COLMAN, SIR JEREMIAH (1859—1942) Eminent English patron of horticulture who assembled an outstanding collection of orchids at Gatton Park, he pioneered in many areas of orchid hybridization, especially in developing flowers of blue tones and fine yellows.

Colmanara (kohl-man-AH-rah) A hybrid genus derived from *Miltonia*, *Odontoglossum* and *Oncidium*, it was created in 1963 and named for Sir Jeremiah Colman.

coloratus, -a, -um (kol-or-AY-tus) Colored.

colossus (ko-LAHS-sus) Large; of gigantic size; colossal.

columnar (kuh-LUHM-ner) Column- or pillar-shaped.

column (KOL-uhm-n) The central organ of the orchid flower, formed by the union of the stamens and pistils.

column foot (KOL-uhm-n foot) In some orchids, the extension of the base of the column to which the lip is attached; part of a mentum (which see) when fused with the lateral sepals.

column wings (KOL-uhm-n wingz) Flange-like appendages protruding from the column of some orchid genera, such as *Oncidium*.

community pot (kuh-MYOO-ni-tee pot) A pot containing numerous small seedlings of an orchid progeny, transplanted from a flask. See compot.

comatus, -a, -um (koh-MAY-tus) Furnished with hair; hairy.

communis, -e (ko-MEW-nis) Common; general; growing in company.

commutatus, -a, -um (ko-mew-TAY-tus) Changed, or changing.

comose (KOH-mose) Bearing a tuft or tufts of hair.

compactus, -a, -um (kom-PAK-tus) Compact; dense.

Comparettia (kom-pa-RET-ee-a) A genus of eight or nine species of epiphytic orchids found chiefly in the Andes of Colombia and Ecuador (one species extending to Mexico and the West Indies), allied to *Trichocentrum* and *Ionopsis*. It was founded by Poeppig and Endlicher in 1835 to honor Sr. Andrea Comparetti, an eminent plant physiologist and professor of botany of Padua, Italy.

complanatus, -a, -um (kom-plan-AY-tus) Flattened; leveled; complanate.

complexus, -a, -um (kom-PLEX-us) Encircled; embraced.

complicate (KOM-pli-kate) Folded over or back on itself.

compot (KOM-pot) A container with many seedlings in proximity prior to their spacing and growing on as individual plantlets.

compound (KOM-pound) Composed of a number of similar parts or divided into a number of similar divisions.

compressus, -a, -um (kom-PRESS-us) Flattened, especially laterally; compressed.

concavus, -a, -um (kon-KA-vus) Hollowed out, basin shaped, concave.

conchiformis, -e (kon-chee-FORM-is) In the form of a shell; shell-shaped; conchiform.

concinus, -a, -um (kon-SIN-nus) Neat; elegant; well-made.

concolor (KON-kol-or) Of the same color throughout; uniformity of hue in sepals and petals.

conduplicate (kon-DOO-pli-kayt) Folded together lengthwise so both halves are together at their faces; refers to character of leaves or petals within the bud.

confluent (kon-FLEW-ent) Merging into each other; blended into one; convergent.

conformis, -e (kon-FORM-is) Conforming to the type; similar to related species.

congeneric (kon-jen-AIR-ik) Belonging to the same genus.

congestus, -a, -um (kon-JEST-us) Crowded very closely together; collected into a mass or body; congested.

conglomeratus, -a, -um (kon-glo-mer-AY-tus) Clustered; brought together; conglomerate.

conical (kon-ih-kul) Cone-shaped.

conjugatus, -a, -um (kon-joo-GAY-tus) Joined in pairs; coupled; conjugate.

conjunctus, -a, -um (kon-JUNK-tus) Conjoined; joined together; conjunct.

connate (kon-nate) Having one organ attached wholly or in part to a like organ. For instance fused lateral sepals.

connatus, -a, -um (kon-NAY-tus) United; twin; having similar organs joined together; connate.

connective (kon-NEK-tiv) The tissue joining the two cells of the anther.

connivent (kon-NYE-vent) Said of organs that stick together but are not fused (connate). Such parts appear to be fused but are actually free. Some *Bulbophyllum* exhibit lateral sepals that are connivent.

conopseus, -a, -um (kon-OP-see-us) Resembling a gnat; canopied.

conspersus, -a, -um (kon-SPUR-sus) Scattered.

constrictus, -a, -um (kon-STRIK-tus) Drawn together; constricted.

contiguous Adjoining; touching.

contorted Twisted or bent.

convallarioides (kon-val-lar-ee-OY-deez) Resembling a *Convallaria*, or lily-of-the-valley.

convex (kon-veks) Having a more or less rounded surface; bulging outward and curved.

convolute (KON-vo-loot) Rolled up longitudinally.

cool-house (kool-hous) A greenhouse with minimum night temperature of 50 degrees F.

co-pigments (ko-pig-mentz) A type of flavonoid that is pale yellow to colorless and complexes with the anthocyanin pigments to form the visible color that naturally occurs within flowers.

copious Large in number or quantity; abundant.

coralloid (kor-al-loyd) Like coral.

Corallorhiza (kor-al-loh-RYE-zah) A genus of 15 species of saprophytic orchids native chiefly to North America and Mexico but also found in Europe and Asia, allied to *Aplectrum* and established by Robert Brown in 1813, the name describing the coral-like appearance of the roots, hence the popular name of "coral-root."

cordatus, -a, -um (kor-DAY-tus) Heart-shaped; cordate.

coriaceous, -a, -um (kor-ee-AY-see-us) Leathery in texture; thick and tough; coriaceous.

cork (kork) The bark of the cork oak, a generic term for plaques or slabs made of cork.

cormatose (kor-mah-toze) Producing corms.

corm (korm) A swollen, fleshy bulb-like base of a stem, without scales and usually subterranean.

corneus, -a, -um (kor-NEE-us) Horny; hard and very dense in texture; corneous.

corniculatus, -a, -um (kor-nik-yew-LAY-tus) Bearing or terminating in a small horn-like protuberance or process; horned; corniculate.

cornigerus, -a, -um (kor-NIJ-er-us) Bearing or being furnished with horns.

cornu-cervi (kor-new-SIR-vee) Stag's horn; flattened like an anther.

cornucopiate (kor-nu-KOH-pee-ayt) Shaped like a cornucopia or horn of plenty.

cornutus, -a, -um (kor-NEW-tus) Horned, or horn-shaped; cornute.

corolla (ko-ROL-la) Combined term for all the petals; the inner of the two series of floral segments, but the term is rarely used in reference to orchid flowers.

coronarius, -a, -um (ko-ro-NAYR-ee-us) Of or like a crown; used for or pertaining to garlands; encircling like a crown.

correct name (kuh-rekt neym) The earliest legitimate name available for a plant except as provided otherwise by the International Code of Botanical Nomenclature.

CORRELL, DONOVAN S. (1908—1993) American botanist, co-author with Oakes Ames of the *Orchidaceae* for the *Flora of Guatemala*, (1952—1953, 1965) author of the *Orchids of North America* (1950).

corrugatus, -a, -um (ko-roo-GAY-tus) Wrinkled or in folds; corrugated.

Coryanthes (ko-ree-AN-theez) A genus of 44 species of epiphytes with extraordinary flowers from the American tropics commonly called bucket orchids, related to *Stanhopea* and *Gongora*, it was described by Hooker in 1831, the name derived from the Greek meaning "helmet flower" in reference to the helmet-shaped epichile of the lip.

Corybas (KOR-ee-bus) The more than 100 terrestrial species in this genus are widespread from the Himalayas to Australia with New Guinea the center of distribution. Salisbury described the genus in 1807, naming it for the priest Korybas.

corymb (KOR-imb) A short and broad, more or less flat-topped flower cluster; a form of centripetal inflorescence in which the outermost flowers expand first.

Corymborkis (KOR-imb-ORE-kiss) The six terrestrial species in this genus are pantropical. Aubert du Petit Thouars established the genus in 1822. He derived the generic name from two Greek words for "corymb", a type of inflorescence appearing flattened or like an inverted duster and the outer flowers opening first, and "orchid" a reference to the type of inflorescence found in the genus.

costatus, -a, -um (kos-TAY-tus) Ribbed, such as the midrib of a leaf; costate.

cotyledon (kot-i-LEE-don) The primary or rudimentary leaf of the embryo of plants.

Cranichis (KRAN-ih-kiss) Olaf Swartz founded the genus in 1788 and derived the name from the Greek word for "helmet" to describe the unique lip on these flowers. There are about 54 species of epiphytes and terrestrials in this genus native to tropical Central and South America.

crassifolius, -a, -um (krass-i-FOH-lee-us) Thick-leaved.

crassinodis, -e (krass-i-NOH-dis) Having remarkably swollen joints, or nodes.

crateriform Bowl-shaped.

Cremastra (KREE-mass-tra) A terrestrial genus of possibly four species widely distributed in Southeast Asia both in montane regions and at lower levels. Lindley described the genus in 1833, and used the Greek word "flower stalk" to denote the stalked ovary.

crenatus, -a, -um (kren-AY-tus) Having the margin cut into rounded scallops; crenate.

crenulatus, -a, -um (kren-yew-LAY-tus) Shallowly scalloped; minutely crenate; crenulate.

crepidatus, -a, -um (krep-i-DAY-tus) Shaped like an old-fashioned sandal or slipper.

crest (krest) A toothed, fringed or hairy thickened portion of the disc of the lip.

crested (krested) Bearing an elevated appendage or protruding fringes; furnished with a crest.

cretaceus, -a, -um (kret-AY-see-us) Chalky white; pertaining to chalk.

criniferus, -a, -um (kri-NIFF-er-us) Hairy; bearing hairs.

crinitus, -a, -um (kri-NYE-tus) Having hairs upon the surface; furnished with long, generally weak, hairs.

crispus, -a, -um (KRISP-us) Finely waved along the margin; closely curled; crisped.

cristagalli (kris-ta-GAL-lee) A specific name meaning cock's-comb.

cristatus, -a, -um (kris-TAY-tus) Crested; bearing a crest; cristate.

crock, crocks (krock, krocks) Small pieces of broken earthenware or flowerpots, or other inert substances, placed in the bottom of a pot when repotting, to improve drainage.

cross (kross) To transfer pollen from a flower of one plant to the flower of a different plant; the progeny resulting from such pollination, or from similar pollinations.

cross-pollinate (kross-pol-in-ate) To transfer the pollen from one flower or plant to the stigma of another flower or plant.

cruciatus, -a, -um (kroo-see-AY-tus) Cross-like or cross-shaped; in the form of a cross.

cruentus, -a, -um (kroo-EN-tus) The color of blood, or with blood-colored spots.

crumenatus, -a, -um (kroo-men-AY-tus) Purse-shaped.

Cryptochilus (KRIP-toh-KYE-luss) There are four species in this genus native to the Himalayas, which may be either epiphytes or lithophytes. Wallich founded the genus in 1826 and coined the name from two Greek words "hidden" and "lip" to describe the lip that is hidden in the flower.

cryptogam (KRIP-toh-gam) A flowerless plant, such as fern, moss, fungus, seaweed.

Cryptopus (KRIP-toh-pus) The islands of Madagascar and Mascarene are home to the four epiphytic species in this genus. Lindley described it in 1824 and used the Greek words "hidden" and "foot," as originally Lindley thought the stipe and viscidium were hidden in the pouch.

Cryptostylis (KRIP-toh-STYE-liss) Brown first described this genus of about 23 terrestrial species that are widespread in tropical Asia from India to Australia. The generic name was derived from the Greek words meaning "hidden" and "style" to denote that the column is partially hidden by the lip.

crystallinus, -a, -um (kris-tal-LYE-nus) Resembling ice in solidity or translucency; crystalline.

cucullatus, -a, -um (kew-kew-LAY-tus) Hooded or hood-shaped; having the margins curved inward to resemble a hood; cucullate.

cucumerinus, -a, -um (kew-kew-mer-EYE-nus) Resembling a cucumber.

Cuitlauzina (KWEET-law-zee-na) This Mexican epiphytic genus was named in 1824 by La Llave and Lexaraza. They named it in honor of Cuitlantzin, the governor of Itazpalapa Cuitlautzin in Mexico. Taxonomists consider it to have 1-4 species.

cultivar (KUHL-tih-vahr) (in orchids) An individual plant and its vegetative propagations in cultivation; a horticultural variety.

cultivation (KUHL-tih-VAY-shun) The artful growing of a plant in a situation other than its natural habitat.

cultratus, -a, -um (kul-TRAY-tus) Shaped like a knife blade.

CUMING, HUGH (1791—1865) English conchologist (the branch of biology devoted to the study of the shells of mollusks) and orchid collector, who collected widely in Chile, Polynesia and the Philippines.

cuneatus, -a, -um (kew-nee-AY-tus) Wedge-shaped or triangular, with the tapered narrow end at the point of attachment.

Cunningham, Allan (1791—1839) Orchid collector (for the Royal Botanic Gardens at Kew), who spent several years in Brazil and about six years in Australia, providing orchid specimens for Lindley and other botanists.

cupreus, -a, -um (KEW-pree-us) Copper-colored; coppery.

cupuliform (KUP-ewe-lih-form) Shaped like a cup.

curtus, -a, -um (KER-tus) Shortened.

curvatus, -a, -um (ker-VAY-tus) Curved.

curvifolius, -a, -um (ker-vi-FOH-lee-us) With curved leaves.

cuspidatus, -a, -um (kus-pi-DAY-tus) Tipped with a sharp rigid point; cuspidate.

cuticle (KEW-ti-kul) The outermost layer of the cells of the epidermis.

cutting (kuht-ing) A severed vegetative or asexual part of a plant used in propagation. *cyaneus*, -a, -um (sy-AY-ne-us) Bright blue, azure.

Cycnoches (SIK-no-keez) A genus of tropical American epiphytic orchids with about 36 species, related to *Catasetum* and *Mormodes* and described by Lindley in 1832. It is popularly known as the "swan orchid," the generic name alluding to the gracefully arched column of the male flowers, which is indeed swanlike.

cylindricus, -a, -um (sil-IN-dri-kus) Long and slender, the horizontal section circular; cylindrical.

Cymbidiella (sym-bid-ee-ELL-a) The three terrestrial or epiphytic species in this genus are endemic to Madagascar. Rolfe established it in 1918 and chose the diminutive form of *Cymbidium* because of the close resemblance of these two genera.

Cymbidium (sim-BID-ee-um) An Asian genus more than 50 species of horticulturally important orchids, found chiefly in the Indian Himalayas. It was established by Swartz in 1799, the name derived from the Greek in allusion to the boat-shaped lip.

cymbiformis, -e (sim-bi-FORM-iss) Boat-shaped; convex and keeled.

cyme (SIME) An inflorescence in which the primary axis bears a single central or terminal flower that blooms first.

cymose (SYE-mohz) Resembling a cyme (see above)..

Cynorkis (sin-ORE-kiss). Madagascar and the Mascarenes are home to most of the more than 100 terrestrial species in the genus, but there are 15 species are native to Africa. Aubert du Petit Thouars described the genus in 1809, deriving the name from the Greek words for "dog" and "testicle" in allusion to the small tubers.

Cypripedium (sip-ree-PEE-dee-um) The common lady's-slipper orchid, a genus of about 64 terrestrial species and natural hybrids distributed in the North Temperate Zone of both hemispheres, it was described by Linnaeus in 1753. The name, incorrectly Latinized from the Greek meaning "Venus sandal," refers to the slipper-like lip.

Cyrtarrhena (KRIP-tah-rehn-a) In 1816, Lindley described this epiphytic genus, of about three species from Central America, South America and the West Indies. He coined the name from the Greek words meaning "hidden" and "stamen," in reference to the unusual column that hides the anther.

Cyrtochilum (sir-toh-KY-lum) A distinctive group of South American orchids usually included in a broadly defined *Oncidium*, characterized by vinelike inflorescences and narrowly floral segments, with about 125 species.

Cyrtopodium (sir-toh-POH-dee-um) A genus of 44 species of terrestrial, lithophytic and epiphytic orchids of tropical America, popularly called "cow's-horn orchids," described in 1813 by Robert Brown. The name refers to the upcurved column-foot; plants are noted for their large, colorful floral bracts.

Cyrtorchis (sir-TOR-kiss) A genus of 18 species of angraecoid orchids from tropical Africa, primarily epiphytic. It was described by Schlechter in 1914, the name probably alluding to the fleshy character of the floral segments.

cytokinin (sy-toh-KYN-in) A class of plant hormones.

cytogenetics (sy-toh-je-NET-iks) Study of the part played by cells in heredity, mutation and evolution.

cytology (sy-TOL-oh-jee) The scientific study of cells, especially their formation, structure and functions.

D

dactyloides (dak-til-OY-deez) Resembling fingers; fingerlike.

Dactylostalix (dak-til-oh-STAY-likes) This monotypic terrestrial genus is endemic to Japan. H.G. Reichenbach described the genus in 1878, coining the name from two Greek words for "finger" and "stake" to describe the fingerlike crest on the lip.

damp or **damp down** (damp, damp daun) To spray or sprinkle the walks, benches, etc. of a greenhouse to cool it or to increase humidity without directly watering the pots or plants.

damping off (damp-ing awf) The collapse of seedlings, usually caused by infestations of the fungi *Botrytis vulgaris* or *Phythium debaryanum*.

DARWIN, CHARLES (1809—1882) British naturalist whose theory of evolution by natural selection was based in part on the results of his studies of orchids. His subsequent opus, *On the Various Contrivances by Which British Orchids are Fertilized by Insects*, laid the foundation for studying pollination biology in orchids.

dasyphyllous With hairy or wooly leaves.

DAY, JOHN (1824—1888) Influential orchid hobbyist of his time, he became famous for his excellent orchid drawings and paintings, with nearly 3,000 illustrations of cultivated orchids filling 17 books.

debilis, -e (DEB-ill-is) Weak; frail; not robust.

deciduous (di-SIJ-oo-uhs) The shedding of leaves or other organs at maturity or at the end of the growing season; not permanent, transitory.

decepiens (de-SIP-iens) Deceptive; not obvious.

declinate (DEK-luh-neyt) Bent or curved downward or forward.

decorus, -a, -um (dek-OR-us) Decorative; becoming; comely.

decumbens (dee-KUM-benz) Reclining but with the growing end upright; decumbent.

decurrens (dee-KUR-enz) Extending down the stem or ovary below the point of insertion; decurrent.

decurved (dee-KURVD) Curved downward.

decussate (dee-KUSS-ayt) Opposite leaves in four rows up and down the stem, alternating in pairs at right angles.

deflexus, -a, -um (dee-FLEX-us) Bent abruptly downward; deflexed.

defoliation (dee-FOL-ee-ay-shun) The casting off or falling of the leaves.

dehiscens (dee-HISS-enz) Dehiscent; the splitting into definite parts by valves, slits or pores, as the capsule or fruit of orchids.

delicatus, -a, -um (del-i-KAY-tus) Tender; delicate.

deltoideus, -a, -um (del-TOY-dee-us) Broadly triangular; shaped like the Greek letter delta (D); deltoid.

dendricolus, -a, -um (den-DRI-koh-lus) Living on trees; epiphytic.

Dendrobium (den-DROH-bee-um) A genus of 900 species of tropical Asian and Pacific epiphytic, lithophytic and terrestrial orchids, variable in plant structure, established by Swartz in 1799, the name derived from the Greek for tree and life, in reference to the epiphytic habit of the plants.

Dendrochilum (den-droh-KYE-lum) A genus of 100 species of Asiatic orchids related to *Coelogyne*. Noted for its long arching scapes with many flowers, it was described by Blume in 1825, the name possibly referring to the epiphytic habit of the plants.

dendrogram (DEN-droh-gram) A pictorial representation of presumed phylogenetic history, a family tree.

dendroideus, -a, -um (den-DROY-dee-us) Treelike; tree-shaped; dendroid.

Dendrophylax (den-droh-FYE-laks) A genus of six species of leafless Antillean monopodial orchids related to *Angraecum*, described in 1861 by Reichenbach, the name alluding to the manner in which the roots surround the tree branch on which the plant grows.

densiflorus, -a, -um (den-si-FLOR-us) Having the flowers densely clustered; densely flowered.

densifolius, -a, -um (den-si-FOH-li-us) Densely leaved.

densus, -a, -um (DEN-sus) Thick; compact; dense.

dentatus, -a, -um (den-TAY-tus) Toothed; furnished with teeth; dentate.

denticulatus, -a, -um (den-tik-yew-LAY-tus) Minutely toothed; slightly dentate; denticulate.

Deoxyribonucleic Acid (DNA) (dee-ox-ee-RYE-bow-new-clay-ick As-id) The primary genetic material of all cells contained within the chromosomes.

depauperatus, -a, -um (dee-paw-per-AY-tus) Imperfectly developed; lacking; depauperate

depressus, -a, -um (dee-PRESS-us) Flattened; pressed down; depressed.

dependens (dee-PEND-enz) Hanging down; dependent.

descending (dee-SEND-ing) In a gradually downward direction.

desert cooler (DEZ-ert kool-er) The name for a commonly used self-contained evaporative cooler.

determinate (dee-TUR-muh-neyt) Condition of inflorescence when the terminal flower opens first and so terminates further elongation of the floral axis.

Dextrorse (DEK-strohs) Turning toward the right.

Di or Dis (DYE or Dihs) The Greek prefix for two.

Diacrium (see *Caularthron*)

diagnosis (dahy-uhg-NO-sis) The comparative statement, usually in Latin, that typically appears with the description of a new taxon.

Dialaelia (die-ah-LEE-lee-ah; die-ah-LIE-lee-ah) A hybrid genus between *Diacrium* and *Laelia* created in 1905. These hybrids are now called *Caulaelia* (*Caularthron* x *Laelia*).

diandrous (dye-an-druhs) Having two anthers.

Diaphananthe (dye-ah-fah-AN-thee) A tropical African epiphytic genus of around 45 species. Schlechter described the genus in 1914, deriving the name from the Greek words for "transparent" and "flower" to describe the almost-translucent flowers.

diaphanus, -a, -um (dye-AFF-an-us) Transparent or translucent; diaphanous.

dicarpellous (dye-KAR-pel-lus) Composed of two carpels.

Dichaea (dye-KEE-a) A medium-sized genus of pseudomonopodial epiphytic orchids from tropical America, characterized by two ranks of short, flattened, closely set leaves. It was described by Lindley in 1833, the name derived from the Greek meaning two-fold in reference to the two ranks of leaves.

dichogamy (dye-KOG-ah-me) Having stamens and pistils maturing at different times, thus avoiding self-pollination.

dichotomus, -a, -um (dye-KOT-oh-mus) Forked in pairs; repeatedly dividing into two branches; dichotomous, as in a dichotomous key.

dichromus, -a, -um (dye-KROH-mus) Two-colored; of two distinct colors.

diclinous (di-KLYN-us) Unisexual, having the androecium and gynoecium in separate flowers.

dicotyledonous (dye-kot-i-LEE-don-us) Having two cotyledons.

didymus, -a, -um (DID-i-mus) Twin; found in pairs; somewhat two-parted.

differentiation (dif-fer-en-she-ay-shun) The physiological and morphological changes that occur in a cell, tissue or organ during development to a different state.

difformis, -e (di-FORM-is) Of unusual form in comparison with the normal for the genus.

diffusus, -a, -um (dif-FEW-sus) Loosely branching or spreading; of open growth; diffuse.

digitatus, -a, -um (dig-i-TAY-tus) Shaped like an open hand; finger-like; digitate.

dilatatus, -a, -um (dye-la-TAY-tus) Spread out; dilated.

DILLON, GORDON (1912—1982) Former editor of American Orchid Society Bulletin (from 1943—1968, 1970—1973) and a former Executive Director of the Society (Ex. Sec. 1950—1977, Ex. Dir. 1976).

Dilochia (dye-LOH-kee-ah) A small genus of epiphytic orchids from Southeast Asia, related to *Arundina*; it was described by Lindley in 1830, the name alluding to the two rows of bracts.

dimidiate (dye-MEE-dee-ayt) Said of an object having one half missing, halved.

dimorphus, -a, -um (dye-MOR-fuss) Having two dissimilar forms of leaf, flower or fruit on the same plant.

Dimorphorchis (dye-MORF-ore-kiss) Borneo is home to the three epiphytic species in this genus. Rolfe described the genus in 1919 and coined the name from the Greek words meaning "two," "shape" and "orchid," to denote the two distinct types of flowers borne on the same inflorescence.

dioecious (dye-EE-shus) Unisexual, with the male and female flowers on separate plants.

Diothonea (dye-OH-thon-ee-a) A small epiphytic genus of approximately six species found in tropical South America. First described in 1834 by Lindley, who used the Greek words "two" and "sail" to describe the unique sail-like structure between the column and lip.

diphyllus, -a, -um (dye-FILL-us) Having two leaves; diphyllous.

Diplocaulobium (dih-plo-caw-LOBE-ee-um) A primarily Australasian genus of about 100 species, formerly included in a broadly defined *Dendrobium*, known for its ephemeral flowers.

diploid (DIP-loyd) Having a complement of two similar sets of chromosomes (2n)

Diploprora (dih-plo-PROR-a) The four epiphytic species in this genus range from India and Sri Lanka east to Taiwan. Hooker identified the genus in 1890 and derived the name from the Greek words meaning "two" and "prow" to describe the bifurcate lip.

Dipodium (dye-POH-dee-um) A small genus of orchids of diverse vegetative character from China, Southeast Asia and on through New Caledonia, it is related to *Cymbidium* and was founded by Robert Brown in 1810, the name derived from the Greek meaning "two little feet" in reference to the two stipes of the pollinia.

dipterus, -a, -um (DIP-ter-us) Two-winged; dipterous.

Disa (DYE-sa or DEE-sa) A large genus of terrestrial orchids found chiefly in tropical and southern Africa, established by Bergius in 1767, the derivation of the name being obscure, but the genus is noted for the beauty and unusual structure of its flowers.

disc (disk) In orchids, the face or upper surface of the middle portion of the lip.

discolor (DIS-kol-or) Of two different and usually distinct colors.

discrete (dis-KREET) Separate, not coalescent.

Disperis (DIS-per-is) This genus of about 80 terrestrial species ranges from South and tropical Africa east to New Guinea. Olaf Swartz described the genus in 1800, coining the generic name from the Greek words meaning "two" and "wallet" to denote the pouchlike lateral sepals found in some species.

dissectus, -a, -um (dis-SEK-tus) Divided into deep lobes or segments; deeply cut; dissected.

distal (DIS-tul) Remote from the place of attachment.

distichus, -a, -um (DIS-tik-us) Arranged in two rows or ranks; distichous.

Diuris (dye-YEWR-is) A medium-sized genus of predominantly Australian terrestrial orchids, described by J.E. Smith in 1798, popularly called "double tails," the name referring to the two tail-like lateral sepals.

diurnus, -a, -um (dye-URN-us) Of the daytime; with flowers open during the day; diurnal.

divaricatus, -a, -um (dye-vayr-i-KAY-tus) Separated by a wide angle; widely spreading; divaricate.

divergens (dy-VERJ-enz) Spreading out widely; divergent.

divisus, -a, -um (di-VYE-sus) Separated to the base; divided.

division (di-vihz-uhn) The technique of propagating plants by cutting or breaking apart the pseudobulbs or stems at the rhizome; a single propagation derived in that manner.

dixanthus, -a, -um (dye-ZAN-thus) Having flowers of two shades of yellow.

dm (decimeter) A measure of length equal to 3.937 inches or 10 centimeters.

dolabriformis, -e (doh-lab-ri-FORM-is) Hatchet-shaped.

dolosus, -a, -um (doh-LOH-sus) Deceitful; appearing like some other plant.

dominant (DOM-uh-nuhnt) Said of an allele (any of several forms of a gene responsible for hereditary variation....see allele) that expresses itself relative to its sister allele.

domingensis, -e (doh-min-GEN-sis) Native of Santo Domingo (now the Dominican Republic)

Domingoa (doh-ming-GOH-ah) A small genus of epiphytic orchids from the West Indies, related to *Laelia*, established by Schlechter in 1913. The name is derived from Santo Domingo, former name of the Dominican Republic.

DOMINY, JOHN (1816—1891) British nurseryman and orchid grower for the firm of James Veitch & Sons, he was the first to breed and flower an artificial orchid hybrid, *Calanthe* Dominyi, in 1856.

Doritaenopsis (doh-rye-tee-NOP-sis) A hybrid genus between *Doritis* and *Phalaenopsis* created in 1923.

Doritis (doh-RYE-tis) A genus of three terrestrial vandaceous orchids, closely related to *Phalaenopsis*, sparsely distributed throughout Southeast Asia and Sumatra. It was described by Lindley in 1833, the name referring to Doritis, one of names for the goddess Aphrodite. Recently transferred to *Phalaenopsis* by Christenson. *Now placed back into *Phalaenopsis*

dorsal (DAWR-suhl) Referring to the upper surface of an organ such as a leaf; that surface turned away from the axis; opposite of ventral.

Dossinia (doss-IN-ee-ah) A monotypic genus of terrestrial orchids from Borneo. Called "Jewel Orchids" because of the dazzling beauty of the foliage, it was found by E. Morren in 1848, the name in compliment to the Belgian botanist E.P. Dossin (1777—1852)

double (DUHB-uhl) Said of flowers that have more than the usual number of floral envelopes, particularly of petals.

downy (DOW-nee) Covered with very short and weak soft hairs.

draco (DRAY-ko) Specific name meaning a dragon.

Dracula (DRACK-yule-ah) A large genus of more than 100 phantasmagoric Neotropical species, related to *Masdevallia*.

Drakaea (DRAYK-ee-a) A genus of four species of terrestrial orchids limited to Western Australia, allied to *Caleana* and *Spiculaea*. It was established by Lindley in 1839, honoring the botanical artist Miss S.A. Drake, who drew many of the plates for Bateman's monumental volume, *The Orchidaceae of Mexico and Guatemala*.

Dresslerella (dress-LER-ell-a) There are eight epiphytic species in this genus that ranges from Nicaragua south to Peru. In 1970, Luer established the genus, a segregate from *Pleurothallis*, naming it in honor of Robert Dressler, PhD.

Dressleria (dress-LER-ee-ah) In 1975, Dodson established this genus of three epiphytic species that are similar to *Catasetum*. The genus ranges from Nicaragua to northern South America and was named in honor of Robert Dressler, PhD.

Dryadella (dry-ah-DELL-ah) About 40 species compose this Neotropical genus of miniature caespitose epiphytes previously included in a broadly defined *Masdevallia*.

dubiosus, -a, -um (doo-bee-OH-sus) Doubtful; not in conformity to the pattern of the genus; dubious.

dulcis, -e (DULL-sis) Sweet.

dumosus, -a, -um (doo-MOH-sus) Low and branching, as a bush; bushy; shrubby.

dunensis, -e (doo-NEN-sis) Of or pertaining to sand dunes.

DUNGS, F. (1915—1977) Noted Brazilian orchidologist and coauthor with Pabst of the exhaustive work *Orchidaceae Brasiliensis*.

duplicate (DOO-pli-kit) Double or doubled over, as the two similar sides of a leaf.

DUTHIE, JOHN FIRMINER (1845—1922) British botanist responsible for the monumental *The Orchids of North-Western Himalaya*.

Dyakia (dye-ACK-ee-ah) A monotypic epiphytic monopodial genus from Borneo. Christenson described the genus in 1986, using the Malay name Dyak in honor of the indigenous people of Borneo.

E

E- A lack of (Latin prefix).

Earina (EER-ee-nah) A genus of seven species of epiphytes from New Zealand and other Pacific Islands, related to *Glomera* and other genera seldom seen in cultivation. It was described by Lindley in 1842, the name referring to the species' spring flowering.

ebeneous Ebony in color; black.

ebracteatus, *-a*, *-um* (ee-brak-tee-AY-tus) Without bracts; ebracteate.

eburneus, *-a*, *-um* (ee-BURN-ee-us) Ivory-like; ivory-white.

ecalcarate (ee-KAL-kar-ayt) Without calcar or spur.

ecallose (ee-KAL-lohz) Without a callus; lacking any protuberance.

echinatus, *-a*, *-um* (ek-in-AY-tus) Furnished with prickles or bristles; spiny; echinate.

echinocarpus, *-a*, *-um* A spiny or echinate fruit.

ecology (ih-KOL-uh-jee) That branch of biology that deals with the mutual interaction between organisms and their environment.

ecornutus, *-a*, *-um* (ee-kor-NEW-tus) Without horns; ecornute.

ecostate (ee-KOS-tayt) Without ribs.

ecotype (EE-ko-type) Plants of a genetically stabilized modification to a variant ecology such as dwarfed individuals from a relatively more xeromorphic habitat.

edaphic (ee-DAFF-ik) Relating to soil and topography, rather than climate.

edentate (ee-DEN-tayt) Without teeth.

effusus, *-a*, *-um* (ef-FEW-sus) Loosely spreading; very diffuse; effuse.

eglandulose (ee-GLAND-yew-lohz) Without glands.

elatus, *-a*, *-um* (e-LAY-tus) Tall; taller than the parts or organs of the plant would lead us to expect, or tall in comparison with its near allies.

elatior (el-AY-tee-or) Taller.

elegans (EL-e-ganz) Very choice and attractive; worthy of being chosen; elegant.

Elleanthus (el-lee-AN-thus) A genus of 115 species of tropical American epiphytic orchids, vegetatively similar to its nearest relative, *Sobralia*, but bearing a number of small flowers in a head or short raceme. It was described by the Czech botanist Presl in 1827, the name presumably dedicated to Helle or Helena.

ellipsoid (ih-LIP-soyd) An elongate solid, elliptical in all sections along the transverse axis and circular in cross-section.

elliptic (ih-LIP-tick) An oval, equally narrowed to rounded ends.

elongate (ee-LONG-ayt) Drawn out in length; lengthened.

emarginatus, -a, -um (ee-mar-jin-AY-tus) Having a shallow notch at the apex; emarginate.

embryo (em-BREE-oh) The zygote or developing plantlet in the seed.

Embreea (em-BREE-ah) A monotypic genus, a segregate of *Stanhopea*, native to Colombia and Ecuador. Dodson established the genus in 1980, naming it in honor of Alvin Embree, one of Dodson's supporters.

Encyclia (en-SIK-lee-ah) A genus of about 240 Neotropical species previously included in a broadly defined *Epidendrum*, sometimes known in horticulture as bulbous epidendrums. Hooker described the genus in 1828, but it wasn't until studies by Dressler in 1961 that the genus was truly established.

endemic (en-DEM-ik) Native to a particular region, as a country or an island, and not found elsewhere.

endocarp (EN-doh-carp) The inner layer of the wall of a ripened fruit.

endogenous (en-DOJ-uh-nuhs) Growing or developing from or on the inside.

endosperm (EN-do-spurm) Starch or other food outside or around the embryo; albumen; nutritive matter in seed plant ovules; absent in most orchids.

ensatus, -a, -um (en-SAY-tus) Sword-shaped.

ensifolius, -a, -um (en-si-FOH-lee-us) Having sword-shaped leaves.

ensiformis, -e (en-si-FORM-is) Straight, with a sharp point like a sword; ensiform.

entire (en-TYE-er) In reference to the floral segments and leafblade, having the margin continuous, not broken with teeth or serrations.

entomophilus, -a, -um (ent-oh-MOFF-ill-us) Insect-loving; a specific name applied to certain plants that attract insects; entomophilous.

entomophily (en-toh-MOFF-ill-ee) Pollination through the agency of insects.

environment (en-vahy-ern-muhnt) The aggregate of surrounding things, conditions and influences.

ephemeral (e-FEM-er-al) Lasting for only a brief period; transitory.

epi- A Greek prefix signifying "on" or "upon."

epicalyx (ep-ee-KAY-licks) A series of bracts, resembling or near the calyx

Epicattleya (ep-i-CAT-lee-ah) A hybrid genus between *Epidendrum* and *Cattleya* created in 1888. Most *Epicattleya* hybrids are actually *Catyclia* (*Encyclia* x *Cattleya*) hybrids and have now been transferred to that genus.

epicarp (EP-i-karp) The outer layer or surface of the pericarp, as the rind or peel of some fruits.

epichile (EP-i-kyle) The terminal part of the jointed lip of some orchids such as *Stanhopea*.

Epidanthus (ep-ee-DAN-thus) There are three epiphytic species in this genus ranging from Mexico to Panama. Williams described the genus in 1940. The name was derived partially from the Greek and means flowers like *Epidendrum*.

epidendroides (e-pi-den-DROY-deez) Resembling an *Epidendrum*.

Epidendrum (eh-pi-DEN-drum) A genus of 800 species of tropical American orchids closely related to *Laelia* and *Cattleya*, the generic name having been used by Linnaeus in 1753 in reference to the epiphytic habit of the plants and originally including a number of concepts now referred to different genera of epiphytic orchids.

epidermis (ep-ee-DER-miss) The outermost layer of cellular tissue enveloping the entire plant body, functioning as a protective covering and as a control against loss of water.

epigaeus, -a, -um (eh-pi-JEE-us) Growing close to the ground; epigeous.

Epigeneium (eh-pi-JEE-nee-um) A genus of 12 species of epiphytic orchids from the Asiatic tropics, related to *Dendrobium* and formerly placed in either *Dendrobium* or *Sarcopodium*. Established by French botanist Gagnepain in 1932, the name means "upon the chin" and refers to the position of the petals and lateral sepals on the column foot.

epigynous (ih-PIJ-uh-nuhs) Growing on top of the ovary.

Epipactis (eh-pi-PAK-tis) A genus of 21 species of circumboreal terrestrial orchids related to *Cephalanthera*, established in 1800 by Swartz, who employed an ancient name originally used by Theophrastus (370?285 BC)

epiparasitic (ep-i-pair-ah-SIT-ick) Said of organisms such as saprophytic orchids that are not primary saprophytes but instead live as parasites upon wholly saprophytic fungal symbionts.

epiphyte (EP-i-fite) A plant that naturally grows on another plant or other means of support above the earth's soil but, in contrast to parasitic, deriving its needed moisture from the air.

epiphytic (ep-i-FIT-ik) Pertaining to an epiphyte; having the character of an epiphyte.

Epistephium (eh-pi-STEEF-ee-um) A genus of 14 species of terrestrial orchids from South America (chiefly Brazil) with brilliant purple *Cattleya*-like flowers, related to *Sobralia* and to *Vanilla*. It was described by Humboldt, Bonpland and Kunth in 1822, from the Greek meaning garlanded, referring to the crown-like swelling at the tip of the ovary.

epseudobulbous (ee-soo-doh-BUL-bus) Without pseudobulbs.

equalis, -e (ee-KWAY-lis) Equal.

equestris, -e (ee-KWES-tris) Knightly, courteous, very handsome; pertaining to a horse, or like the rider of a horse.

equitant (EK-kwi-tant) Said of conduplicate leaves that overlap each other in two ranks, as in *Oberonia*, *Psymorchis* and *Tolumnia* (equitant orchids).

erectus, -a, -um (er-REK-tus) Upright; erect.

Eria (EAR-ee-a) A genus of 500 epiphytic species of Asiatic orchids closely related to *Dendrobium*, described in 1825 by Lindley, the name alluding to the woolly outer surface of the sepals and petals.

ericoides (e-ri-KOY-deez) Resembling Erica or heather.

erinaceus, -a, -um (e-rin-AY-see-us) Resembling a hedgehog; spiny; erinaceous.

Eriopsis (ear-ee-OP-siss) A genus of four species of tropical American epiphytic orchids with close affinity to *Acineta* and *Coeliopsis*, described by Lindley in 1847. The name is derived from the Greek, meaning resembling *Eria*, a genus to which it is but distantly related.

erosus, -a, -um (ee-ROH-sus) Jagged, as if gnawed; having a ragged edge; erose.

erostrate (e-ROSS-trayt) Without a beak.

erubescens (e-roo-BESS-enz) Blushing; growing rosy red.

Erycina (err-ee-SEE-nah) The two epiphytic species in this genus are found in Mexico. Lindley described the genus in 1853, naming it in honor of Erycina, the Aphrodite of Mt. Eryx, in Sicily.

Erythrodes (err-i-THROH-deez) A genus of 60 species of terrestrial orchids found in the tropics and subtropics of both hemispheres related to *Goodyera* and described by Blume in 1825, the name referring to the reddish color of the flowers of many of the species.

erythrocarpus, -a, -um (e-ri-thro-KAR-pus) Having red fruit.

esculentus, -a, -um (es-kew-LEN-tus) Edible; related to eating.

estriatus, -a, -um (es-tri-AY-tus) Without stripes.

Esmeralda (es-mer-ALL-duh) H.G. Reichenbach described this genus in 1874, using the Greek word meaning "emerald green," possibly a reference to the deep green foliage. There are two species growing either terrestrially or lithophytically that are native from the Himalayas east to southern China.

ethylene (ETH-ill-een) A gas that acts as a hormone signaling numerous physiologic changes including flower senescence.

etiolation (ee-ti-o-LAY-shun) Effect on green plant from loss of chlorophyll through exclusion of light, the normally green tissue becoming white or yellow by unmasking of carotenoids within the chloroplasts.

Euanthe (yew-AN-thee) A monotypic genus established by Schlechter in 1914 to accommodate the species most widely accepted as *Vanda sanderiana*, the distinction from *Vanda* being based on recondite characters in the structure of the lip.

Eulophia (yew-LOH-fee-ah) A genus of 200 species of terrestrial orchids related to *Cyrtopodium*, widespread throughout the Old World tropics with a single species in the Americas. Described in 1823 by Robert Brown, the name refers to the crest on the lip.

Eulophidium (yew-loh-FID-ee-um) A later name for a genus of chiefly terrestrial orchids from tropical Africa and Madagascar (with one species throughout the Americas), now placed in *Oeceoclades*. Described by Pfitzer in 1888, the name is a diminutive for *Eulophia* and refers to its presumed relationship with that genus.

Eulophiella (yew-loh-fee-EL-lah) A small genus of epiphytic orchids from the island of Madagascar, somewhat allied with *Cyrtopodium*. Described by Rolfe in 1891, the name is a diminutive of *Eulophia*.

europaeus, -a, -um (yoor-o-PEE-us) European.

evanescent (ev-a-NESS-sent) Short-lived; not lasting for a long period.

evaporative cooler (ih-vap-ruh-tive kool-er) A mechanism that cools air by the evaporation of water. See desert cooler.

evectus, -a, -um (e-VEK-tus) Exalted, proud, stately.

evergreen (eh-ver-green) Retaining green foliage all the year, as certain species of *Dendrobium*, in contrast to those that are deciduous.

evertus, -a, -um (ee-VERT-us) Turned inside out.

exaltatus, -a, -um (eks-all-TAY-tus) Very tall; lofty; exalted.

exasperatus, -a, -um (eks-as-per-AY-tus) Roughened; having a rough surface.

excavatus, -a, -um (eks-kav-AY-tus) Hollowed out.

excellens (eks-SELL-enz) Excelling; excellent.

excelsior (ex-SELL-see-or) A shaved-wood product used to provide surface area in evaporative coolers.

excelsus, -a, -um (eks-SELL-sus) Tall.

eccentric (ik-SEN-trik) One sided or off center.

excisus, -a, -um (eks-SYE-sus) Cutaway; cut out; excise.

excrescences (eks-KRESS-en-ses) Small warty outgrowths.

excurrent (ik-SKUR-uhnt) Said of a leaf base that extends beyond the margin of the blade.

exfoliating (ex-FOL-ee-ayt-ing) Peeling off in thin layers.

exiguus, -a, -um (eks-IG-yew-us) Very little; meager; poor.

eximius, -a, -um (eks-IM-ee-us) Out of the ordinary; distinguished.

exine (EKS-ine) The outer layer of a pollen grain.

exocary (EKS-oh-kary) The outer layer of the pericarp.

exotic (ek-ZOTT-ik) Not native, foreign.

expansus, -a, -um (eks-PAN-sus) Expanded.

explant (EKS-plant) A small piece of tissue removed from a donor plant and placed in tissue culture.

explante (EKS-plant-ay) Lying flat.

exserted (ek-SER-ted) Projecting beyond a common point.

exsiccated (EK-sik-kay-ted) Dried; having the moisture removed.

extrorse (eks-TRORS) Looking or facing outward.

exudans (EKS-yew-danz) Exuding.

eye The incipient bud of a vegetative growth, particularly in sympodial orchids.

F

FCC/AOS An American Orchid Society flower award denoting a First Class Certificate, awarded to an orchid species or hybrid that scores 90 points or more out of a possible 100 points.

falcate (FAL-kayt) Scythe-shaped; curved and flat, tapering gradually. Like the laterals on *C. granulosa*

family (FAM-uh-lee) The usual major subdivision of an order or suborder, commonly comprising a plurality of related genera; ending with -aceae as in Orchidaceae.

fallax (FAL-laks) Deceptive; false; fallacious.

fan and pad A greenhouse cooling system that consists of a moistened high surface area pad on one wall in conjunction with exhaust fans on an opposing wall, the air being cooled by evaporation.

farinaceus, -a, -um (fa-ri-NAY-see-us) Containing starch, or starch-like materials; mealy, like flour; farinaceous.

farinosus, -a, -um (fa-ri-NOH-sus) Covered with meal-like powder; mealy; powdery; farinose.

fasciation (fa-see-AY-shun) A malformation caused by an abnormal growing point, the expanded mass often called a crested, the plant a "crested" form.

fasciatus, -a, -um (fa-see-AY-tus) Bound together; clustered or grouped into bundles; fasciated.

fascicle (FAS-i-kul) A close cluster or bundle of flowers, leaves, stems or roots.

fascicularis, -e (fa-sik-yew-LAIR-is) In close bundles or clusters.

fascinator (fa-si-NAY-tor) Unusually attractive; fascinating.

fastigiatus, -a, -um (fa-sti-jee-AY-tus) Having branches close together and erect, often forming a column; fastigiate.

faveolate (fah-VEE-oh-layt) Honey-combed.

fecundation (fee-kun-DAY-shun) Fertilization of the female by the male to form a new individual; impregnation.

feminine (fem-in-in) Pistillate (in higher plants); possessing the female sex apparatus.

fenestralis, -e (fen-neh-STRAY-lis) Pierced or furnished with window-like openings; fenestrate.

fermate (FER-mayt) An organic fungicide, ferric dimethyl dithiocarbonate, useful as a spray or dust to combat leaf spot, stem rot, root rot and similar infectious diseases.

Fernandezia (fur-nan-DEEZ-ee-ah) A genus of about 10 species of Andean, montane, pseudo-monopodial orchids known for their striking red-orange flowers.

ferrugineus, -a, -um (fer-roo-JIN-ee-us) Rust-colored; rusty; ferrugineous.

fertilis, -e (FER-till-is) Capable of producing numerous seeds or viable pollen; fruitful; fertile.

fertilization (fer-till-eye-ZAY-shun) (1) The fusion of two gametes to form a new individual (zygote); the effect of pollination, resulting in the conversion of the flower into fruit and of the ovules into seed. (2) The application of nutrients to the growing medium.

fertilizer (fer-till-EYE-zer) A substance, organic or inorganic, that provides nutritional elements necessary to plant growth; a plant food.

ferus, -a, -um (FER-us) Wild.

festivus, -a, -um (FES-ti-vus) Beautiful; gay; bright; festive.

fetidus, -a, -um (FET-i-dus) Having a disagreeable odor; fetid. (See also foetid)

fibrillosus, -a, -um (fib-ri-LOH-sus) Composed of fine fibers or threads; fibrous; fibrillose.

fibrosus, -a, -um (fye-BROH-sus) Composed of or resembling fibers; the texture of roots as in *Listera*; fibrous.

filament (fill-ah-ment) The threadlike support of the anther; threadlike.

filiformis, -e (fil-i-FOR-mis) Long, slender and flexible.

fimbriatus, -a, -um (fim-bree-AY-tus) Fringed; fimbriate.

fimbrillate (FIM-bril-layt) Minutely fringed; fimbrillose.

Finet, Achille (1862–1913) A French botanist who worked on the orchids of China and Japan and contributed substantially to our knowledge of angraecoid orchids. He is commemorated in the genus *Neofinetia*.

fir bark A potting medium consisting of the chopped or ground bark of white fir, red fir or Douglas fir.

fissile (fiss-eye-l) Splitting.

fistularis, -e (fist-yew-LAIR-is) Cylindrical and hollow; fistulous.

FITCH, WALTER HOOD (1817–1892) Outstanding botanical artist who was sole illustrator for Curtis' Botanical Magazine from 1834–1877. His admirable lithographs of orchids have appeared in Hooker's *A Century of Orchidaceous Plants* (1854), Bateman's *Second Century of Orchidaceous Plants* (1867), Bateman's *Monograph of Odontoglossum* (1864–1874) and Warner's *Select Orchidaceous Plants* (1862–1891).

FITCH, JOHN NUGENT (1840–1927) Nephew of Walter Hood Fitch, he continued his uncle's work after his death, lithographing plates for Curtis' Botanical Magazine in a similar manner. He produced all the original drawings for *The Orchid Album* (1882–1897).

FITZGERALD, ROBERT D. (1830–1892) Deputy Surveyor-General of New South Wales, Australia, he was a keen amateur botanist who wrote and illustrated the monumental publication *Australian Orchids*, (1875–1888), the first comprehensive treatment of the native orchids of Australia.

flabellatus, -a, -um (fla-bel-LAY-tus) Fan-shaped; flabellate; flabelliform.

flaccidus, -a, -um (FLAS-si-dus) Weak, drooping, usually applied to flower stems; soft, lax, not rigid.

flagelliformis, -e (fla-jell-i-FOR-mis) Whip-form; long and slender like a lash; flagelliform.

flask (1) Any clear container used in the germination of orchid seed and other forms of micropropagation; (2) To sow orchid seed or to transplant seedlings into such a container.

flasking The process of sowing orchid seed or transplanting seedlings or other tissue into a flask.

flat Shallow tray or box, usually of plastic, in which small seedlings are grown in quantity.

flavescens (fla-VEH-senz) Yellowish; turning yellow; flavescent.

flavidus, -a, -um (FLAY-vi-dus) Yellow; flavid.

flavus, -a, -um (FLAY-vus) Yellow; flavid.

flexuosus, -a, -um (flek-shoo-OH-sus) Bending alternately in opposite directions.

Flickingeria (flik-in-GEER-ee-ah) A widespread Asiatic genus with 75 species characterized by ephemeral flowers, formerly known as *Ephemerantha*, and now included in the revised genus *Dendrobium*.

floccose (FLOK-ohs) Having tufts of wooly hair.

flora The plant composition of a given region; also a book describing this composition.

floralis, -e (floor-RAY-liss) Of or pertaining to the flower; floral.

floriculture The art and science of growing flowers.

floridus, -a, -um (FLOOR-i-dus) Literally flowering and thence flourishing; bright, florid.

floriferous Flower-bearing; blooming freely.

florula (floor-UHL-ah) Literally a small flora, referring to a flora of a relatively small area such as a nature preserve.

foetid (FEE-tid) With a disagreeable odor; fetid.

foliaceus, -a, -um (foh-lee-AY-see-us) Resembling a leaf in texture and appearance; bearing leaves; foliaceous.

foliaceous bract (foh-lee-AYE-shuss brackt) A bract that is broad, green and leaf-like, the leaf-like structure subtending the pseudobulb in genera such as *Brassia* and *Miltonia*.

foliage (foll-ee-ayg) Leaves.

-foliate (foll-ee-ayt) In combinations, -leaved; having leaves; as trifoliate, "three-leaved."

foliosus, -a, -um (foh-lee-OH-sus) Leafy; foliose.

-foliolate (FOH-lee-o-layt) Having leaflets; as trifoliolate; "of three leaflets."

foot (of column) An extension of the base of the column beyond its point of attachment to the pedicel, or flower stem.

foot-candle A unit of illumination equivalent to that produced by a standard candle at the distance of one foot.

foramen (foh-RAY-men) An aperture or opening.

forcing (fore-sing) To hasten flower production by artificial means.

forked Branching or divided into nearly equal parts or members.

form A taxonomic designation referring to randomly occurring infrequent variants such as albinos.

formosanus, -a, -um (for-mo-SAY-nus) From the island of Formosa.

formosus, -a, -um (for-MOH-sus) Very beautiful in shape; therefore, strikingly ornamental.

formula (fore-MEW-luh) (in hybrids) The names of the two parents connected by the multiplication sign ' '; the seed parent listed first, then the pollen donor.

fornicatus, -a, -um (for-ni-KAY-tus) Arched; fornicate.

FOWLIE, JACK (1929—1993) Taxonomist and editor of the *Orchid Digest* (1967—1993)

foveolate Minutely pitted.

fractiflex (FRAK-ti-fleks) Zig-zag.

fragrans (FRAY-granz) Sweet-scented.

free Not joined to other organs; as petals free from the stamens, calyx or themselves.

fringed (FRINJD) Furnished with hair-like appendages on the margins.

frond (FRAHND) Leaf of fern; sometimes used in the sense of foliage.

fructification (fruk-ti-fi-KAY-shun) The act or process of fruiting; also the fruiting organ or organs.

fruit (frewt) The seed-bearing organ of a plant.

fruticosus, -a, -um (froo-ti-KOH-sus) Shrubby or shrub-like in the sense of being woody; fruticose.

fugacious (few-GAY-shus) Falling away or fading very early; transitory.

fulvus, -a, -um (FULL-vus) Tawny; fulvous; dull yellowish-brown or yellowish-gray.

fungicide (FUN-gi-syde) The class of chemicals that are used to destroy fungi.

furcatus, -a, -um (fer-KAY-tus) Forked or two-horned; furcate.

furfuraceus, -a, -um (fer-fer-AY-see-us) Scurfy; scaly, furfuraceous.

furrowed (fur-ROW-d) With longitudinal channels or grooves.

fuscatus, -a, -um (fus-KAY-tus) Brownish; dark; dusky; fuscous.

fusiformis, -e (few-si-FOR-mis) Spindle-shaped; narrowed both ways from a swollen middle; fusiform.

G

Galeandra (gal-ee-AN-dra) A genus of 25 species of epiphytic or terrestrial orchids from the American tropics and described by Lindley in 1830, the name referring to the helmet-shaped anther cap.

galeatus -a, -um (gal-ee-AY-tus) Helmet-shaped; galeate.

Galeottia (gal-ee-OHT-tee-ah) A genus of 11 showy Neotropical epiphytic species related to *Zygopetalum*, formerly known as *Mendoncella*. Originally described by Roberts in 1845, but changed to *Mendoncella* in 1963, then revived by Christenson in 1988 as a valid genus.

gamete (GAM-eet) One of the sex-cells, either sperm or egg.

gamopetalus (gam-oh-PET-a-lus) Having a corolla of one piece; petals united.

gamophyllous (gam-oh-FILL-us) Having the leaves united.

gamosepalous (gam-oh-SEP-a-lus) Having the calyx of one piece; sepals united.

Gastrochilus (gas-troh-KYE-lus) A genus of 20 species of Asiatic epiphytes from southern India to the Philippines, related to *Haraella*. Described by David Don in 1825, the name alludes to the belly-

shaped lip of the flowers in this genus. *Gastrochilus* has often been included in an overly broad *Saccolabium*.

Gastrorchis (gas-TRORK-is) A genus of six species of semiterrestrial orchids from Madagascar and the Mascarene Islands, related to and sometimes included in *Phaius*. First proposed by du Petit-Thouars in 1809, the name refers to the basally inflated or saccate lip of the flowers. Sometimes seen spelled *Gastorchis*.

gelidus, -a, -um (JEL-i-dus) From icy-cold regions.

Gelrite (JELL-ryte) One of several synthetic agars used to gel media used in micropropagation.

genome (JEE-nohm) The set of chromosomes containing all the inherited traits.

geniculate With abrupt knee-like bends and joints.

Genyorchis (jen-EE-ore-kiss) The six epiphytic orchids in this genus are found in Tropical Africa. Schlechter established the genus in 1901. He coined the generic name from two Greek words meaning "jaw" and "orchid," as the flower in side view resembles an open jaw.

Geodorum (jee-oh-DORE-um) The 10 terrestrial species of this genus are widespread in Southeast Asia, from India to Australia to the southwest Pacific Islands. Jackson described the genus in 1810 using the Greek words meaning "ground" and "gift" to denote the inflorescence that curves toward the ground.

germ cells (jurm selz) Cell types that give to or are the reproductive cells (e.g., pollen or egg).

geminatus, -a, -um (jem-i-NAY-tus) In pairs; twin; geminate.

gemma (JEM-a) A bud; particularly a bud or bud-like structure by which a plant propagates.

gemmule (JEM-yewl) A little bud or bud-like structure.

gene A portion of a chromosome that is a physical unit concerned with the transmission and development of a hereditary character(s)

genera (JEN-e-ra) Plural of genus.

generation (jen-e-RAY-shun) Period from fertilization to death; the epoch from one 1-celled stage of a plant to the next 1-celled stage.

generic (je-NER-ik) Of or pertaining to a genus.

genetics (je-NET-iks) The study and science of heredity and variation; (singular), pertaining to genesis or origin.

geniculatus, -a, -um (je-nik-yew-LAY-tus) Bent abruptly, like a knee; geniculate.

genotype (JEE-noh-type) The fundamental hereditary makeup of an organism.

genus (JEE-nus), pl. genera (JEN-e-ra) A subdivision of a family consisting of one or more species that show similar characteristics and have an assumed common ancestry.

German peat moss (jur-muhn peet moss) A coarse, chunky peat moss used in potting media to retain moisture without significantly decreasing aeration.

germination (jur-min-ay-shun) The development of an embryo into a plantlet or individual plant.

gibbosus, -a, -um (gib-BOH-sus) Protuberant or swollen on one side; gibbous.

giganteus, -a, -um (jye-gan-TEE-us) Greatly exceeding its congeners in size and stature; extremely large; gigantic.

gigas (JYE-gas) A giant, in allusion to size, either of plant or flower.

glabratus, -a, -um (glab-RAY-tus) Nearly glabrous, or becoming glabrous with maturity or age; smooth; glabrate.

glabrous (GLAY-brus) Smooth, having a surface without hairs or projections.

gladius, -a, -um (glad-ee-AY-tus) Having sword-shaped foliage; swordlike; gladiate.

gland (gland) Properly, a secreting part or prominence of appendage, but often used in the sense of gland-like.

glandular (gland-U-lahr) Bearing glands or of the nature of a gland; pertaining to or resembling a gland.

glanduliferous (gland-U-lih-FUR-us) Having glands.

glaucous (glaw-sess-ent) Being glaucous.

glaucophyllus, -a, -um (glaw-koh-FILL-us) Having grayish or bluish-green leaves; having a bloom on the leaves.

glaucus, -a, -um (GLAW-kus) Covered with a bluish-gray, bluish-green, or whitish bloom; glaucous. Like the foliage on *Rhyncholelia digbyana*

globosus, -a, -um (gloh-BOH-sus) Nearly spherical; round; globose.

glochid (gloh-kid) A barbed hair; a bristle.

glomeratus, -a, -um (gloh-mer-RAY-tus) In dense or compact clusters; glomerate.

glomerule (GLOM-e-rule) An inflorescence consisting of a cyme (a cluster of flowers opening from the center outward) growing at the end of its own stalk.

gloriosus, -a, -um (glow-ri-OH-sus) Renowned, illustrious, very beautiful; superb, glorious.

glumaceus, -a, -um (gloo-MAY-see-us) Chaffy in texture or resembling the awns of wheat; having glumes; glumaceous.

glume (gloom) A small chaff-like bract; in particular, one of the two empty bracts at the base of the grass spikelet.

glutinosus, -a, -um (gloo-tin-OH-sus) Covered with a sticky exudation; glutinous.

Gomesa (go-MEJ-ah) A genus of 12 epiphytic species from Brazil, allied to *Oncidium*. It was established in 1815 by Robert Brown to commemorate Dr. Bernardino Antonio Gomes, a Portuguese naval physician and botanist, author of a book on the medicinal plants of Brazil.

Gongora (gon-GOR-ah) A genus of 25 species confined to the American tropics, the flowers of which are extremely complicated; related to *Stanhopea* and *Coryanthes*, it was described in 1794 by Ruiz and Pavon, and dedicated Don Antonio Cabellero y Gongora, Bishop of Cordova, Spain.

Goodyera (good-YER-ah) A genus of 25 terrestrial species distributed throughout the world and noteworthy for the variegated leaves of many of its species. It was described in 1813 by Robert Brown in dedication to John Goodyer (1592–1664), early English botanist, who assisted Johnson in his edition of Gerard's Herbal.

gorge The throat of the flower.

Govenia (go-VEEN-ee-a) The genus contains around 25 terrestrial species ranging from Mexico south to Bolivia. Loddiges described the genus in 1831, naming it in honor of J.J. Goven, an English naturalist who collected plants in Assam.

gracilis, -e (GRAS-ill-is) Slender and graceful.

graminifolius, -a, -um (gram-i-ni-FOH-lee-us) Having grasslike leaves.

Grammangis (gram-MANG-giss) A genus of two species related to *Grammatophyllum* and *Cymbidium*. Found in Madagascar and Java, it was described by Reichenbach in 1860, the meaning of the name being obscure.

Grammatophyllum (gram-mat-oh-FILL-um) A genus of 12 species of epiphytic orchids from Malaya, Indonesia or the Philippines. Related to *Cymbidium* and noted for the large size of the plants, it was described in 1825 by Blume, the name possibly referring to the markings on the flowers or the prominent parallel leaf-veins.

grandifolius, -a, -um (grand-i-FOH-lee-us) Having leaves larger than those of its cogeners.

grandiflorus, -a, -um (grand-i-FLOOR-us) Having flowers large in comparison with others of the genus.

grandis, -e (GRAND-is) Big, great, showy, imposing; grand.

granulosus, -a, -um (gran-yew-LOH-sus) Composed of or appearing as if covered by minute grains; granulose.

Graphorkis (graf-ORE-kiss) Madagascar and the Mascarenes are the home of the five epiphytic species in this genus. Aubert du Petit Thouars established the genus in 1809 and used the Greek words for "writing" and "orchid" to coin the name, but his reasoning is unclear, as there are no markings on the flowers.

gratissimus, -a, -um (grat-ISS-i-mus) Very agreeable; pleasing.

graveolens (grav-ee-OH-lenz) Strong smelling; heavy-scented; rank.

green pod A horticultural expression for seed capsules that are harvested prior to their dehiscence, allowing surface sterilization of the fruit and sowing of still immature embryos.

gregarious (gri-gair-ee-uhs) Growing together in clusters or colonies; synchronous flowering in orchids, such as some *Dendrobium* and *Thrixspermum*.

grex (greks) A flock or group, applied collectively to the offspring of a given cross.

GRISEBACH, AUGUST HEINRICH RUDOLF (1814–1879) Prominent German taxonomist who worked on the plants of the West Indies.

Grobya (grow-BEE-a) There are three epiphytic species in this Brazilian genus. Lindley described the genus in 1835, naming it in honor of Lord Grey of Groby, England, a patron of horticulture and orchid grower.

grossus, -a, -um (GROH-sus) Very large.

Guarianthe (gwar-ee-AN-thee) A small genus of species from Central America and northern South America formerly included in *Cattleya*. The National flower of Costa Rica

guatemalensis, -e (gwat-i-ma-LEN-sis) A native of Guatemala.

GUILLAUMIN, ANDRÉ (1885–1974) French botanist who wrote numerous orchid publications and co-authored, with F. Gagnepain, the *Orchidaceae* for the *Flore Générale d'Indochine* (1932–1934)

guttatus, -a, -um (gut-TAY-tus) Spotted; speckled with small dots; guttate.

Gymnadenia (jim-na-DEN-ee-ah) A small genus of tuberous terrestrials from Europe and Temperate Asia, allied to *Habenaria*. It was erected by Robert Brown in 1813, the name derived from the Greek for "naked" and "gland," referring to the sticky disc of the pollinia, which are free on both sides of the rostellum.

gynoecium (jye-NEE-see-um) The female or pistil-bearing part of the flower. See androecium.

gynandrous (jye-NAN-drus) With the stamens borne on the pistil and united in one organ, as in the orchids.

gynostemium (jye-noh-STEM-ee-um) See column

H

Habenaria (hab-ee-NARE-ee-a) There are more than 500 terrestrial species in this very widespread genus ranging around the world in temperate and tropical grassland regions. They are most numerous in tropical Africa, Asia and South America. Wildenow established the genus in 1805 and coined the generic name from the Greek word for "reins" to denote the straplike divisions of the sepals and petals.

HCC/AOS An American Orchid Society flower award denoting a Highly Commendable Certificate, awarded to an orchid species or hybrid that scores between 75 and 79 points out of a possible 100.

habit (hab-it) The characteristic form, aspect or mode of growth of a plant.

habitat (hab-ih-tat) The kind of locality in which a plant normally grows.

Haemaria (hee-MAY-ree-ah) A monotypic genus of highly variable terrestrial orchids from tropical Asia. Noted for its attractive foliage as one of the "jewel orchids," it was described by Lindley in 1826 but is now considered a synonym of the earlier genus *Ludisia*.

Hagsatera (hag-sa-TER-a) Mexico is the home of the two species in this genus that grow either epiphytically or lithophytically. Tamayo established the genus in 1974, naming it in honor of Eric Hágsater, editor of *Orquidea*, a Mexican journal.

hairs (hairz) A general name (technically known as trichomes for many kinds of small and slender outgrowths on the parts of plants; special kinds of hairiness are designated as setose, villous, comose, pubescent, hirsute etc.

halophyte (HAL-uh-fayt) Plants growing in saline soil.

hamate (HAY-mayt) Hook-shaped; having a hooklike process.

haploid (HAP-loyd) An individual or cell with only a single set of chromosomes. (n) The characteristic chromosome number of the gametes.

hapuu (hah-POO-oo) Hawaiian term for tree-fern fiber.

Haraella (ha-ra-EL-a) The two epiphytic species in this genus are native to Taiwan. Kudo described the genus in 1930 and named it in honor of Yoshi Hara, who discovered the material that became the type specimen.

harpophyllus, -a, -um (har-poh-FILL-us) Having sickle-shaped leaves.

HARTWEG, KARL THEODORE (1812—1871) A plant collector from Karlsruhe, Germany, who explored Mexico and the Andes for the Horticultural Society of London. He was commemorated by Lindley in the genus *Hartwegia*.

Hartwegia (hart-WEGG-ee-a) See *Nageliella*.

hastatus, -a, -um (has-TAY-tus) Like an arrowhead; spear-shaped; hastate.

hastilabius, -a, -um (has-ti-LAY-bee-us) With a spear-shaped lip.

HAWKES, A.D. (1927—1977) Prominent horticultural taxonomist whose work culminated in the *Encyclopaedia of Cultivated Orchids* (1965)

head (hed) A short dense spike; capitulum.

Helcia (HEL-see-a) Only one species is known in this genus native to Colombia and Ecuador. Lindley established the genus in 1840, deriving the generic name from the Greek word for "horse-collar or yoke," probably a reference to the hair on the pit at the base of the lip. Now included in the genus *Trichopilia*.

helicoid (HEL-i-koyd) Twisted or coiled in snail-shell form.

heliotropism (hee-lee-o-TROPE-ism) The characteristic of turning toward the light.

hemi- In Greek compounds, signifying "half."

hemiepiphyte (hem-ee-EPP-i-fyte) A plant, such as Vanilla, whose life history includes both terrestrial and epiphytic phases.

hepaticous Liver-colored.

hepta- (HEHP-ta) In Greek compounds, signifying "seven."

herb (erb) A plant with no persistent woody stem above ground.

herbaceous, *-a*, *-um* (her-BAY-see-us) Herblike; not woody; green and succulent; herbaceous.

herbarium (her-BAIR-ee-um) A collection of dried (or otherwise preserved) plant specimens, annotated and identified, and systematically arranged.

herbarium specimen (her-BAIR-ee-um speh-SIH-men) A dried preserved plant mounted on a sheet of paper, synonymous with a herbarium sheet, also applied to associated research collections such as spirit-preserved flowers.

herbicide (her-bih-SIDE) The class of chemicals that is used to destroy plants.

hermaphrodite (her-MAF-roh-dyte) A flower having the organs, characteristics or attributes of both sexes, hence, perfect.

hermaphroditic (her-maf-roh-DIT-ik) Pertaining to hermaphrodite; with the stamens and pistils in the same flower.

heterocarpus, *-a*, *-um* (het-er-o-KAR-pus) Having variable or various kinds of seed pods.

heterogamous (het-er-OG-a-muss) With two or more kinds or forms of flowers.

heterozygous (het-er-oh-ZY-guss) Pertaining to an individual that has inherited different alleles for a gene from each parent.

Hexadesmia (hex-a-DEZ-mee-a) There are about 15 epiphytic species in this genus native to the tropical Americas. Brongniart founded the genus in 1842, deriving the name from two Greek words meaning "six" and "chain or bond" to denote the six pollinia in two groups.

hexaploid (HEKS-ah-ployd) Having six sets of chromosomes (6N).

Hexisea (hex-EE-zee-a) A genus of two species of epiphytic orchids from Meso-america and northern South America, now in the genus *Scaphyglottis*, it was described in 1834 by Lindley, the name derived from the fact that the six segments of the flower's perianth are about equal in size and shape.

Himantoglossum (hi-man-toe-GLOSS-um) There are four or five robust terrestrial species in this genus native to northern Europe and the Middle East. The genus was first described by W.D. Kock in 1837, who derived the name from two Greek words meaning "strap" and "tongue" to denote the unusual lip.

hippacripiform (hip-ah-KRIP-ih-form) Shaped like a horseshoe; or hippocrepiform.

hirsute (HIR-soot) Covered with long, rather coarse or stiff hairs.

hirsutissimus, -a, -um (her-soo-TISS-eh-muss) Most hairy; very hairy.

Hispaniella (his-pan-EE-ell-a) This is a monotypic epiphytic genus from Hispaniola in the West Indies. G. Bream, in 1980, removed this species from *Oncidium* and established the new genus. He named it in honor of the island of Hispaniola.

hispidus, -a, -um (HISS-pid-us) Beset with rigid or bristly hairs or with bristles; hispid.

hispidulus, -a, -um (hiss-PID-yew-lus) Somewhat or minutely hispid; hispidulous.

hoary (HOHR-ee) Covered with a close white or whitish pubescence.

HOEHNE, FREDERICO CARLOS (1882–1959) Brazilian botanist who worked extensively on orchids, author of the Orchidaceae for the Flora Brasiliica (1940–1953)

Holcoglossum (hole-koe-GLOSS-um) There are perhaps eight species in this epiphytic genus from Southeast Asia, ranging from Myanmar to Taiwan. Schlechter first described the genus in 1919, using the two Greek words for "strap" and "tongue" to denote the strap-shaped lip.

HOLFORD, LT. COL. SIR GEORGE L. (1860–1926) Son of Robert Holford, he inherited his father's fine collection of orchids at Westonbirt, Gloucester, Tetsbury, England, developing it into one of the world's greatest orchid collections; noted for its fine hybrid cattleyas and cymbidiums, particularly the tetraploid *Cymbidium Alexanderi* 'Westonbirt', FCC/AOS.

holophyletic (HOHL-oh-fy-let-ick) Cladistic term referring to a phylogenetic group that is both monophyletic (from one ancestor) and includes all derivatives from that one ancestor.

holotype (hole-oh-TYPE) The specimen that was used for the original genus description.

HOLTUM, RICHARD ERIC (1895–1990) Prominent English botanist, director of the Singapore Botanic Garden, expert on orchids, gingers and ferns, author of many orchid publications including the Orchidaceae for the Flora of Malaya.

Homalopetalum (ho-mal-oh-PET-al-um) A genus of four species of epiphytic orchids from tropical America. Allied to *Sophranitis*, it was described by R.A. Rolfe in 1896, the name referring to the uniformity of the petals and sepals.

homo- (ho-moh) In Greek compounds, signifying "alike" or "very similar."

homocarpous (ho-moh-KAR-pus) All the fruits, as of a flower head, alike.

homogamous (ho-MOG-ah-mus) Having flowers that do not differ sexually.

homologous (ho-MAHL-oh-gus) Corresponding in origin and in type of structure, but not necessarily in function. (See analogous)

homomorphous (hoh-moh-MOR-fus) Uniform; all the given parts alike; possessing perfect flowers of only one kind.

homonym (HOM-oh-nim) A scientific name that is has already been used by its earlier application to a different entity of the same type and hence untenable under the rules of taxonomic priority. For instance the use of *Carria* to describe a genus of orchids since the name has previously been used to describe another genus in the plant world.

homozygous (hoh-moh-ZYE-gus) An individual that possesses the same two alleles for a particular gene.

HOOKER, JOSEPH DALTON (1817–1911) Successor to his father as director of the Royal Botanic Gardens, Kew. A worldwide botanical traveler with a keen interest in biogeography, he authored many botanical works and floras, including orchids of various regions; editor of Curtis' Botanical Magazine from 1865 to 1904, he was elected president of the Royal Society in 1873.

HOOKER, WILLIAM JACKSON (1785–1865) A professor of botany at the University of Glasgow, he was in 1841 appointed first official director of the Royal Botanic Gardens at Kew, where his herbarium, along with those of Linnaeus, George Bentham and John Lindley, forms the basis of the Kew Herbarium.

hormone (HOR-mone) A chemical produced in one part of the body and transported to another area of the body where it affects growth and development.

horny (hor-nee) Hard and dense in texture; corneous.

host (host) A plant from which a parasitic plant derives its nourishment; a tree upon which an epiphyte grows.

Houlletia (hoo-LET-ee-ah) A tropical American genus of 10 species allied to *Stanhopea*, it was described by Brongniart in 1841 and dedicated to Houliet (1811–1890), a French horticulturist and assistant curator at the Jardin des Plantes, Paris, who collected the type species in Brazil.

Howeara (how-AR-ah) A hybrid genus derived from *Leochilus*, *Oncidium* and *Rodriguezia* created in 1976, named in honor of Stephen Howe, the hybridizer of the first cross. Now called *Leomesezia*.

humidity (hue-mid-ih-tee) The condition of dampness; the percentage of water vapor in the air out of the total amount capable of being contained at the same temperature (specifically, relative humidity).

humifuse (hum-ih-fuse) Spreading over the ground. Procumbent.

humilis, -e (HEW-mil-is) Low-growing; more dwarf than most of its kind.

humus (hue-muss) Decomposing organic matter in the soil.

Huntleya (HUNT-lee-ah) A genus of 10 species of epiphytic orchids from tropical America. Allied to *Zygopetalum*, it was described by Bateman in 1837, the name complimenting the Rev. J.T. Huntley, an English orchid enthusiast.

HURST, CHARLES CHAMBERLAIN (1870–1947) British geneticist who was one of the first to apply scientific analysis to orchid breeding behavior, with particular attention to albinism, and who, with Rolfe, prepared a major book on manmade orchid hybrids, *The Orchid Stud-Book* (1909)

hyacinthinus, -a, -um (hye-a-sin-THYE-nus) Resembling a hyacinth.

hyaline (HYE-a-leen) Thin and translucent, rarely transparent.

hybrid (hye-brid) The offspring resulting from the union of a species or hybrid with another species or hybrid.

hybrid swarm Hybrid plants which are back-crossing to the parents and crossing with themselves, so that there is a continuous intergradation of forms in the population.

hybridization (hye-brid-I-ZAY-shun) Causing the production of hybrids by crossing different species, etc.

hydrophyte (hye-druh-fahyt) Said of plants growing near water.

hydroponics (hye-dro-PON-iks) A soilless method of growing orchids, using nutrient solutions and an inorganic supporting medium.

hyemalis, -e (hye-em-AY-lis) Of winter; flowering in winter. (Also spelled hiemalis)

Hygrochilus (hye-grow-KYE-luhs) This monotypic genus comes from Southeast Asia, ranging from India to southeast China. Pfitzer established the genus in 1897, choosing two Greek words for "wet" and "lip" to denote the nectar-producing channel on the lip.

hygroscopic (hye-groh-SKOP-ik) Capable of absorbing moisture from the atmosphere.

hyperboreus, -a, -um (hye-per-BOR-ee-us) Far northern.

hyphae (HYE-fee) The cylindrical threadlike filaments that constitute the vegetative body of a fungus.

hyphaematicus, -a, -um (hye-fee-MAT-i-kus) Blood red underneath.

hypochile (HYE-poh-kyle) The lower or basal part of the compound lip in some orchids; also hypochilium.

hypogaeous (hye-puh-JEE-uhs) Growing underground.

hysteranthous With the flowers appearing before the leaves.

hystrix (HISS-triks) Bristly; like a porcupine.

I

igneus, -a, -um Fiery color, red; igneous.

illustris, -e (ill-LUS-tris) Brilliant; lustrous.

imbricatus, -a, -um (im-bree-KAY-tus) Overlapping, like shingles on a roof, either vertically or spirally; imbricate.

immaculatus, -a, -um (im-mak-yew-LAY-tus) Spotless; immaculate.

immarginate (im-MAR-ji-nayt) Without a rim or edge; lacking a definite margin.

immersus, -a, -um (im-MER-sus) Entirely under water.

imperfect (im-per-fekt) Said of a flower that has either stamens or pistils but not both.

implexus, -a, -um (im-PLEKS-us) Tangled; interlaced; implexuous.

impregnation (im-preg-NAY-shun) Fecundation or fertilization of the ovule by the pollen; also the infiltration of substances.

impressus, -a, -um (im-PRESS-us) Deeply nerved; furrowed or grooved as if by pressure.

inaequalis, -e (in-ee-KWAY-lis) Unequal; having unequal parts.

incanus, -a, -um (in-KAY-nus) Hoary; quite gray; incanescent; canescent.

incarnatus, -a, -um (in-kar-NAY-tus) Flesh-colored.

included (in-KLEW-ded) Not protruding from the surrounding segments.

incertus, -a, -um (in-SER-tus) Doubtful; uncertain.

incisus, -a, -um (in-SYE-sus) Deeply and irregularly cut; incised.

incorrect names (in-KOR-rekt nayms) Names that are not in conformity with all requisite provisions of the International Codes of Nomenclature.

incomputus, -a, -um (in-KOMP-tus) Unadorned.

incrassate (in-KRASS-ayt) Thickened or swollen.

incrassatus, -a, -um (in-krass-AY-tus) Thickened; incrassate.

incumbent (in-KUHM-bent) Resting or leaning upon another organ.

incurvus, -a, -um (in-KER-vus) Crooked, bent; curved inward.

indefinite (in-def-ih-nit) Very numerous, as above 20; see "definite."

indehiscent (in-dee-HISS-ent) Not opening by valves, etc.; remaining persistently closed.

indeterminate (in-dee-ter-min-it) Growing on from the apex, particularly of the main axis.

indigen (IN-di-jen) A plant that is indigenous or native.

indigenous (in-DIJ-en-us) Native to a country or region, not introduced.

indivisus, -a, -um (in-div-EYE-sus) Undivided.

indument (in-DEW-ment) Any pubescent or hairy covering

induplicate (in-DEW-pli-kayt) With margins folded inward.

induratus, -a, -um (in-dew-RAY-tus) Hard, hardened.

inferior (in-feer-EE-or) Beneath, lower, below; as an inferior ovary, one that is below the attachment of the petals and sepals.

inflatus, -a, -um (in-FLAY-tus) Blown up; bladdery; swollen; inflated.

inflexed (in-FLEXD) Bent or turned abruptly inwards or downwards.

inflorescence (in-floor-ESS-ents) The general arrangement and disposition of the flowers on an axis; the mode of flowering; the flowering part of a plant.

infra- (IN-frah) In combinations, signifying "below."

infundibuliformis, -e (in-fund-dib-yew-li-FORM-is) Funnel-form, trumpet-shaped; infundibuliform.

infundibulum (in-fun-DIB-yew-lum) A funnel.

innate (in-nayt) Borne at the apex of the supporting part.

inodorus, -a, -um (in-oh-DOOR-us) Scentless; without a scent.

inrolled Curled or rolled inward.

inscriptus, -a, -um (in-SKRIP-tus) Marked, as if with letters; inscribed.

insecticide (in-sekt-ih-SIDE) The class of chemicals that is used to attack insects.

inserted (in-sir-ted) Attached; as a stamen growing on the corolla.

insignis, -e (in-SIG-nis) Noble, admirable, distinguished.

inter- (in-ter) Prefix meaning between.

interfoliaceous (in-ter-foll-EE-AY-shuss) Between the leaves of a pair.

intergeneric (in-ter-jen-NAIR-ik) Between or among two or more genera.

integer, -gra, -grum (IN-tej-er) Entire.

intermedius, -a, -um (in-ter-MEE-dee-us) Halfway between two other things; intermediate in color, form or habit.

internode (IN-ter-nohd) That portion of a stem between two nodes or joints.

interruptus, -a, -um (in-ter-RUPP-tus) Not continuous, as with scattered leaves or flowers; interrupted.

interspecific (in-ter-speh-SIFF-ik) Between or among two or more species.

intortus, -a, -um (in-TORT-us) Twisted upon or around itself.

intra- (in-tra) A prefix meaning within.

intramarginal (in-tra-mar-GIN-ahl) Just within the margin or edge; between the margins.

intricate Tangled together.

introduced (in-truh-doozd)) Brought from another region, either intentionally or otherwise; in horticulture, used to designate the intentional bringing of plants into cultivation either from another country or from the wild.

introduction (in-tro-DUK-shun) An exotic plant introduced by man or other agency from its native region to another area.

introrsus, -a, -um (in-TROR-sus) Turned or faced inward or toward the axis; introrse.

inverted (in-vuhr-ted) Turned over; end-for-end; topside down.

in vitro (in-VEE-tro) Biological processes and reactions under artificially controlled conditions outside of the organism.

in vivo (in-VEE-vo) Biological processes and reactions within a living organism.

involute (IN-vo-loot) Rolled inward or toward the upper side; said of a flat body (as a leaf) See "revolutus."

Ionopsis (eye-oh-NOP-siss) A genus of two tropical and subtropical American orchids, usually epiphytic, described in 1815 by Humboldt, Bonpland and Kunth, the name referring to the violet-like appearance of the flowers.

Ipea (IP-see-ah) A monotypic genus from Ceylon and southern India, related to Phaius. It was described by Lindley in 1831, the origin of the name obscure but probably meaning "by itself," that is, without close relatives; the sole species, the yellow-flowered *Ipea speciosa*, is called the "daffodil orchid."

iridifolius, -a, -um (eye-rid-i-FOH-lee-us) Iris-leaved.

iridescent Displaying many colors, as in a rainbow.

irregular (ih-REG-yuh-lar) Showing inequality in the size, form or union of its similar parts.

irroratus, -a, -um (ir-ror-AY-tus) Dewy; moistened, sprinkled with dew; irrorate.

Isabelia (iz-a-BELL-ee-ah) A monotypic genus of dwarf-growing creeping epiphytic orchids from Brazil, now referred to as *Neolauchea*. Related to *Sophranitis*, it was founded by Barbosa-Rodrigues in 1877, the name honoring Isabel, Countess d'Eu, patroness of science and floriculture in Brazil under the reign of Pedro II.

Isochilus (eye-soh-KYE-lus) A genus of 10 species of tropical American epiphytes allied to *Ponera*, described by Robert Brown in 1813, the name alluding to the fact that the lip is usually equal to the sepals in size.

Isotria (eye-SOH-tree-ah) A genus described by Rafinesque in 1808 consisting of two species of terrestrial orchids confined to the United States, the name referring to the symmetrical arrangement of the three sepals that are similar in size and shape.

isozyme (eye-so-zyme) Different forms of the same enzyme that have slightly different activities; used in chemotaxonomy.

isthmus (IS-muhs) A narrowed portion of a part or segment of a flower.

ixioides (iks-ee-OY-deez) Resembling plants of the African genus *Ixia* in the Iridaceae.

J

JC/AOS An American Orchid Society award denoting a Judges Commendation, awarded to flowers or plants, individually or in groups, for a distinctive characteristic or aspect of historical or other importance that, in the opinion of the judges, is worthy of recognition.

Jacquiella (jack-in-ee-ELL-ah) A small genus of tropical American epiphytic orchids related to *Ponera* and *Isochilus*. It was established in 1920 by Schlechter, the name commemorating the Austrian botanist, Nikolaus Joseph von Jacquin (1727–1817), who collected and described many American plants.

japonicus, -a, -um (ja-PON-ik-us) Native of Japan; Japanese.

javanicus, -a, -um (ja-VAN-ik-us) Native of Java; Javanese.

jointed (JOYN-ted) With nodes, or points of real or apparent articulation.

jugosus, -a, -um (joo-GOH-sus) Furrowed, lipped; mountainous; connected or yoked.

Jumellea (joo-MELL-ah) A sizable genus of epiphytic orchids from Madagascar and tropical Africa, closely related to *Angraecum*, it was described by Schlechter in 1914 and dedicated to Professor Henry Jumelle, a French botanist from Marseilles who investigated the flora of Madagascar in the late nineteenth century.

juncifolius, -a, -um (jun-ki-FOH-lee-us) Rush-leaved.

K

karyology (kair-ee-OLL-oh-gee) The science of studying chromosome morphology.

karyotype (CAIR-ee-oh-type) The morphologic type or characterization of the chromosome complement.

keel (keel) A central dorsal ridge, like the keel of a boat.

keeled (keel-d) Provided with a keel.

Kefersteinia (kef-er-STINE-ee-a) There are around 20 epiphytic species in this genus ranging from Costa Rica south to Bolivia. H.G. Reichenbach created the genus in 1852, naming it in honor of Herr Keferstein of Krollwitz, an avid orchid grower and friend of Reichenbach.

Kegeliella (keg-el-ee-EL-a) The two species in this genus are found in Central America, West Indies and Surinam. H.G. Reichenbach established the genus in 1852, naming it *Kegelia*, in honor of Herr Kegel, the gardener at Halle University in Germany, but Mansfield, in 1934, discovered that the name had been used previously for another genus and changed it to *Kegeliella*.

Kingella (king-EL-a) See *Kingidium*.

keiki (KAY-kee) Hawaiian term used by orchidists to signify an adventitious offshoot or offset from an orchid's cane or inflorescence.

key (KEE) A series of paired, contrasting statements used to facilitate identification.

KING, GEORGE (1840—1909) British botanist, co-author with Robert Pantling of the monumental *The Orchids of the Sikkim-Himalaya*.

KINGDON-WARD, F. (1885—1958) Indefatigable British plant collector, responsible for numerous horticultural introductions from Asia including the eponymous *Paphiopedilum wardii*.

Kingidium (king-ID-ee-um) There are approximately five epiphytic species in this genus ranging from India east to the Philippines. P.F. Hunt established the genus in 1970, naming it in honor of Sir George King, the coauthor of *Orchids of Sikkim-Himalaya*. Recent studies by Christenson transfer this genus to *Phalaenopsis*.

KLABOCH, FRANZ (?-1879) A nephew of Benedict Roezl, he collected orchids for a few years for the firm of Sander, chiefly in Colombia, and with his brother is commemorated in the species *Pescatorea klabochorum*.

KNUDSON, LEWIS (1884—1958) An American plant physiologist, long associated with Cornell University, noted for his work in the development of the asymbiotic method of germinating orchid seed; in 1949, he was awarded the American Orchid Society's Gold Medal of Achievement for his contributions to orchidology.

Koellensteinia (kehl-en-STINE-ee-a) The 10 species in this genus, widespread in South America, grow either terrestrially or epiphytically. Schlechter established the genus in 1918, naming it in honor of Captain Kellner von Koelenstein, an Austrian.

KRAENZLIN, FRITZ (1847—1934) A German orchidologist whose work embraced miscellaneous new orchid species from Tibet, China, the Pacific Islands, Africa and the Americas. He is noted chiefly for his substandard monographic treatment of large and difficult groups of orchids, such as the Coelogyninae, the Dendrobiinae, the Oncidiinae, Masdevallia and Polystachya.

L

labellum (lah-BEL-lum) The lip or modified petal of an orchid flower.

labiatus, -a, -um (lah-bee-AY-tus) Large-lipped; having a lip; labiate.

labyrinthiformis, -e (lab-i-rin-thee-FORM-iss) With intricate winding lines or passages; labyrinthine.

Lacaena (la-SEE-na) The two epiphytic species in this genus are native to Central America. Lindley established the genus in 1843, deriving the generic name from the Greek word Lakaina. The reasoning is not clear, although this is an alternative name for Helen of Troy.

laceratus, -a, -um (la-ser-RAY-tus) Torn; irregularly cleft or cut; lacerate.

laciniatus, -a, -um (la-sin-ee-AY-tus) Slashed; cut into narrow pointed segments; lacinate.

lactescens (lak-TESS-senz) Containing milk or a milklike substance; lactescent.

lacunosus, -a, -um (lak-yew-NO-sus) Having holes or empty places; deeply pitted; lacunose.

Laelia (LAY-lee-a) A genus of showy epiphytic orchids from tropical America. Related to *Cattleya* and *Epidendrum*, it was described by Lindley in 1831, the name obscure but possibly dedicated to Laelia, one of the Vestal Virgins.

Laeliocattleya (lay-lee-oh-KAT-lee-a) A hybrid genus between *Laelia* and *Cattleya* created in 1863.

Laeliopsis (lay-lee-OP-siss) A monotypic epiphytic genus from the West Indies. It was established in 1853 by Lindley, the name alluding to the similarity of the species to the members of the genus *Laelia*. The species are now included in the genus *Broughtonia*.

laevigatus, -a, -um (lay-vig-AY-tus) Having a smooth, polished surface; lustrous; shining.

lamella (la-MEL-la) A thin flat plate or laterally flattened ridge; (pl. lamellae)

lamellate (LAM-el-layt) Provided with lamellae.

lamina (LAM-in-ah) The expanded portion of a leaf or floral segment. (See blade)

laminatus, -a, -um (lam-i-NAY-tus) Covered with plates or scales; laminated.

lanate Woolly; densely covered with long tangled hairs.

lanceolatus, -a, -um (lan-see-oh-LAY-tus) Shaped like the head of a lance; spear-shaped; narrow and tapering toward the apex or toward each end; lanceolate.

Lanium (lan-EE-um) A small epiphytic genus of two or more species native to northern South America. Lindley described the genus in 1841, coining the generic name from the Greek word for "wool" to denote the pubescens on the inflorescences and flowers.

Lankesterella (lank-es-ter-ELL-ah) A genus of 20 species of tropical American (chiefly Brazil) miniature epiphytic orchids. Related to *Spiranthes*, it was described by Oakes Ames in 1923 and dedicated to Charles H. Lankester, an ardent English amateur plantsman domiciled in Costa Rica.

lanuginosus, -a, -um (lan-oo-jin-OH-sus) Woolly or cottony; covered with soft, downy hairs; lanuginose.

lasioglossus, -a, -um (lay-zee-oh-GLOSS-us) Woolly tongued; having a rough or hairy lip.

lateralis, -e (la-ter-AY-lis) On or at the side of; lateral.

lath house (lath hous) A lattice-work structure that provides broken shade for orchids grown outdoors in warm or frost-free climates or seasons.

latex (LAY-teks) The milky sap found in some plants.

latifolius, -a, -um (lat-i-FOH-lee-us) Broad-leaved.

latilabrus, -a, -um (lat-i-LAY-brus) Broad-lipped.

lax (laks) Open or loose, not dense.

laxus, -a, -um (LAKS-us) Loose or open; lax.

lead (leed) A young, new vegetative growth.

leaflet (LEEF-let) One part of a compound leaf; secondary leaf.

leaf-stalk (LEEF-stawk) The stem of a leaf; petiole.

lectotype (lek-TOE-type) A specimen chosen by subsequent workers in taxonomy when no holotype was designated or when the original holotype was lost or destroyed.

legitimate name (LEK-toe-type) A name that is in accordance with the articles of the International Codes of Nomenclature.

LEHMANN, F.C. (1850—1903) Renowned Neotropical plant collector in Colombia, Ecuador and Central America with a special interest in orchids, commemorated in numerous orchids including *Pescatorea lehmannii*.

Lemboglossum (lem-boh-GLOSS-um) A primarily Mexican genus of 14 species of showy epiphytes formerly included in *Odontoglossum*. Halbinger established the genus in 1985, deriving the name from two Greek words meaning "boat" and "tongue," possibly to describe the callus tissue on the lip. Now synonymous with *Rhynchostele*.

lenticularis, -e (len-tik-yew-LAY-ris) Lentil-shaped; lens-shaped; lenticular.

lentiginosus, -a, -um (len-tij-in-OH-sus) Freckled; lentiginose.

Leochilus (lee-oh-KYE-luss) A genus of 10 species of dwarf epiphytic orchids from the American tropics allied to *Oncidium*. It was described by Knowles and Westcott in 1838, the name derived from the Greek meaning ecallose lip, in reference to the smooth lip of the flower.

leonis (lee-OH-niss) Of a lion, in the sense of strong, stout, leonine.

leopardinus, -a, -um (lee-oh-par-DYE-nus) Tawny, or conspicuously spotted like a leopard.

Lepanthes (leh-PAN-theez) A genus of 100 or more species of small-flowered dwarf epiphytic orchids of tropical America. Related to *Pleurothallis* and *Masdevallia*, it was founded by Swartz in 1799, the name referring to the tiny scalelike flowers.

Lepanthopsis (leh-pan-THOP-siss) A genus of 40 species of dwarf epiphytic orchids from tropical America, related to and resembling *Lepanthes* as its name implies. It was described by Oakes Ames in 1933.

lepidotus, -a, -um (le-pi-DOH-tus) Covered with small scurfy scales; lepidote.

lepidus, -a, -um (LEP-id-us) Neat, pretty, pleasing; graceful; elegant.

leptosepalus, -a, -um (lep-toh-SEP-al-us) Having slender sepals.

Leptotes (lep-TOH-teez) A genus of three species of epiphytic orchids from Brazil and Paraguay. Related to *Laelia*, it was described by Lindley in 1833, the name referring to the slender leaves.

leucochilus, -a, -um (lew-ko-KYE-liss) White-lipped.

Leucohyle (lew-ko-HYE-lee) The four epiphytic species in this genus range from Panama south to Brazil. Klotzsch described the genus in 1834, deriving the generic name from two Greek words meaning "white" and "wool," in reference to the white hairs on the inflorescence.

leucorrhodus, -a, -um (lew-ko-ROH-dus) Rosy-white.

ligneous (LIG-nee-us) Woody.

ligulatus, -a, -um (lig-yew-LAY-tus) Strap-shaped; ligulate.

liguliform (lig-yu-LIH-form) Strap-shaped

limb (lim) The expanded portion of any petal, lip or leaf.

lilacinus, -a, -um (lye-la-SYE-nus) Like lilac in color or form.

limbatus, -a, -um (lim-BAY-tus) Having a distinct border of some other color; limbate.

LINDEN, JEAN JULES (1817—1898) Famous explorer and Belgian horticulturist responsible for the introduction and popularization of numerous orchids, producer of the monumental illustrated works *Pescatorea* (1854—1860) and *Lindenia* (1885—1906).

LINDLEY, JOHN (1799—1865) An eminent English botanist and orchidologist whose great contributions did so much to establish the basic knowledge of the orchid family; among his many works are *Orchidearium Sceletos* (1826), *Genera and Species of Orchidaceous Plants* (1830—1840), *Sertum Orchidaceum* (1837—1842), and *Folia Orchidacea* (1852—1859).

linearis, -e (lin-e-AY-ris) Long and narrow, with sides nearly parallel, like a blade of grass; linear.

lineatus, -a, -um (lin-ee-AY-tus) Lined; bearing thin parallel stripes; lineate.

linguiformis, -e (ling-gwee-FOR-miss) Tongue-shaped; linguiform.

lingulatus, -a, -um (ling-u-LAY-tus) Tongue-shaped; lingulate; ligulate.

linkage map (LINK-ij map) Delineation of the relative position of the genes on the chromosome.

lip (lip) See labellum

Listera (LISS-ter-a) A genus of 20 species of mostly dwarf terrestrial orchids found throughout the Northern Hemisphere, commonly called "twayblades." It was founded in 1813 by Robert Brown, the name commemorating Dr. Martin Lister (1638—1711), an English physician and naturalist.

lithophyte (LITH-oh-fyte) A plant that grows on rocks.

lithophytic (lith-oh-FIT-ik) Pertaining to a lithophyte; growing on rocks.

lividus, -a, -um (LIV-id-us) Lead-colored; bluish-gray; livid.

lobatus -a, -um (lo-BAY-tus) Furnished with lobes; lobed; lobate.

LOBB, THOMAS (1811—1894) The younger of two brothers who collected plants for James Veitch & Sons, he traveled widely in India, Burma, Java, Malaya, Borneo, and the Philippines, discovering

many new and valuable orchid species; he is commemorated in *Bulbophyllum lobbii*.

LOBB, WILLIAM (1809—1863) The older of two brothers who collected plants for James Veitch & Sons from 1840 to 1857, he journeyed chiefly in South America, but later went to California, where he remained until his death.

lobe (lohb) Any division or segment of an organ such as a leaf, petal, etc.

lobed (lohb d) Furnished with a lobe or lobes.

lobulate (LOB-yew-layt) Furnished with lobules; having small lobes.

lobule (LOB-yewl) A small lobe.

LOCKHART, DAVID (?—1846) The first superintendent of the Botanical Gardens in Trinidad from 1818 to 1846, and a plant collector in Africa and Trinidad, his name is commemorated in the genus *Lockhartia*.

Lockhartia (lok-HART-ee-ah) A genus of 25 species of epiphytic orchids from the American tropics, related to *Oncidium* and commonly called the "braided orchid" because of the arrangement of the leaves. It was described in 1827 by Hooker in compliment to David Lockhart.

locule (LOK-yewl) Compartment or cell of a pistil or anther.

locus, -i (LOH-kus) The position of a gene on the chromosome.

longicollis, -e (lon-jee-KOL-liss) Having a long neck.

longicornu (lon-jee-KOR-noo) Having a long horn.

longifolius, -a, -um (lon-jee-FOH-lee-us) Long-leaved.

longiscapus, -a, -um (lon-jee-SKAY-pus) Having a long scape or flower stalk.

loratus, -a, -um (lor-AY-tus) Strap-shaped; lorate.

LOW, HUGH (1824—1904) Founder of the firm of Hugh Low & Co. of Clapton, London, and father of Rajah Sir Hugh Low of Sarawak, he collected orchids in Borneo, Burma and other countries of Asia.

lucid (LEW-sid) Shining, referring to the surface of an organ.

Luisia (loo-EEZ-ee-ah) A genus of 40 species of Asian epiphytic orchids with terete leaves and congested inflorescences. Closely related to *Vanda*, it was founded by Gaudichaud in 1826 and dedicated to Don Luis de Torres, a Spanish botanist of the nineteenth century.

lunatus, -a, -um (loo-NAY-tus) Crescent-shaped; lunate.

luridus, -a, -um (LOO-rid-us) Dismal-colored; yellowish brown; lurid.

lustrous Shiny or glossy.

luteolus, -a, -um (loo-tee-OH-lus) Pale yellow; yellowish.

luteo-purpureus, -a, -um (LOO-tee-oh-pur-PUR-ee-us) Yellowish purple or yellow and purple.

luteus, -a, -um (LOO-tee-us) Golden-yellow; luteous.

lutescens (loo-TESS-sens) Yellowish; becoming yellow; lutescent.

Lycaste (lye-KASS-tee) A genus of 25 species of epiphytic, or semiterrestrial, orchids of tropical America, described by Lindley in 1843 and dedicated the beautiful daughter of Priam, last king of Troy.

lyrate (LYE-rayt) Divided transversely into several lobes, the smallest at the base becoming gradually larger toward the end of the leaf.

M

Maclellanara (mac-LELL-an-AR-ah) A hybrid genus derived from *Brassia*, *Odontoglossum* and *Oncidium*, created in 1978 and named for the firm Rod McLellan Co., which created the genus. Now these hybrids are correctly, *Brassidium*.

Macodes (ma-KOH-deez) A genus of 14 species of terrestrial orchids from Java and Borneo, considered one of the "jewel orchids" because of the beautiful variegated foliage. It was described in 1840 by Lindley, the name alluding to the elongated midlobe of the lip.

Macradenia (mak-ra-DEN-ee-ah) A genus of 12 species of inconspicuous epiphytic orchids from tropical America, somewhat similar to *Notylia*. It was described by Robert Brown in 1822, the name derived from the Greek in reference to the long stipe connecting the pollinia to the viscid disk.

macranthus, -a, -um (ma-KRAN-thus) Large-flowered.

macroceras (mak-ro-SER-as) Large-horned.

macrochilus, -a, -um (mak-ro-KYE-lus) Large-lipped.

Macroclinium (mak-roh-KLY-nee-um) A Neotropical genus of 29 species of diminutive fan-shaped twig epiphytes formerly included in a broadly defined *Notylia*. Barbosa-Rodrigues described the genus in 1889, coining the generic name from two Greek words for "large" and "klinandrum," a reference to the area where the pollinia are attached.

macrophyllus, -a, -um (mak-ro-FILL-us) Large-leaved.

macrostachyus, -a, -um (mak-ro-STAY-kee-us) Having long tails like an ear of corn.

maculatus, -a, -um (mak-yew-LAY-tus) Spotted; maculate.

macule (MAK-yewl) A spot of pigment; the colored spot or mask on the base of the lip in miltonias.

maculosus, -a, -um (mak-yew-LOH-sus) Spotted; maculate.

magnificus, -a, -um (mag-NIF-i-kus) Showy; magnificent.

magnus, -a, -um (MAG-nus) Great; large; big.

majalis, -e (ma-JAY-lis) Flowering in May.

major (MAY-jor) Larger than its cogeners.

majus, -a, -um (MAY-jus) Large compared with others of the same genus.

MAKINO, TOMITARO (1862—1957) Prominent Japanese botanist and botanical artist who illustrated orchids of Eastern Asia.

malathion (mal-ah-THYE-on) The common name for a chemical pesticide consisting of S-(dicarbethoxyethyl) O, (O-dimethy dithiophosphate); used for the control of soft scales, spider mites, aphids and other orchid pests.

Malaxis (mal-AKS-iss) A genus 300 species of mostly terrestrial orchids found throughout the world but most abundant in tropical mountains. Related to *Liparis*, it was described by Swartz in 1788, the name alluding to the soft texture of the leaves.

malodorous Having a disagreeable odor.

malquique (mal-KEE-ke) Mexican term for tree fern, and also for tree-fern fiber.

mammiform (MAM-mih-form) Conical with a rounded top; breast-shaped

mammillatus, -a, -um (mam-mil-LAY-tus) Having nipple-shaped structures; mammillate.

manicatus, -a, -um (man-i-KAY-tus) With long sleeves or sheaths.

marbled (mahr-buhld) Having irregular splashes or streaks of color.

marcescent (mar-SESS-ent) Withering, but not falling off.

marginalis, -e (mar-jin-AY-lis) Placed upon or attached to the edge.

marginatus, -a, -um (mar-jin-AY-tus) Furnished with a margin or border of distinct character; marginate.

marmoratus, -a, -um (mar-mor-AY-tus) Marbled; mottled; marmorate.

Masdevallia (mas-de-VAHL-lee-ah) A genus of 380 species of epiphytic orchids from tropical America. Related to *Pleurothallis*, it was established in 1794 by Ruiz and Pavon, the name complimenting Dr. Jose Masdevall, a Spanish physician and botanist of the 18th century.

matutinus, -a, -um (ma-too-TYE-nus) Pertaining to or occurring in the morning; matutinal.

mauve Bluish or pinkish-purple

Maxillaria (mak-sil-AIR-ee-ah) A genus of 420 species of chiefly epiphytic orchids from the American tropics related to *Scuticaria* and *Trigonidium*. It was described by Ruiz and Pavon in 1794, the name alluding to the fancied resemblance of the flowers to the jaws of an insect.

maxillaris, -e (mak-sil-AIR-iss) Resembling jaws.

maximus, -a, -um (MAK-sim-us) The largest of its kind; maximal.

mealybug (MEE-lee-bug) A group of sucking insects commonly found in the leaf axils and along the inflorescences of orchids, characterized by white elliptic bodies.

Mediocalcar (mee-dee-oh-CAL-car) A genus of 20 species of New Guinea epiphytes known for their long-lasting, brilliantly colored sepaline tubes. J.J. Smith established the genus in 1914, deriving the generic name from two Greek words meaning "middle" and "spur" to denote the saccate middle portion of the lip.

medium, media (MEE-dee-um, MEE-dee-a) (1) A nutrient substance, either liquid or jelly-like, upon which orchid seeds are germinated under aseptic or sterile conditions. (2) The substance or substratum in which an orchid plant is grown under cultivation, either organic, such as osmunda, tree fern, bark, etc., or inorganic, such as gravel, cinders, pumice, etc.

medius, -a, -um (MEE-dee-us) Intermediate; middle.

medusae (me-DEW-see) Referring to Medusa, one of the Gorgons whose locks Minerva changed into serpents.

Megaclinium (meg-ah-KLYN-ee-um) An African genus of 40 epiphytic species now included as a section of *Bulbophyllum*, usually characterized by broadly flattened inflorescences resembling tongue depressors.

meiosis (my-OH-sis) The reduction division that halves the number of chromosomes.

Meiracyllium (mye-rah-SILL-ee-um) A genus of two species of epiphytic or lithophytic orchids from Mexico and Guatemala allied to *Laelia*. Founded by Reichenbach in 1864, the name refers to the dwarf creeping habit of the plants.

meleagris, -re (mel-ee-AY-gris) Resembling or spotted like a Guinea hen.

membranaceus, -a, -um (mem-bran-AY-shus) Thin and semitransparent; skinlike; membranaceous.

Mendoncella (men-don-SELL-a) There are 11 epiphytic species in this genus ranging from Mexico south to Brazil and Peru. Hawkes identified the genus in 1963, naming it in honor of Dr. Luys de Mendon—a, editor of a Brazilian orchid journal.

meniscoidal (men-iss-KOY-dal) Like a meniscus or disk; with the form of a watch-crystal.

mentum (MEN-tum) A chinlike projection formed by the sepals and extended foot of the column.

mericlone (MAIR-i-klohn) A clonal orchid plantlet produced through the technique of meristem propagation.

meristem (MAIR-i-stem) The growing tissue made up of actively dividing cells, particularly at the tips of roots and at the apex of the vegetative or floral shoot.

-merous (mer-uhs) A suffix meaning having parts, as three-merous; having three parts of each kind.

mesocarp (MES-oh-karp) Middle layer or part of a pericarp; the part between the endocarp and exocarp.

mesochile (MES-oh-kyle) The intermediate or middle part of the lip of orchids whose lip is separated into three parts.

Mesoglossum (mee-so-GLOSS-um) A monotypic lithophytic or terrestrial genus native to Mexico. A member of the *Odontoglossum* Alliance, species in this genus have lips held at an intermediate angle to the column. Halbinger established the genus in 1984, deriving the generic name from two Greek words meaning "middle" and "tongue," a reference to the intermediate position of the lip.

mesophyte (MES-oh-fyte) A plant that only requires an average amount of water.

meter (MEE-ter) A measure of length equal to 39.37 inches or 10 decimeters; abbreviated m.

Mexicoa (meks-ih-KO-a) A monotypic epiphytic genus native to Mexico. Garay identified the genus in 1974, naming it after Mexico. Considered by many taxonomists to belong to *Oncidium*.

Micholitz, Wilhelm (1854–1932) A plant collector for the firm of Sanders, who collected in the Philippines, New Guinea and elsewhere. He introduced many fine orchids, including *Coelogyne micholitzii* from Vietnam.

microchilus, -a, -um (mye-kroh-KYE-lus) Small-lipped.

Microcoelia (mye-crow-SEE-lee-a) There are around 27 leafless epiphytic species in this genus ranging from tropical Africa to Madagascar. Lindley described the genus in 1830, coining the name from two Greek words meaning "small" and "abdomen" to denote the unique spur on these flowers.

micropropagation (mye-crow-prop-a-GAY-shun) The horticultural propagation of plants by in vitro multiplication by tissue culture (meristemming) and sterile seed culture.

micropyle (MYE-kroh-pyle) The opening of the ovule through which impregnation takes place; the point on the seed marking the orifice of the ovule.

midlobe The central lobe.

midrib (mihd-rihb) The main vein of a leaf or leaflike part. *militaris*, -e (mil-i-TAY-ris) Pertaining to soldiers; like a soldier. In plants often in reference to flowers carried stiffly erect like soldiers.

midvein The central vein.

Miltonia (mil-TOH-nee-ah) A genus of nine species of epiphytic orchids from South America related to *Brassia*, it was described in 1837 by Lindley, who dedicated it to the Earl Fitzwilliam, Viscount Milton (1748–1833) a patron of horticulture. Many plants known in horticulture as *Miltonia* have been reclassified as *Miltoniopsis*.

Miltonioides (mil-TOH-nee-OY-deez) Around five or six epiphytic species are found in this tropical Central- and South American genus. Brieger and Lueckel described the genus in 1883, selecting a name that indicated these species were similar to *Miltonia*.

Miltoniopsis (mill-toh-nee-OP-sis) A showy Neotropical genus of six species formerly known as the cool-growing miltonias, commonly known as pansy orchids. This epiphytic genus was described by Godefroy-Lebeuf in 1889, selecting a name to indicate that the flowers resembled those of *Miltonia*.

minax (MYE-naks) Threatening; forbidding.

miniatus, -a, -um (min-ee-AY-tus) Vermilion-colored; cinnabar-red; miniaceous.

minimus, -a, -um (MIN-i-mus) Smallest; minimum.

minus, -a, -um (MYE-nus) Smaller.

minutus, -a, -um (mye-NEW-tus) Very small; minute.

minutissimus, -a, -um (mye-new-TISS-i-mus) The smallest; most minute.

mirabilis, -e (mye-RAB-il-is) Wonderful; remarkable; marvelous.

Mischobulbon (mih-shoh-BUHL-on) The six terrestrial species in this genus are native to Southeast Asia south to New Guinea. Schlechter described the genus in 1911, coining the name from two Greek words for "stalk" and "bulb" to describe the small pseudobulbs found in this genus.

miticide (mye-TIH-side) A pesticide used to kill mites.

mitosis (my-TOH-sis) The process of nuclear division producing daughter nuclei with the same number of chromosomes, followed by cell division; see meiosis.

mitratus, -a, -um (mye-TRAY-tus) Wearing a miter, alluding to the shape of the flower.

mitriformis, -e (mye-tri-FOR-miss) Miter-shaped, or like a cap.

millimeter (mill-ih-MEE-ter) A measure of length equal to .03937 of an inch (1/25 of an inch); abbreviated mm.

modestus, -a, -um (moh-DESS-tus) Modest; not showy or flamboyant.

Mokara (moh-KAR-ah) A hybrid genus derived from *Arachnis*, *Ascocentrum* and *Vanda* in 1969, and named in honor of the hybridizer C.Y. Mok.

monandrous (moh-NAN-drus) With one stamen.

moniliformis, -e (mo-nil-i-FOR-miss) Necklace-like; having alternate swellings and constrictions.

mono- (mon-oh) A prefix meaning one

monodelphous (mon-oh-DEL-fus) When stamen filaments are fused into a column or tube.

monoclinous (mon-oh-KLYE-nus) Hermaphroditic; perfect; the two sexes in the same flower. (See diclinous)

Monocotyledoneae (mon-oh-kot-ill-ee-DOHN-ee-ee) One of two subclasses of the angiospermous (seeds in a closed ovary) plants having but one cotyledon (seed-leaf), a stem that rarely exhibits secondary growth in thickness and is without annual rings, leaves generally parallel-veined, and the flowers trimerous (having parts in threes); comprising such families as the orchids, lilies, irises, palms, sedges and grasses.

monoecious (mon-EE-shus) With functional stamens and pistils in separate flowers on the same plant.

monogynous (mon-NOJ-i-nus) With only one style.

monopetalous (mon-oh-PET-a-lus) One-petaled; all the petals united to form one body or organ, as a gamopetalous corolla.

monophyletic (mon-oh-fye-LET-ick) A taxonomic and cladistic term referring to a group having a common ancestor.

monophyllous (mon-oh-FIL-us) Having a single leaf.

monopodial (mon-oh-POH-dee-al) A form of growth in which there is a single vegetative shoot that continues in growth from its terminal bud from season to season, such as in the genus *Vanda*.

monostichous (moh-NOSS-ti-kus) In one row. (See *distichous*)

monstrosity (mon-STROSS-i-tee) Deformity; any unusual or atypical kind of development; a teratology.

monotypic (mon-oh-TIP-ik) Having only one type, as a genus with but one species.

montanus, -a, -um (mon-TAY-nus) Pertaining to or living in mountains; montane.

MOON, HENRY GEORGE (1857—1905) Noted English botanical artist who painted most of the plates for the great orchid folios *Reichenbachia* (1888—1894). Commissioned by Frederick Sander, whose daughter he later married.

Mormodes (mor-MOH-deez) A genus 60 species of epiphytic or semiterrestrial orchids from tropical America, allied to *Catasetum* and *Cycnoches*. It was described by Lindley in 1836, the name alluding to the strange appearance of the asymmetric flowers.

morphogenesis (mor-foh-JEN-eh-sis) The process through which an embryo or cultured tissue develops into the final adult form.

morphology (mor-FOLL-oh-jee) The branch of biology that deals with the form and structure of plants and animals without regard to functional processes.

Mormolyca (mor-moh-LYE-ka) The six epiphytic species in this genus come from Central America and northern South America. Fenzl founded the genus in 1850, coining the name from the Greek word meaning "hobgoblin," a reference to the appearance of the flower when viewed from the side.

moscifera (ma-SKIFF-er-a) Bearing flies; alluding to the resemblance of some flowers to a fly.

moschatus, -a, -um (mos-KAY-tus) Musk-scented.

mottled With colored spots or blotches.

mucilaginous (mew-suh-LAJ-uh-nuhs) Mucilagelike or slimy

mucosus, -a, -um (mew-KOH-sus) With a slimy covering or secretion.

mucro (MEW-kro) A short and small abrupt tip.

mucronatus, -a, -um (mew-kron-AY-tus) Tipped with a mucro; pointed; mucronate.

mucronulatus, -a, -um (mew-KRON-ule-aye-tus) Having a small mucron, or sharp, pointed tip, used to describe the leaf apices of many orchids.

mule (mewl) An old term for a hybrid cross, particularly between different species; a hybrid.

multiflorus, -a, -um (mul-tee-FLOR-us) Many-flowered.

multigeneric (mul-tee-jen-AIR-ik) Of many genera; usually used in reference to hybrids combining several genera.

muralis, -e (mew-RAY-lis) Growing on walls.

muricatus, -a, -um (mew-ri-KAY-tus) Roughened with short, hard prominences; muricate.

muscariformis, -e (mus-ka-ree-FOR-miss) In the form of a brush or flybrush.

muscosus, -a, -um (mus-KOH-sus) Resembling a moss.

mutabilis, -e (mew-TAB-il-is) Changeable, especially as to color.

mutant (mew-TANT) An individual resulting from a mutation.

mutation (mew-TAY-shun) A change in the amount of chemical structure of DNA, resulting in a change in characteristics of a cell or organism; an individual resulting from such a change.

muticous (mew-TEE-kos) Blunt or pointless.

muticus, -a, -um (MEW-tik-us) Blunt; without a point.

mycelium (mye-SEE-lee-um) Vegetative part of a fungus composed of threads or hyphae.

mycorrhiza (my-koh-RHYZ-ah) The condition of having symbiotic fungi associated with roots, the usual condition in orchids as well as other plant families such as the Ericaceae, or heath family.

Myoxanthus (my-oxs-AN-thus) About 40 creeping epiphytic species make up this genus that comes from Central America and South America. The genus was described in 1835 by Poeppig and Endlicher, who coined the name from two Greek words meaning "dormouse" and "flower," probably to denote how they viewed these flowers.

myrianthus, -a, -um (meer-ee-AN-thus) Innumerable-flowered.

Myrmecophila (mer-me-KOFF-ill-ah) There are eight epiphytic species in this tropical Central and South American and West Indies genus. Rolfe established the genus in 1917, deriving the name from two Greek words meaning "an ant" and "a friend" to describe the association of ants with these species. Ants form colonies in the hollow pseudobulbs.

myrmecophilous (mer-me-KOFF-ill-us) Ant-loving; inhabited by ants. *Mystacidium* (miss-ta-SID-ee-um) A genus of nine species of epiphytic orchids from Africa. Allied to *Aerangis* and *Angraecum*, it was established by Lindley in 1836, the name derived from the Greek and referring to the bearded appendages of the column.

N

naevius, -a, -um (NEE-vi-us) Freckled.

Nageliella (NAY-gel-ee-ELL-ah) A genus of two species of Mesoamerican orchids related to *Epidendrum* and *Scaphyglottis*. It was established in 1940 by Louis O. Williams, the name honoring the contemporary collector of Mexican orchids, Otto Nagel.

naked (NAY-ked) Wanting its usual covering or lacking certain organs as leaves, pubescence, etc.

nanellus, -a, -um (nan-ELL-us) Very dwarf.

nanus, -a, -um (NAY-us) Dwarf.

napiformis, -e (nap-i-FOR-miss) Turnip-shaped; more or less short-fusiform; broader than high and abruptly tapering both ways; napiform.

nascent (NAY-scent) In the process of being formed, as in meristematic tissue

nasutus, -a, -um (nas-OO-tus) Large-nosed.

natans (NAY-tanz) Floating.

natural hybrid (NACH-er-uhl HYE-brid) A hybrid produced in the wild, in contrast to an artificial hybrid produced by man.

naturalized (NACH-er-uhl-eyzd) Said of plants from foreign areas that have become established.

natural selection (NACH-er-uhl SEE-lek-shun) The process of evolution that results in the differential survival and reproduction of those individuals best adapted to their environment.

navicularis, -e (nav-ik-yew-LAY-ris) Boat-shaped; cymbiform; navicular.

nebulosus, -a, -um (neb-yew-LOH-sus) Clouded; cloudlike; also applied to a plant found growing at a high elevation.

necrotic (ne-KROT-ik) The condition of cells and tissues killed through disease or injury.

nectar (NEK-ter) The saccharine secretion of a plant that rewards the animal vectors that pollinate the flower.

nectariferous (nek-tar-IF-fer-us) Nectar-bearing.

nectary (NEK-tar-ee) A nectar-secreting organ or part, such as the spurs of many orchids.

neglectus, -a, -um (neg-LEK-tus) A plant hitherto disregarded or overlooked.

nemoralis, -e (nem-oh-RAY-lis) Growing in groves or shady places; nemoral.

neo- (NEE-oh) A prefix meaning new.

Neobathiea (nee-oh-BATH-ee-a) There are seven epiphytic species in this genus native to Madagascar and the Comoros. Schlechter founded the genus in 1925, naming it in honor of Henri Perrier de la B—thie, who authored the *Orchidaceae* of Madagascar.

Neobenthamia (nee-oh-ben-THAM-ee-ah) A monotypic genus of terrestrial African orchids. Related to *Polystachya*, it was described by Rolfe in 1891, honoring the English botanist George Bentham.

Neocogniauxia (nee-oh-kohn-YOH-zee-ah) A genus of two West Indian orchids originally thought to be related to *Laelia*, it was established in 1913 by Schlechter and dedicated to the Belgian botanist Alfred Celestin Cogniaux; it accommodates the species formerly known as *Laelia monophylla* and *L. hexaptera*. *Neocogniauxia* is now known to belong to the *Pleurothallidinae*.

Neoescoberia (nee-oh-ess-ko-BAR-ee-a) The two epiphytic species in this genus come from the Andes in South America. Garay described the genus in 1972, naming it honor of the well-known Colombian orchid grower Don Gilberto Escobar R.

Neofinetia (nee-oh-fin-EH-tee-ah) A monotypic genus of epiphytic orchids from Japan, Korea and the Ryukyus related to *Ascocentrum* and resembling *Angraecum*. The genus was established by H.H. Hu in 1925 and dedicated to M. Achille Finet, a French botanist who worked on the orchids of China and Japan. Now included in *Vanda*

Neogardneria (nee-oh-gard-NEHR-ee-a) A monotypic Brazilian genus. Schlechter founded the genus in 1921, naming it in honor of George Gardner, who collected orchids in Brazil in the early 1800s.

Neolauchea (nee-oh-LOWK-ee-a) See *Isabelia*.

Neomoorea (nee-oh-MORE-ee-ah) A monotypic genus of epiphytic or lithophytic orchids from northern South America and Panama, allied to *Houlletia*, it was founded by Rolfe in 1904, being dedicated to F.W. Moore, curator at Glasnevin and an orchid fancier.

Neostylis (nee-oh-STY-liss) A hybrid genus between *Neofinetia* and *Rhynchostylis* created in 1965.

Neotropical (nee-oh-trop-ih-kuhl) Of, pertaining to or designating the region comprising South America, the West Indies and tropical North America.

Neottia (nee-OTT-ee-ah) A genus of nine species of saprophytic orchids found chiefly in the boreal regions of the Old World. Related to *Listera*, *Neottia* was established by Linnaeus in 1735, the name alluding to the fancied resemblance of the clustered roots to a bird's nest.

Nephelaphyllum (neff-el-a-FIL-um) The 16 terrestrial species in this genus come from Southeast Asia, ranging from India east to the Malay Peninsular. Blume described the genus in 1825, coining the name from two Greek words for "cloud" and "leaf" to denote the mottling on the leaves.

nephroid (NEFF-royd) Kidney-shaped; reniform.

nervation (ner-VAY-shun) See venosus.

nerve (nerv) A vein or slender rib, particularly if not branched.

Nervilia (ner-VILL-ee-ah) A genus of 65 species of unusual terrestrial orchids from the tropical and subtropical areas of Asia and Africa and the Pacific noted for their rather attractive, solitary, heart-shaped leaves. It was described in 1826 by Gaudichaud, who attributed it to Commerson.

nervosus, -a, -um (ner-VOH-sus) Prominently nerved; nervose.

netted (net-ed) Marked with reticulated lines or veins.

neuter (new-ter) Said of a flower lacking reproductive structures.

neutral (new-truhl) A chemical condition of water or moist soil in which acid and alkaline constituents are exactly balanced; pH 7.

NICHOLS, WILLIAM H. (1885—1951) Australian orchidologist and illustrator, author of *Orchids of Australia* (1951—1958).

Nidema (nye-DEE-ma) The two epiphytic species in this genus range from Mexico south to Panama. Britton and Millspaugh founded the genus in 1920. The name is an anagram of the generic name *Dinema*.

nidulatus, -a, -um (nid-yew-LAY-tus) Nested; like or borne in a nidus or nest; nidulate.

niger, *nigra*, *nigrum* (NYE-ger) Black.

nigrescens (nye-GRESS-enz) Blackish; nigrescent.

nitidus, -a, -um (NIT-id-us) Shining; nitidous; nitid

nitens (NYE-tenz) Shining; becoming shiny.

nivalis, -e (niv-AY-lis) Snowy white; nival.

niveus, -a, -um (NIV-ee-us) Snowy; snow-white; growing near snow.

nobilis, -e (NOH-bil-is) Eminent; remarkable for fine qualities; noble.

nocturnal (nok-TER-nuhl) Of the night; used in reference to flowers that open after dark or having fragrance only at night.

nocturnus, -a, -um (nok-TERN-us) Night-flowering; blooming at night.

nodding Bent to one side and downward.

node (no-d) A joint on a stem or pseudobulb that normally bears a bract, a leaf, a whorl of leaves or a root.

nodosus, -a, -um (noh-DOH-sus) Having many joints or nodes; knotty; knobbed; nodose.

nodule (nah-dewyl) A small node

nomenclature (NOH-men-klay-cher) A set or system of names and naming.

notatus, -a, -um (noh-TAY-tus) Spotted; marked.

Notylia (noh-TILL-ee-ah) A genus of 50 species of compact, small-flowered epiphytic or lithophytic orchids from tropical America. It was established by Lindley in 1825, the name meaning "humpback," alluding to an unusual hump or callosity on the stigma, a character shared by its segregate genus *Macroclinium*.

nubigenus, -a, -um (new-bi-JEN-us) Born among the clouds; from a high elevation.

nucleus (NEW-klee-us) The central dense structure of a cell where DNA is replicated and transcribed.

nucleolus (new-klee-OH-lus) A sharply defined point in the nucleus of a cell where ribosomal RNA is synthesized.

nudus, -a, -um (NEW-dus) Naked; bare; nude.

nutans (NEW-tanz) Nodding; nutant.

nutrient (new-TREE-ent) A substance used or required for food by an organism.

nutrient solution (new-TREE-ent suh-LEW-shun) An aqueous solution of chemicals or natural substances required for growth or germination.

nutrition (new-TRIH-shun) The act or process by which an organism obtains energy and chemicals from the environment for survival or growth.

nyctanthous Blooming at night

O

ob- (ob) A prefix, meaning inversely or oppositely.

obcompressed (ob-kuhm-PREST) Flattened dorso-ventrally, instead of laterally

obconical (ob-KON-i-kuhl) Inversely conical; having the attachment at the apex.

obcordatus, -a, -um (ahb-kor-DAY-tus) Inversely cordate; heart-shaped with the attachment at the apex, obcordate.

Oberonia (oh-ber-OH-nee-ah) A genus of 300 species of equitant-leaved epiphytic orchids distributed from East Africa to Samoa, it is related to *Liparis* and was described in 1830 by Lindley, who dedicated it to Oberon, king of the fairies.

ochroleucous (oh-kro-LEW-kus) Yellowish white

oblanceolate (ob-LAN-see-oh-layt) Inversely lanceolate, with the broadest part toward the apex.

oblique (ob-leek) Having unequal sides; asymmetrical; slanting.

oblong (ob-long) Being longer than broad, and with the sides nearly parallel.

oblongifolius, -a, -um (ob-long-gi-FOH-lee-us) With oblong leaves.

obovate (ob-OH-vayt) Inversely ovate; ovate with the narrow end at the base.

obovoid (ob-OH-voyd) Inversely ovoid; egg shaped with the narrow end at the base.

obryzatus, -a, -um (oh-bry-ZAY-tus) Pure gold color.

obsolescent (ob-suh-LES-uhnt) Becoming rudimentary; gradually disappearing or imperfectly developed.

obsolete (ob-suh-leet) Imperfectly developed or rudimentary.

obtusus, -a, -um (ob-TOO-sus) Blunt or rounded at the tip; having an angle greater than 90 degrees.

obtusifolius, -a, -um (ob-too-si-FOH-lee-us) Blunt-leaved.

ocellatus, -a, -um (oh-sell-LAY-tus) With an eye; having a circular spot of one color inside a larger spot or area of another color.

ochraceus, -a, -um (oh-KRAY-see-us) Yellowish, ocher-colored; ochraceous.

ocreate (oh-KREE-ayt) Having stipules that sheath.

Octomeria (ok-toh-MER-ee-ah) A genus of 135 species of epiphytic orchids from the American tropics, related to *Pleurothallis*, it was described in 1813 by Robert Brown, the name alluding to the eight pollinia.

oculatus, -a, -um (ok-yew-LAY-tus) Having one or more dark spots like eyes; oculate.

Odontioda (oh-don-tee-OH-dah) A hybrid genus between *Cochlioda* and *Odontoglossum* created in 1906.

odontochilus, -a, -um (oh-don-toh-KYE-lus) Having a toothed lip. Also a genus of terrestrial orchids from Asia and the Pacific.

Odontocidium (oh-don-toh-SID-ee-um) A hybrid genus between *Odontoglossum* and *Oncidium* created in 1911.

Odontoglossum (oh-don-toh-GLOSS-um) A genus of 140 species of showy epiphytic orchids from tropical America belonging to the *Oncidium* alliance. It was established by Humboldt, Bonpland and Kunth in 1815, the name referring to the toothed crest on the lip of most of the species. Now officially included in the genus *Oncidium*.

Odontonia (oh-don-TOE-nee-ah) A hybrid genus between *Odontoglossum* and *Miltonia* (including *Miltoniopsis*) created in 1905.

odoratus, -a, -um (oh-do-RAY-tus) Fragrant.

odoratissimus, -a, -um (oh-door-a-TISS-i-mus) Very fragrant.

odoriferous With a distinct odor.

Oeceoclades (ee-see-oh-CLAY-dees) A Pantropical terrestrial genus of 31 species closely allied to and sometimes included in a broadly defined *Eulophia*, formerly known as *Eulophidium*. Lindley described the genus in 1832, deriving the generic name from two Greek words for "private" and "branch," to indicate forming a private branch from *Angraecum*.

Oeonia (oh-ee-oh-NEE-a) There are five epiphytic species in this genus from Madagascar and the Mascarene Islands. Lindley founded the genus in 1824, deriving the generic name from the Greek word for "bird of prey," an allusion to the flowers that slightly resemble birds.

OERSTED, ANDERS S. (1816-1872) Nineteenth-century Danish plant collector and ecologist, particularly important to early Costa Rican phytography.

Oerstedella (ewer-sted-ELL-ah) A former Neotropical genus of 32 species of reedy plants now included in *Epidendrum*, characterized by verruculose leaf sheaths. H.G. Reichenbach described the genus in 1852, naming it in honor of Andre Santoe Oersted, who collected the original material.

officinalis, -e (oh-fiss-in-AY-lis) Kept in stock by apothecaries. Typically refers to species of ethnobotanical interest.

offset (off-set) A short lateral shoot that may produce another plant; an offshoot.

oleaginous (oh-lee-AJ-in-us) Having the nature or quality of oil.

oliganthis, -a, -um (ol-ig-ANTH-us) With few flowers.

olivaceus, -a, -um (ol-iv-AY-see-us) Greenish brown; olive-colored; olivaceous.

oncioides (on-sid-ee-OY-deez) Resembling an *Oncidium*.

Oncidium (on-SID-ee-um) A large genus of epiphytic orchids from tropical America, it was founded by Swartz in 1800, the name alluding to the warty callus on the lip of the species in the genus. The count of species in the genus varies from less than 300 to over 1000 depending on how broadly the genus is circumscribed.

ontogeny The process of development of an organ toward maturity.

opaque Dull; neither shining nor translucent.

operculate (oh-PERK-yew-layt) Lidlike, as some anthers, or furnished with a lid.

operculum (oh-PERK-yew-lum) A cap or lid of an organ, usually shed by circumscissile dehiscence; in orchids, the anther cap.

Ophrys (OFF-riss) A genus of 25 species of terrestrial orchids from the North Temperate Zone of Europe, Africa and Asia, especially around the Mediterranean Sea, established by Linnaeus in 1753, the name derived from the Greek, meaning "eyebrow."

Opsistylis (op-si-STY-lis) A hybrid genus between *Rhynchostylis* and *Vandopsis* created in 1970.

opposite (OP-uh-zit) Said of a plant having two leaves at the same node

orbicularis, -e (or-bik-yew-LAY-ris) Having a rounded outline; disc-shaped; orbicular.

orbiculatus, -a, -um (or-bik-yew-LAY-tus) Disc-shaped; orbiculate.

Orchidaceae (or-ki-DAY-see-ee) The largest family of flowering plants including terrestrial and epiphytic herbs from both temperate and tropical regions. A cosmopolitan group related to lilies, palms, grasses and other monocotyledonous plants, the flowers are usually characterized by their bilateral symmetry and the possession of a column representing the fusion of both the male and female reproductive organs.

orchidist (ore-KID-ist) One whose interest in orchids is primarily horticultural.

orchidologist (ore-KID-oll-uh-jist) One who specializes in the study of orchids, particularly their evolution and relationships.

orchidology (ore-KID-oll-uh-gee) The branch of technical botany that deals with orchids and their study.

Orchis (ORE-kiss) There are 30 terrestrial species in this genus widely distributed in Europe and Asia, all the way to China. Carl von Linné founded the genus in 1753, selecting the Greek word meaning "testicle" to describe the two tubers found on these plants.

organelle (ore-GAN-ell) An organized structure within the cell that has a specialized function.

orifice (ore-uh-FISS) An opening.

originator (uh-RIJ-uh-NAY-ter) In reference to the registration of an orchid hybrid, the owner (or his assignee) of the seed-bearing parent at the time of pollination.

Ornithocephalus (or-nith-oh-SEFF-al-us) A genus of 28 species of pseudobulbless fan-shaped epiphytes from the American tropics. Related to *Phymatidium* and *Zygostates*, it was established by Hooker in 1825, the name alluding to the resemblance of the column and anther to the head of a bird.

Ornithochilus (or-nith-oh-KYE-luss) The three monopodial epiphytes in this genus come from Southeast Asia, ranging from the Himalayas east to the Malay Peninsula. Lindley founded the genus in 1833, deriving the generic name from two Greek words for "bird" and "lip" to denote the birdlike lips on these flowers.

Ornithophora (or-nith-oh-FORE-a) A monotypic genus native to Brazil. Barbosa-Rodrigues described the genus in 1881, coining the generic name from two Greek words meaning "bird" and "bearing," referring to the column, which appears birdlike in side view.

ornithorhynchus, -a, -um (or-nith-oh-RINK-us) Resembling the beak of a bird.

ortho- (or-tho) A word element meaning "straight" or "upright."

Osmoglossum (oz-moh-GLOSS-um) The three epiphytic species in this genus come from Central America. Schlechter established the genus in 1916, deriving the generic name from two Greek words meaning "scent or odor" and "lip" to denote the fragrance of the flowers.

osmosis (oz-MOH-sis) Diffusion of a solvent such as water through a semipermeable membrane from a dilute to a concentrated solution.

osmundine (oz-MUN-deen) The cut fibrous roots of ferns of the genus *Osmunda* used as a growing medium for epiphytic orchids; *osmunda*.

Otochilus (oh-toh-KYE-lus) The four creeping epiphytic species in this genus range from the Himalayas east to Thailand. The genus was founded by Lindley in 1830. He derived the generic name from two Greek words meaning "ear" and "lip," however, the reason behind the naming is not clear.

Otoglossum (oh-toh-GLOSS-um) This genus of seven epiphytic species comes from Central and South America, ranging from Costa Rica south to Peru. Schlechter described these species as a section of *Odontoglossum* in 1924 and in 1976 Garay and Dunsterville raised the section to the generic level.

outcross To transfer pollen from one flower to the anther of another within the same species or hybrid.

ovalis, -e (oh-VAY-liss) Broadly elliptic in shape; oval.

ovary (OH-vah-ree) The part of an orchid flower that becomes the fruit following pollination and fertilization. It contains the ovules, which, if fertilized, become the seeds; in orchids, the ovary is combined with the pedicel to form the pedicellate ovary beneath the flower.

ovatus, -a, -um (oh-VAY-tus) Shaped like the outline of an egg, with the broader end downward; ovate.

overpot (OH-ver-pot) To pot an orchid in a container larger than necessary, allowing more freedom for root growth or for greater plant growth, or allowing for a greater time interval before repotting; in inexperienced hands, this can be detrimental to the plant.

overwater (OH-ver-wah-ter) To keep the medium too wet or too damp, usually degrading the roots and eventually preventing the plant from absorbing needed water and nutrients.

ovoid (OH-voyd) Egg shaped, the larger end toward the stem or axis; used in a three-dimensional sense as opposed to ovate.

ovulate (OV-yuh-layt) Bearing ovules

ovule (OV-yewl) One of the young bodies in the ovary that, upon fertilization, develop into a seed; the female gametophyte.

ovuliferus, -a, -um (oh-vyew-LIF-er-us) Ovule-bearing.

P

PABST, GUIDO FREDERICO JOAO (1914—1980) Dynamic Brazilian orchidologist whose many publications include the comprehensive *Orchidaceae Brasiliensis* with F. Dungs.

Pabstia (PABST-ee-a) The five epiphytic species in this genus are native to tropical Brazil. Garay removed them from *Colax* in 1973, naming the new genus in honor of Guido Pabst, co-author of *Orchidaceae Brasiliensis*.

pachyphyllus, -a, -um (pak-ee-FILL-us) Thick-leaved.

pallens (PAL-lenz) Becoming pale or light in color.

pallidus, -a, -um (PAL-li-dus) Pale, pallid.

palmatius, -a, -um (pal-MAY-tus) Lobed and radiating like the fingers; palmate.

paludosus, -a, -um (pal-yew-DOH-sus) Growing in marshes; paludose.

Palumbina (pal-um-BEE-na) A monotypic epiphytic genus from Guatemala. H.G. Reichenbach described the genus in 1863, deriving the generic name from the Greek word "belonging to a dove," probably a reference to the white flowers, as white is associated with doves. The single species is now correctly, *Cuitlauzina candida*.

palustris, -e (pal-US-triss) Growing in marshes; palustrine.

pampinus, -iform Tendril.

pan A form of pot that is broader and shallower than the regular type. These are also known as azalea pots or bulb pans.

panduratus, -a, -um (pan-dew-RAY-tus) Shaped like a violin; pandurate.

panduriformis, -e (pan-dew-ri-FOR-miss) Fiddle-shaped; panduriform.

panicle (PAN-i-kul) A loosely arranged branched inflorescence, blooming from the center or lower branches to the outer ends or top.

paniculate (pan-ik-yew-layt) Having an inflorescence resembling a panicle.

paniculatus, -a, -um (pan-ik-yew-LAY-tus) With flowers arranged in a paniculate manner.

Panisea (pan-EE-see-a) The seven species in this genus may be either epiphytic or lithophytic and come from Southeast Asia, mainly Nepal and India. Lund founded the genus in 1987 by removing these species from *Coelogyne*. He derived the generic name from two Greek words meaning "all" and "equal" due to the similarity between the sepals and petals.

pannose (pan-noze) Having the texture of felt or woven cloth.

PANTLING, ROBERT (1856—1910) British botanist, co-author, with George King, of the monumental *The Orchids of the Sikkim-Himalaya* (1898).

Paphinia (paff-EE-nee-a) The five epiphytic species in this genus range from Guatemala south to northern South America. Lindley described the genus in 1843, using the Cypriot name for Aphrodite as the generic name.

Paphiopedilum (paff-ee-oh-PED-i-lum) A genus of about 60 species of the lady's-slipper orchids from the Asiatic tropics, formerly included in the genus *Cypripedium*, the name having been proposed by Pfitzer in 1886 in allusion to the slipper-shaped lip.

papilio (pa-PILL-ee-oh) A butterfly.

Papilionanthe (pap-ill-ee-oh-NAN-thee) A genus of 10 species of Asian orchids formerly included in *Vanda* and known in horticulture as terete-leaved vandas, commonly grown landscape plants in the tropics and the usual flower of orchid leis.

papillae (pa-PILL-ee) Minute nipplelike projections.

papillosus, -a, -um (pap-ill-OH-sus) Covered with nipple-like protuberances on the surface; papillose.

papyraceous Papery in texture and usually color.

Paraphalaenopsis (pair-ah-fayl-e-NOP-sis) A genus of four species of vandaceous orchids endemic to Borneo, characterized by terete leaves and subumbellate inflorescences, named for the flowers' similar morphology to *Phalaenopsis*.

paraphyletic (pair-ah-fy-LET-ick) Cladistic term for a group that does not include all descendants of a common ancestor.

parasite A plant that grows on and derives part or all of its nourishment from another plant, called the host.

pardinus, -a, -um (par-DYE-nus) Spotted like a leopard or panther.

parenchyma (puh-RENG-kuh-muh) Said of undifferentiated cells with thickened walls.

parent (pare-ent) One of the two particular plants responsible for the production or generation of a given plant or progeny.

parietal (pa-RYE-e-tal) Borne on the inner surface or wall surface of a capsule or ovary.

PARISH, CHARLES SAMUEL POLLOCK (1822—1897) An English missionary, stationed at Moulmein, Burma, he collected, illustrated and introduced from that country many fine orchids, such as *Paphiopedilum parishii*.

parted (par-ted) Cleft or cut almost to the base.

parthenogenesis (par-thin-oh-JEN-e-siss) The process by which a seed may develop without fertilization; plants so produced have the genetic constitution of the seed-bearing plant.

partitus, -a, -um (par-TYE-tus) Divided nearly to the base; partite.

partitioned (par-TISH-und) Divided in compartments or chambers by internal horizontal walls.

parviflorus, -a, -um (par-vi-FLOR-us) Small-flowered.

parvus, -a, -um (PAR-vus) Small.

passerinus, -a, -um (pass-er-EYE-nus) Resembling or marked like a sparrow; passerine.

patelliform (pah-TELL-ih-form) In the shape of a disc; shaped like a kneecap.

patens (PAY-tenz) Spreading.

patent (PA-tent) Expanded or spreading.

pathogen (PATH-oh-jen) A disease-producing organism.

pathological (path-oh-LOJ-i-kul) Diseased.

pathology (path-OLL-oh-jee) The science dealing with diseases, their causes, results and cures.

patulus, -a, -um (PAT-yew-lus) Spreading, broad, flat; patulous.

paucus, -a, -um (PAW-kus) Few. In compound words pauci-.

PAXTON, SIR JOSEPH (1801—1865) British gardener-orchidist who superintended the orchid collection and grounds of the 6th Duke of Devonshire at Chatsworth. He introduced Paxton's Magazine of Botany (1834) and was a founder of Gardener's Chronicle. He invented and introduced inexpensive greenhouses for the general populace and designed the Crystal Palace, a domed conservatory greenhouse, for England's first Great Exhibition.

peat (peet) Any mass of semicarbonized vegetable tissue formed by a partial decomposition in water of various plants, especially species of the moss genus Sphagnum.

Pecteilis (peck-TILE-iss) An East Asian segregate of *Habenaria*, the nine species of which are prized for their cranelike white flowers with spectacularly fringed labella. Rafinesque described the genus in 1836, deriving the generic name from the Greek work meaning "pectin" to describe the pectinate side lobes of the lip.

pectinatus, -a, -um (pek-ti-NAY-tus) Shaped like a comb, with narrow parallel projections; pectinate.

pedalis, -e (ped-AY-lis) About one foot long.

pedatus, -a, -um (ped-AY-tus) Like a bird's foot; footlike; pedate.

pedicel (PED-i-sel) The ultimate division of a common peduncle; the stalk of an individual flower; in orchids usually continuous with the inferior ovary.

pedicellate ovary (PED-i-sel-layt OH-va-ree) In orchids, the combined pedicel with the ovary of the flower.

peduncle (pe-DUNK-ul) Stalk of a flower-cluster or of a flower. The stalk of an inflorescence that bears the pedicels and flowers.

peduncularis, -e (pe-dunk-yew-LAY-riss) Having long peduncles or peduncular flower-stalks.

pedunculatus, -a,-um (pe-dunk-yew-LAY-tus) Borne on a peduncle; pedunculate.

Pelatantheria (pell-at-an-THEER-ee-a) There are five epiphytic species in this genus native from Southern China south to Indonesia. Ridley named the genus in 1896, using the Greek words "approaching or neighbor" and "anther" but the meaning is not clear.

Pelexia (pell-EKS-ee-a) This genus consists of about 50 terrestrial species from temperate and tropical South America, being most common in Brazil. Richard described the genus in 1818, using the Greek word meaning "helmet" to denote the structure of the sepals.

pellicle (PELL-i-kuhl) An epidermis or surface membrane.

pellucid (pel-LOO-sid) Clear or transparent.

peloria (pe-LOR-ee-a) Abnormal regularity of structure occurring in flowers normally irregular; generally applied to orchids where the petals have lip characters or colors. Also when lips take on petal characteristics; radial symmetry in flowers normally bilaterally symmetrical.

peltatus, -a, -um (pel-TAY-tus) Shield-shaped; peltate.

pendent (See pendulous)

pendulus, -a, -um (PEN-dew-luss) Hanging or drooping; pendulous.

pennatus, -a, -um (pen-AY-tus) Feathered.

pentadactylus, -a, -um (pen-tah-DAK-til-us) Five-fingered; pentadactyl; pentadactylate.

pentamerous (pen-TAM-er-us) Consisting of or divided into five parts.

pentaploid (PEN-ta-ployd) Having five sets of chromosomes (5N).

pentas (pen-tus) Greek prefix meaning five.

perbellus, -a, -um (per-BELL-us) Very beautiful.

percussus, -a, -um (per-KUSS-us) Perforated, or appearing so.

perennial (per-ENN-ee-al) Having a life cycle lasting more than two years.

perfect (PER-fekt) Said of flowers that have both the staminate (male) and pistillate (female) parts.

perfoliate (per-FOLL-ee-ayt) Said of stems that pass through a leaf.

perforate With holes or perforations.

pergameneous (per-gah-MEN-ee-us) Having the texture of parchment.

peri- (PARE-ee) A prefix derived from the Greek, signifying "around," "about," "beyond" in scientific terms.

perianth (PARE-ee-anth) The floral envelope considered as a whole, consisting of the calyx (sepals) and corolla (petals), whatever their form.

pericarp (PARE-ee-karp) The outer ovary wall.

peripheral (puh-RIF-er-uhl) Near the edge or margin

Peristeria (per-is-TER-ee-ah) A small genus of 15 species of epiphytic orchids from Panama and northern South America. Related to *Lycomormium*, it was described by Hooker in 1831, the name meaning "little dove" from the resemblance of the column and lip to a dove. *Peristeria elata*, the national flower of Panama, is popularly called the "dove orchid."

perlite (purr-LITE) A lightweight, heat-expanded phosphate rock used to add aeration to potting media.

persicolor Peach-colored.

persistent (puhr-siss-tent) Remaining for a long time, as leaves or flowers on the plant.

perspicuous transparent.

pertusus, -a, -um (per-TEW-sus) Perforated; having an aperture.

peruvianus, -a, -um (per-ROO-vee-ay-nus) Native of Peru; Peruvian.

Pescatorea (pess-ka-TOR-ee-ah) A small genus of 16 species of pseudobulbless epiphytic orchids distributed from Costa Rica to Ecuador. It is related to *Bollea* and *Huntleya*. Described in 1852 by Reichenbach, it was dedicated to M. Pescatore, a French orchid enthusiast.

pesticide (PESS-ti-cyde) General term for any chemical used to kill or control pests (e.g., fungicide, insecticide, herbicide)

petal (PET-al) One of the segments of the corolla of a flower; in orchids, one of the three petals is usually modified into a lip or labellum.

petaloid (PET-a-loyd) Resembling a petal.

PETERSON, RICHARD (1940—1984) Former Editor of the American Orchid Society Bulletin (1973—1984), credited with changing the journal to an all-color publication, and a former Executive Director of the Society (1977—1984)

petiolatus, -a, -um (pet-ee-oh-LAY-tus) Having a petiole; petiolate.

petiole (PET-ee-ohl) The stalk by which a leaf is attached to a stem.

PFITZER, ERNST HUGO HEINRICH (1846—1906) German orchidologist, Professor of Botany and Director of the Botanical Garden at the University of Heidelberg, he contributed much to modern phylogeny of the orchids, including the orchid family in Engler and Prantl's *Die Natürlichen Pflanzenfamilien* and the monograph of the *Cypripedium* tribe in *Das Pflanzenreich*.

pH (PEE-ACHE) The chemical symbol representing the negative log of the hydrogen ion concentration as an indicator of acidity of a solution, pH 7.0 being neutral, acidity under 7.0 and alkalinity over 7.0.

Phaius (FAY-us) A genus of 45 species of terrestrial orchids widely distributed in Indo-Malaysia and China from India to New Guinea, related to *Calanthe* and *Spathoglottis*, it was described by Loureiro in 1790, the name referring to the swarthy colors of the flowers.

Phalaenopsis (fail-eh-NOP-siss) A genus of 50 species of showy epiphytic orchids from the Asiatic tropics, related to *Doritis* and *Sarcochilus*, it was founded by Blume in 1825, the name referring to the mothlike appearance of the flower.

phenogam, phenerogam (FEE-noh-gam) (FEE-ner-oh-gam) Flowering plants; seed-bearing plants (as distinguished from spore-bearing, or cryptogams)

phenotype (FEE-noh-type) The extrnal expression of a genotype.

philippinensis (fill-ip-pin-EN-sis) Native of the Philippines; Philippine.

phloem (FLOH-em) The food conducting tissue within the vascular system of the plant.

phoenicius, -a, -um (fee-NISH-us) Purple-red.

Pholidota (fol-i-DOH-tah) A medium-sized genus of pseudobulbous epiphytes from India and southern China to Australia, related to *Dendrochilum* and *Coelogyne*, it was established in 1825 by Lindley, the name arising from the presence of scaly bracts on the inflorescence, hence the common name of "rattlesnake orchid."

photoperiodism (foh-toh-PEER-ee-oh-dizm) The response of a plant to the daily duration of daylight, correlated to seasonal changes.

photosynthesis (foh-toh-SIN-the-siss) The formation of carbohydrates, in constructive metabolism, from water and the carbon dioxide of the air in the chlorophyll-containing tissues of plants exposed to light.

Phragmipedium (frag-mi-PEE-dee-um) A small genus of lady's-slipper orchids distributed from Mexico to Peru, and established by Rolfe in 1896; related to *Cypripedium*, plants of this genus were incorrectly called *Selenipedium* in cultivation.

Phreatia (FREET-ee-a) This widespread genus of about 150 epiphytic species ranges from India east to the Pacific Islands and south to Australia. Lindley described the genus in 1830, deriving the generic name from the Greek word meaning "well" to denote the well-like mentum formed by the sepals and lip.

phylloidium (phyllodia) (FILL-oh-dee-um, FILL-oh-dee-a) A dilated petiole that resembles a leaf.

phyllotaxy (FILL-oh-tak-see) The arrangement of leaves on the stem.

phylogenetic (fye-loh-je-NET-ik) Pertaining to the evolutionary history of a type or group of organisms; the evolutionary system of a type or group of organisms.

phylogeny (fye-LOJ-en-ee) Evolutionary history of a group of organisms.

phyllum (FILL-um) In compound words meaning leaf, as in aphyllum meaning "without leaves."

phylum (FYE-lum) A primary division of the animal or vegetable kingdom.

Phymatidium (fye-mah-TID-ee-um) The dozen or so epiphytic species in this genus come from South America. Lindley established the genus in 1833, using the diminutive of the Greek word for "growth" to denote the small size of these plants.

phymatochilus, -a, -um (fye-mat-oh-KYE-lus) Having a swelling on the lip.

Physosiphon (fye-so-SIGH-fon) A genus of about six species of tufted epiphytic orchids from the American Tropics. Related to *Pleurothallis* and frequently considered a synonym, it was founded by Lindley in 1836, the name referring to the tubelike base of the connate sepals.

phytology (fye-TOL-oh-jee) The study of plants; particularly of the kinds or species; botany.

phytotoxicity (fye-toh-tok-SISS-i-tee) Poisonousness to plants.

picturatus, -a, -um (pik-tew-RAY-tus) Variegated.

pictus, -a, -um (PIK-tus) Painted.

pileatus, -a, -um (pil-ee-AY-tus) Furnished with a cap.

pilosus, -a, -um (pye-LOH-sus) Covered with long soft hairs; pilose.

pinnatus, -a, -um (pin-NAY-tus) Featherlike, having leaflets arranged on each side of a common stalk; pinnate.

piriform Pear-shaped.

pisiform (PYE-sih-form) Pea shaped

pisaceous Pea-green.

pistil (PISS-til) The seed-bearing organ of the flower, consisting of the ovary, stigma and, when present, style.

pistillate (PISS-til-layt) Having pistils and no stamens; female.

pitted (pih-TED) Marked with small depressions or pits.

placatus, -a, -um (pla-KAY-tus) Quiet; calm; placid.

placenta (pla-SEN-ta) That part or place in the ovary where ovules are attached.

plaited (PLA-ted) Folded lengthwise, as a closed fan; pleated; plicate.

planus, -a, -um (PLAY-nus) Flat; plane.

plastid (PLAS-tid) A class of cellular organelles that contains either pigments (chloroplast, chromoplast) or starch (amyloplast)

Platanthera (plah-TAN-ther-ah) A genus of 40 species of North Temperate orchids formerly included in a broadly defined *Habenaria*, commonly known as the fringed orchids. Louis-Claude-Marie Richard founded the genus in 1818, deriving the generic name from two Greek words meaning "broad" and "anther," a reference to the broad anthers found in this genus.

Platystele (plat-ee-STEE-lee) There are some six epiphytic species in this genus distributed in Central and South America. Schlechter described the genus in 1910, deriving the generic name from two Greek words meaning "broad" and "column" to denote the short column.

plaque (plack) A vertical growing substrate of cork, tree fern, wood or other material. (See slab)

platy- (PLAT-ee) In Greek combinations, signifying "broad," "wide" or "flat."

Pleione (plye-OH-nee) A genus of 15 species of diminutive pseudobulbous orchids from the Himalayas and Southeast Asia. Related to *Coelogyne*, it was established in 1825 by D. Don, who dedicated it to Pleione, mother of the Pleiades in Greek mythology.

plenus, -a, -um (PLEE-nus) Double or full.

plesiomorphy (PLEE-zee-oh-more-fee) A cladistic term referring to an ancestral character state.

Pleurothallis (plur-oh-THAL-liss) A genus of 1,120 species of chiefly epiphytic pseudobulbous orchids from the American tropics. Related to *Masdevallia* and *Stelis*, it was established in 1813 by Robert Brown, the name referring to the riblike leaf stalks found in most species.

plicatilis, -e (plye-kayt-EYE-liss) Folded; plicate.

plicatus, -a, -um (plye-KAY-tus) Folded like a fan, or pleated; plicate.

Plocoglottis (plo-ko-GLOTT-iss) The 40 terrestrial species in this genus range from the Andaman Islands east to Indochina and south to New Guinea. Blume described the genus in 1825, deriving the generic name from two Greek words meaning "binding together" and "tongue," a reference to the attachment of the lip to the column.

ploidy, or —ploidy (PLOY-dee) The number of sets of chromosomes in a cell.

plumbeous Lead-colored.

plumosus, -a, -um (ploo-MOH-sus) Feathery; featherlike; plumose.

pod (pod) Horticultural (but botanically incorrect) term for the seed capsule of an orchid.

Pogonia (poh-GOH-nee-ah) A genus of two terrestrial species widely distributed in the North Temperate Zone in both hemispheres, it was founded by Jussieu in 1789, the name referring to the bearded crest on the lip of most species.

pollen (POL-len) The fertilizing grains contained in the anther.

pollinarium (pol-li-NAIR-ee-um) The inclusive term for the pollination unit of most orchids, comprising pollinia and caudicles, viscidium, or viscidium and stipe.

pollination (pol-li-NAY-shun) The application of pollen to the receptive surface of the stigma.

pollination biology (pol-li-NAY-shun bye-ol-OH-gee) The study of the interaction between floral morphology and pollinator behavior.

pollinia (sing. **pollinium**) (pol-LIN-ee-a) The masses of waxy pollen or of coherent pollen grains found in the anthers of most orchids.

Podangis (poe-DAN-gis) A monotypic epiphytic genus from Central and Western Africa. Schlechter identified the genus in 1918, using two Greek words meaning "foot" and "vessel" to describe the footlike spur on the lip.

polliniferous (pol-li-ni-FER-us) Having pollen.

poly-(POL-ee) In Greek combinations, signifying "numerous" or "many."

polyanthus, -a, -um (pol-ee-AN-thus) Many-flowered.

polybulbon (pol-ee-BUL-bon) Having many bulbs.

Polycycnis (pol-ee-SIK-niss) A genus of 16 species of epiphytic orchids distributed from Costa Rica to Peru and related to *Gongora*. It was described by Reichenbach in 1855, the name literally meaning "many swan," in reference to the fancied resemblance of the many flowers to swans.

polyethylene (pol-ee-ETH-i-leen) A nearly transparent plastic which, in sheet form, is used as a temporary greenhouse covering or as inside insulation.

polyembryony (pol-ee-em-BREE-on-nee) Having more than one embryo in an ovule.

polygamous (pol-IG-ah-mus) Having unisexual and hermaphrodite flowers on the same or on different plants of the same species.

polymin (POL-e-min) A term applied to hybrids between polyploid and miniature Cymbidium.

polymorphic (pol-ee-MOR-fik) Having or assuming several distinct forms.

polyphyletic (pol-ee-FIH-let-ik) An artificial taxon in classification that has two or more ancestral groups.

polyploid (POL-ee-ployd) Having more than two chromosome sets in each somatic cell, or an organism with this condition.

Polyradicion (pol-ee-rah-DIS-ee-on) A genus of five species of leafless epiphytic orchids found in the tropics and subtropics of South Florida and the Caribbean area, it is related to *Dendrophylax* and *Campylocentrum*; it was described by Pfitzer as *Polyrrhiza* in 1889, the name referring to the many conspicuous roots. In 2002, P.M. Brown moved these species into the genus *Dendrophylax*.

Polystachya (pol-ee-STAK-ee-a) A large genus of 150 epiphytic, lithophytic or occasionally terrestrial species that are basically African, with several species in tropical America and Madagascar. Hooker founded the genus in 1625, deriving the generic name from two Greek words meaning "many" and "ear of grain or spike" to denote the inflorescences in some species.

Ponera (poe-NER-a) There are seven epiphytic or lithophytic species in this genus ranging from Mexico to Central America, with one species found as far south as Ecuador. Lindley founded the genus in 1831, deriving the generic name from the Greek word "miserable" probably to denote the small habit and tiny flowers.

Ponerorchis (poe-ner-OR-kiss) This genus containing approximately 10 terrestrial species comes from Japan and Taiwan. H.G. Reichenbach described the genus in 1852, deriving the generic name from the Greek words meaning "miserable" and "orchid" to denote the small size of these orchids.

Ponthieva (pon-THEE-vah) A genus of 53 species of terrestrial American orchids related to *Cranichis* and distributed from the southern United States to Chile. Described in 1813 by Robert Brown, the name commemorates the French West Indian merchant Mr. Henri de Ponthieu, who collected plants in the Caribbean area and sent them to Sir Joseph Banks in 1778.

population (pop-yu-LAY-shun) The assemblage of progeny from a single mating or from a series of similar matings, particularly in the wild.

porosus, -a, -um (por-OH-sus) With small holes, pores or perforations; porose.

Porphyroglottis (por-feer-oh-GLOTT-is) A monotypic epiphytic genus native to Borneo and the lower Malay Peninsula. Ridley described the genus in 1896, deriving the generic name from two Greek words meaning "purple" and "tongue" to denote the lip of these flowers.

porrect (por-REKT) Directed outward and forward.

Porroglossum (por-roe-GLOSS-um) The 27 epiphytic or lithophytic species of this genus come from South America, ranging from Ecuador and Peru northward. Schlechter identified the genus in 1920, coining the generic name from two Greek words meaning "forward" and "tongue" to indicate the separation of the column from the lip.

posterior (poss-TEER-ee-or) Next or toward the main axis; the reverse of anterior.

pot (pot) A container, usually cylindrical and tapered, made of baked clay, plastic or other material, in which orchid plants are grown; to plant an orchid in such a container.

potshard (POT-shard) A piece or fragment of a broken earthen pot.

Potinara (poh-ti-NAR-ah) A hybrid genus, created in 1922, that was derived from *Brassavola*, *Cattleya*, *Laelia* and *Sophranitis*.

potting (pot-ing) The act of placing an orchid plant in a container and securing it in a medium for support and growth.

praecox (PREE-koks) Early blooming; very early; precocious.

praemorsus, -a, -um (pree-MOR-sus) Jagged, as if bitten off at the end.

praestans (PREE-stanz) Standing in front; excelling; distinguished.

prasinus, -a, -um (pray-SYE-nus) Grass-green.

precocious (pre-KOE-shus) Developing very early.

Prescottia (press-KOT-ee-ah) A genus of 35 species of terrestrial orchids distributed from Florida to Peru. It is related to *Cranichis* and was described in 1824 by Lindley in honor of the English botanist John D. Prescott, who collected plants in Russia and northern Asia.

prickle (PRIH-kl) A sharp outgrowth from the epidermis

primary (pri-MER-ee) The first part to develop.

primordium (pri-MOR-dee-um) The first recognizable histologically undifferentiated stage in the development of an organ.

primulinus, -a, -um (prim-yew-LYE-nus) Resembling a primrose.

princeps (PRIN-seps) Distinguished.

prismatocarpus, -a, -um (priz-mat-oh-KAR-pus) Having prism-shaped seed pods with three flat sides and three sharp angles.

proboscideus, -a, -um (proh-bos-SID-ee-us) Snout-like.

proboscis (proh-BAW-siss) The elongate feeding organ of an insect, formed of the mouth parts.

process (PRO-sess) An extension of any surface or part beyond the main outline.

procumbens (pro-KUM-benz) Prostrate; lying flat along the ground.

productus, -a, -um (proh-DUK-tus) Lengthened; extended or prolonged; produced.

profusus, -a, -um (proh-FEW-sus) Abundant; profuse.

proliferation (pro-lih-fer-AY-shun) Producing offshoots; growing by multiple division.

Promenaea (pro-men-EE-ah) A genus of 14 species of dwarf epiphytic orchids from Brazil and neighboring areas, related to *Zygopetalum*. It was described by Lindley in 1843, the name derived from Promeneia, a priestess at Dodona.

prominent Standing out from the surrounding surface, as raised veins on the surface.

prophyllum (pro-FILL-um) The small bract at the base of a flower.

prostrate (PROS-trayt) Lying flat on the ground.

postular (poss-tewl-ar) Having blisterlike projections

protocorm (PROH-toh-korm) The first growth, a tuberlike body produced by a germinating orchid seed prior to the production of leaves, roots, etc.

protologue (PRO-toh-log) The information presented at the place and time of publication of a new taxon.

protuberance A rounded bulge, swelling, or projection.

proximal (PROK-sim-al) The part nearest the axis.

pruinosis, *-a*, *-um* (prew-in-OH-sus) Covered with a whitish, frostlike bloom; excessively glaucous; pruinose.

pseudo- (SOO-doh) A Greek prefix meaning false.

pseudobulb (SOO-doh-bulb) A thickened portion of a stem, resembling a bulb but not being a true bulb, which is a modified stem composed of bulb scales.

pseudobulbous (SOO-doh-BUL-bus) Having or producing pseudobulbs.

pseudobulbless (SOO-doh-BULB-less) The condition of not having a noticeable pseudobulb.

pseudocopulation (SOO-doh-kop-yu-LAY-shun) A form of pollination in orchids wherein the flower mimics a female insect fooling the male enough to cause him to pollinate the flower.

Psychilis (sy-KYE-liss) The 15 epiphytic or lithophytic species of this genus are found in the West Indies. The genus was originally described by Rafinesque in 1838 and largely ignored until Saulea resurrected it in 1988. The generic name was derived from two Greek words meaning "butterfly" and "lip" to denote the colorful lip.

Psychopsiella (sy-kop-SEE-ell-a) A monotypic epiphytic genus from Brazil and Venezuela. Lueck and Braem founded the genus in 1982, and used the diminutive form of *Psychopsis*, an allied group.

Psychopsis (sy-KOP-sis) A Neotropical genus of four species commonly called butterfly orchids. Previously maintained in *Oncidium*, they are remarkable for their dimorphic sepals and striking colors.

psycodes (sy-KOH-deez) Fragrant.

Psygmorchis (sig-MOR-kiss) A small genus of four or five twig epiphytes ranging from Central America south to Brazil and Bolivia. Dodson and Dressler founded the genus in 1972, deriving the generic name from two Greek words meaning "fan" and "orchid" to describe the plants' vegetative characteristics.

pterocarpus, *-a*, *-um* (tare-oh-KAR-pus) Having a winged fruit.

Pterostylis (tare-oh-STYE-liss) A genus of more than 100 species of terrestrial orchids from Australia, New Zealand, New Caledonia and New Guinea, it was described in 1810 by Robert Brown, who derived the name from the prominently winged column of the flower found in most species.

puberulent (pew-BEH-ru-lent) Finely pubescent; with fine, short hairs.

pubescens (pew-BESS-enz) Downy; covered with fine short hair; pubescent.

pu^dicus, -a, -um (PEW-dik-us) Modest; bashful.

pu^gioniformis, -e (pew-ji-on-i-FORM-is) Dagger shaped.

pu^lchellus, -a, -um (pul-KEL-lus) Fair, pretty.

pu^lcher, *pu^lchra*, *pu^lchrum* (PUL-ker) Beautiful, lovely.

pu^llus, -a, -um (PULL-us) Dark colored.

pu^lvinatus, -a, -um (pull-vin-AY-tus) Formed like or resembling a cushion.

pu^milus, -a, -um (PEW-mill-us) Dwarf, or low growing.

puⁿctatus, -a, -um (punc-TAY-tus) Spotted; marked with dots, depressions or translucent glands; punctate.

puⁿgent (pun-jent) Acid to the taste; tipped with a sharp, rigid point.

pu^rpurascens (per-per-ASS-enz) Becoming or turning purple; purplish.

pu^rpuratus, -a, -um (per-per-AY-tus) Marked with purple so as to have a certain regal quality.

pu^rpureus, -a, -um (per-PER-ee-us) Purple.

pu^rus, -a, -um (PUR-us) Spotless; of one color.

pu^sillus, -a, -um (pew-SILL-us) Very small.

pu^ygmaeus, -a, -um (pig-MEE-us) Very small; pygmy.

pu^yramidalis, -e (peer-a-mid-DAY-liss) Pyramid shaped; pyramidal.

pu^yriformis, -e (peer-i-FOR-miss) Pear shaped; pyriform.

pu^yxidate (piks-UH-dayt) Having a lid.

Q

qua^drat^us, -a, -um (kwad-RAY-tus) Four-sided; quadrate.

qua^dricolor (KWAD-ri-ko-lor) Four-colored.

qua^dricornis, -e (kwad-ri-KOR-niss) Four-horned.

qua^drigenerⁱc (kwad-ri-jen-AIR-ik) Pertaining to four genera; used particularly in reference to hybrids combining members of four genera.

qua^aqua^versal (kwa-kwa-VER-sal) Turning or twisting in any direction.

qua^ternatus, -a, -um (kwa-ter-NAY-tus) In fours; quaternate.

quinatus, -a, -um (kwin-AY-tus) In fives.

quinqvenervis, -e (kwin-kwe-NER-viss) Having five nerves or veins.

quinquepartitus, -a, -um (kwin-kwe-par-TYE-tus) Being five-parted.

quinquevulnerus, -a, -um (kwin-kwe-vul-NER-us) Having five wounds, or blood-red spots.

QUISUMBING, EDUARDO (1895—1986) Philippine botanist who collaborated extensively with Oakes Ames on modern study of Philippine orchids, he is commemorated by many orchids including *Tuberolabium quisumbingii*.

R

race (reys) A group of individuals within a species, all of which possess one or more distinguishing characteristics.

raceme (ray-SEEM) A simple inflorescence of stalked flowers on a common, more or less elongated axis.

racemosus, -a, -um (ras-see-MOH-sus) With flowers borne in racemes, resembling a raceme; racemose.

rachis (RAY-kiss) The axis of an inflorescence.

radians (RAY-di-anz) Radiating outward.

radiant (Ray-dee-nt) Coming from a central point.

radiatus, -a, -um (ray-dee-AY-tus) Spreading out from a common center; with rays; radiate.

radical (RAD-i-kul) Of or arising from the root or base of the stem.

radicans (RAD-ik-anz) Having rooting stems.

radicle (RAD-i-kul) The embryonic plant root.

radix (RAY-diks) A root.

raft (rahft) A large, flat basket made of interlocking pieces of wood.

rameal (RAY-mee-al) Belong to a branch.

ramification (rahm-ih-FIH-kay-shun) Branching.

ramicaul (RAM-i-kall) A morphologic term for the so-called "secondary stem" of the Pleurothallidinae.

ramosus, -a, -um (ram-OH-sus) Branched; ramose.

ramulose (RAM-yuh-lohs) Having many branches.

Rangaeris (ran-gah-ER-is) The six species in this genus are widespread throughout tropical Africa. Summerhayes described the genus in 1936, naming it *Rangaeris*, an anagram of *Aerangis*, to which it is related.

raniferus, -a, -um (ran-NI-fer-us) With a frog-like callus .

ranks (rangks) Rows, as in the arrangement of flowers in an inflorescence.

raphe (RAYF-a) A ridge.

raphides (RAYF-ids) Needlelike crystals, usually of calcium oxalate, which occur in the cells of many plants.

rarus, -a, -um (RARE-us) Rare; uncommon.

raucus, -a, -um (RAW-kus) Hoarse; raw; raucous.

receptacle (re-SEP-ta-kul) The summit of the flower stalk bearing the floral organs.

recessive (ree-SESS-iv) Said of an allele that is not expressed when paired with a dominant allele; also, the phenotypic character thereof.

reciprocal cross (ree-SIP-ro-cul kraws) A repeat of a cross in which the original roles of the pollen and seed parents are reversed.

reclinatus, -a, -um (rek-lin-AY-tus) Bent backward; reclining; reclinate.

recondite (REK-on-dyet) Concealed; difficult to make out; not easily recognized.

rectus, -a, -um (REK-tus) Upright; erect.

recumbent leaning or resting on the ground; prostrate.

recurvus, -a, -um (ree-KER-vus) Bent backward, recurved.

reflasking (ree-flask-ing) Transplanting small seedlings from one flask into a flask of fresh medium to permit greater growth before deflasking the seedlings into community pots or thumb pots.

reflexus, -a, -um (ree-FLEK-sus) Abruptly bent backward or downward; reflexed.

refracted Bent backward from the base.

refulgens (ree-FUL-jenz) Shining brightly.

regalis, -e (ree-GAY-liss) Of outstanding merit; regal.

reginae (re-JYE-nee) Of the queen; queenly.

registrant (rej-ih-STRANT) The person or firm in whose name an application is made for the registration of an orchid hybrid.

registrar (rej-ih-STRAR) The official of the Royal Horticultural Society (London) International Registration Authority of the responsible for the processing of applications to register orchid hybrids.

registration (rej-is-STRAY-shun) The process and procedures for the recording of the name and parentage of a new orchid hybrid under the jurisdiction of the International Registration Authority.

regius, -a, -um (REE-jee-us) Royal; regal.

regular (REG-yuh-ler) Uniform or symmetrical in shape or structure.

regulator gene (reg-yuh-LAY-tore jeen) Any gene that controls the expression of another gene.

REICHENBACH, HEINRICH GUSTAV (1824—1889) An eminent German orchidologist born in Dresden. His activity was chiefly that of describing new species, especially new horticultural introductions, and monographing certain genera. His papers were scattered in numerous journals, especially in *The Gardener's Chronicle*; his most important single work was *Xenia Orchidacea* (1854—1900), a three-volume illustrated work. He was the son (filius in Latin) of an equally eminent botanist and thus he is also known as the younger Reichenbach or Reichb.f.

remotus, -a, -um (ree-MOH-tus) Scattered; not close together; remote.

Renanthera (ren-ANN-ther-ah) A genus of 17 species of epiphytic and hemiepiphytic orchids distributed from southeast Asia through Malaysia and the Philippines, related to *Vanda* and *Arachnis*. Established in 1790 by Loureiro, the name alludes to the kidney-shaped pollinia of the flowers.

Renantherella (ren-ANN-ther-ell-a) At least one epiphytic species is known in this genus native to peninsular Thailand and Malaya south to Borneo. Ridley established the genus in 1896, using the diminutive form of *Renanthera*, due to their similarity.

reniform Kidney-shaped

replicate Folded backward.

resiniferous Resin producing.

repandens (ree-PAN-denz) With a gently wavy or fluted margin; undulate; repand.

repens (REE-penz) Creeping; prostrate and rooting at the nodes; repent.

replicatus, -a, -um (rep-li-KAY-tus) Doubled back; folded; replicate.

respiration (res-per-AY-shun) The processes used by organisms to produce metabolically usable energy from oxidative breakdown of food.

Restrepia (re-STREP-ee-a) There are about 30 miniature epiphytic species in this genus ranging from Mexico south to northern Argentina. Humboldt, Bonpland and Kunth described the genus in 1815, naming it in honor of Sr. Jos— E. Restrepo, who worked on the geography of the Andes.

Restrepiella (re-STREP-ee-ell-a) A monotypic epiphytic genus from tropical Central America. Garay and Dunsterville described the genus in 1966, using the diminutive form of *Restrepia* due to their likeness.

resupinate (re-SOO-pin-ayt) With the lip on the lower side of the flower in respect to the rachis; used to refer to flowers with the lip lowermost regardless of orientation.

reticulatus, -a, -um (re-tik-yew-LAY-tus) In the form of a network; reticulate.

reticulum (re-TIK-yuh-lum) A network of fibers.

retinaculum (ret-in-AK-yuh-lum) In Orchidaceae, the gland where one or more pollinia are attached.

retorse (re-TRORSS) Directed back or downward.

retusus, -a, -um (re-TEW-sus) Rounded at the end, but with a broad and shallow notch in the center; retuse.

reversion (ree-VER-zuhn) A change backward to an earlier condition.

reversus, -a, -um (ree-VER-sus) Turned around; reversed.

revolutus, -a, -um (rev-oh-LEW-tus) Rolled backward from the margin or apex; revolute.

rhachis (RAY-kiss) See rachis.

rhizomatose (RYE-zoh-mah-tose) Having the characteristics of a rhizome.

rhizome (RYE-zohm) A root-bearing stem, prostrate on or under the ground, the apex of which progressively sends up leafy shoots.

rhizome clip (RYE-zohm klip) A bent piece of heavy wire that fastens to the side of a pot, used to stabilize a newly potted orchid that bears a rhizome.

rhombic (ROM-bik) Top-shaped; an equilateral figure having oblique angles.

rhomboid (ROM-boyd) Having the shape of a rhombus, i.e., a parallelogram with oblique angles and equal sides.

Rhynchoaelia (rink-oh-LAY-lee-ah) There are two epiphytic species in this genus native to Mexico, Guatemala, Honduras and Belize. Schlechter established the genus in 1918, deriving the generic name from two Greek words meaning "snout" and "laelia." in reference to the very long ovaries characteristic of the the two species, *R. digbyana* and *R. glauca*.

RHS (Royal Horticultural Society) Horticultural society based in London; responsible for registering orchid hybrids.

Rhynchocentrum (rink-oh-SEN-trum) A hybrid genus between *Ascocentrum* and *Rhynchostylis* created in 1963.

Rhynchostylis (rink-oh-STYE-liss) A genus of three species of epiphytic orchids, widely distributed from India and Ceylon through Burma, Indo-China and Malaysia to the Philippines, related to *Aerides* and *Vanda*. It was first described by Blume in 1825, the name alluding to the beaked column of the type species.

rib (rib) In a leaf or similar organ, the primary vein; also any prominent vein or nerve.

ribonucleic acid (RNA) (RYE-bow-new-CLAY-ik as-id) Nucleic acid formed on a DNA template and involved in directing protein synthesis within the cell.

RICHARD, ACHILLE (1794—1852) French botanist, son of L.C. Richard, significant for his several works on orchids including his important contribution to Mexican orchidology with H.G. Galeotti.

RICHARD, LOUIS CLAUDE MARIE (1754—1821) French botanist whose work on European orchids developed an exact and critical terminology of the parts of the orchid plant, particularly the flowers.

RIDLEY, HENRY NICHOLAS (1855—1956) Versatile English botanist who began his career as an assistant in the British Museum (Natural History) and subsequently became director of the Botanic Garden in Singapore; besides monographic treatments of the genus *Liparis*, *Microstylis*, *Malaxis* and *Bromheadia*, his works on orchids include those of Madagascar, Borneo and Malaya.

rigidus, -a, -um (RIJ-id-us) Stiff; unbending; rigid.

rim A projecting edge or flange.

rimosus, -a, -um (ri-MOH-sus) With cracks or chinks; cracked; fissured; rimose.

ringens (RIN-jenz) Gaping; said of labiate flowers with an open throat or mouth.

riparian (RYE-pare-ee-en) Said of plants growing near a stream or river.

rivalis, -e (ri-VAY-liss) Growing along streams.

Rodricidium (rahd-ri-SID-ee-um) A hybrid genus between *Oncidium* and *Rodriguezia* created in 1957.

Rodriguezia (rahd-ri-GUESS-ee-ah) A genus of 40 species of epiphytic orchids in South America, extending into Central America and the Caribbean. Related to *Comparettia* and *Ionopsis*, it was established in 1794 by Ruiz and Pavon, commemorating the 18th-century Spanish botanist and apothecary, Don Manuel Rodriguez.

Rodrigueziella (rahd-ri-GUESS-ee-ell-a) The five epiphytic species in this genus are native to Brazil. Kuntze described the genus in 1891, dedicating it to Dr. João Barbosa Rodrigues, an avid orchidologist.

ROEZL, BENEDICT (1823—1885) Famous Czech orchid collector who is commemorated in numerous South American orchids such as *Miltoniopsis roezlii*.

ROGERS, RICHARD SANDERS (1862—1942) Early Australian orchidologist.

Rolfe, Robert Allen (1855—1921) One of the greatest of modern English orchidologists. Essentially self-taught, he began as a gardener at the Royal Botanic Gardens, Kew, and became an assistant in the Kew Herbarium, where he served for 40 years. He founded and for 28 years edited *The Orchid Review*, monographed the orchids for the *Flora of Tropical Africa*, co-authored the *Orchid Stud Book*, and contributed numerous articles on orchids in leading periodicals.

roller shades (ROH-ler sheyds) A curtain, made of slats, evenly spaced, or other shade material that can by means of ropes or cords be rolled and unrolled over the outside or inside of a greenhouse roof (and sometimes sides) to regulate the amount of sunlight admitted.

root (root) The underground portion of a plant. It supports the plant and supplies water and nutrients to the upper portion

rootstock (root-stawk) (See rhizome)

rosette (roh-ZET) A radiating or circular cluster of leaves or other organs.

roseus, -a, -um (ROH-zee-us) Rose-colored; delicate pink; rosy.

Rossioglossum (ross-ee-oh-GLOSS-um) There are six epiphytic species in this Central American genus ranging from Mexico south to Panama. Schlechter described the genus in 1916, naming it in honor of John Ross, who collected Mexican orchids in the 1830s.

rostellum (ros-TELL-um) A sometimes beaklike extension of the stigma, a gland that produces a viscous substance used in pollination. Also separates the female portion from the male portion of the flower, preventing self-pollination.

rostratus, -a, -um (ros-TRAY-tus) Having a projection like the beak of a bird; beaked; rostrate.

rosula (ross-YUH-la) A rosette.

rosulate (ross-YUH-layt) In the form of a rosette.

rotatus, -a, -um (roh-TAY-tus) Wheel-shaped; rotate.

rotundatus, -a, -um (roh-tund-AY-tus) Nearly circular; rounded; rotund.

rotundifolius, -a, -um (roh-tun-di-FOH-li-us) With round or rounded leaves.

ROXBURGH, WILLIAM (1751—1815) English botanist and illustrator, he described many new species of orchids and other plants of India, where he served as superintendent of the Royal Botanical Garden at Calcutta from 1793 to 1814.

rubellus, -a, -um (roo-BEL-lus) Reddish-colored.

ruber, rubra, rubrum (ROO-ber) Red. In compound words, rubri-.

rubescens (roo-BESS-enz) Rosy red, or suffused with rose; blushing; reddish-colored.

rubro-oculatus, a, -um (roo-broh-ok-yew-LAY-tus) Red-eyed.

rubro-purpureus, -a, -um (roo-broh-purr-PURR-ee-us) Reddish purple.

rubiginosus, -a, -um (roo-bij-in-OH-sus) Rusty; rust-colored; rubiginous.

ruderal (ROO-der-uhl) Growing in waste spaces.

rudimentary (roo-dih-MEN-tah-ree) Arrested in an early stage of development.

Rudolfiella (roo-DOLF-ee-ell-a) The six epiphytic species in this genus are native to tropical South America and Panama. Hoehne identified the genus in 1944, naming it in honor of Dr. Rudolf Schlechter, an avid orchidologist.

rufescens (roo-FESS-enz) Reddish brown.

rugosus, -a, -um (roo-GOH-sus) Roughened by wrinkles; rugose.

rugulosus, -a, -um (roo-gew-LOW-sus) Minutely rugose; finely wrinkled; rugulose.

ruminate (ROO-muh-neyt) Appearing as having been chewed.

runcinate (RUN-suh-neyt) Sharply incised, the segments bent backward.

runner (RUH-ner) A slender trailing shoot taking root at the nodes.

rupestris, -e (roo-PESS-triss) Growing in rocky places; rock-loving.

rupicolus, -a, -um (roo-PIK-oh-lus) Growing in cliffs and ledges; rupicolous.

RUPP, HERMAN MONTAGUE RUCKER (1872—1956) Australian orchid taxonomist who elucidated the flora of New South Wales.

rust (ruhst) A fungal disease.

S

sabulose (SAB-yew-lohz) Growing in or pertaining to sandy places.

saccharinus, -a, -um (sak-ka-RYE-nus) Sweet.

saccatus, -a, -um (sak-KAY-tus) Pouch- or bag-shaped; saccate.

Saccolabium (sak-koh-LAY-bee-um) A genus of four small-flowered epiphytic orchid species of Southeast Asia, related to *Vanda* and *Ascocentrum*. Established by Blume in 1825, the name alludes to the baglike shape of the lip; rarely cultivated, it has been confused with many vandaceous genera.

sagittatus, -a, -um (saj-it-TAY-tus) Shaped like an arrowhead, with the basal lobes directed downward.

salient Projecting outward.

salinus, -a, -um (sal-LYE-nus) Growing in salty places; saline.

SANDER, H.F.C. (1847—1920) Founder of the English orchid firm of Sander, he was an ardent importer of many new species and fine varieties through his employment of many famed plant collectors.

sanctus, -a, -um (SANK-tus) Holy.

sanguineus, -a, -um (sang-GWIN-ee-us) Blood-colored; blood-red; sanguine.

sanguinolens (sang-gwin-OH-lenz) Approaching blood color.

sanguinolentus, -a, -um (sang-gwin-oh-LEN-tus) Having blood-red spots or veins.

sapidus, -a, -um (SAP-id-us) Pleasant to taste; sapid.

saprophyte (SAP-roh-fite) A plant growing in and deriving most of its nourishment from decaying organic matter, often apparently lacking in chlorophyll.

saprophytic (sap-roh-FIT-ik) Pertaining to a saprophyte.

sarcanthine (sar-KAN-theen) An adjective referring to any Asiatic monopodial orchid, more inclusive than the similarly applied "vandaceous."

Sarcochilus (sar-coh-KYL-us) A genus of approximately 20 species of diminutive epiphytes restricted to Australia and New Caledonia, including the orange blossom orchid of Australia, *Sarcochilus falcatus*. Brown founded the genus in 1810, deriving the generic name from two Greek words meaning "flesh" and "lip" due to the fleshy lip observed in the type specimen.

sarcodes (sar-KOH-deez) Of fleshlike substance.

Sarcoglottis (sar-ko-GLOTT-is) There are some 50 terrestrial species in this genus widespread throughout the West Indies, Central and South America. Presl described the genus in 1827, deriving the generic name from two Greek words meaning "flesh" and "tongue" to denote the fleshy lips found in these flowers.

sativus, *-a*, *-um* (sa-TYE-vus) Cultivated.

Satyrium (sa-TEER-ee-um) There are close to 100 terrestrial species in this African genus spread throughout tropical and South Africa. Swartz established the genus in 1800, naming it possibly for the Satyri, Greek demigods, or since the word also means "man orchid" it could denote the Greek belief that the tubers had aphrodisiac properties.

saxicolus, *-a*, *-um* (sax-IK-oh-lus) Growing on rocks; saxicolous.

scaber, *scabra*, *scabrum* (SKAY-ber) Rough; scabrous.

scabrous (SKAY-brus) Rough; feeling roughish or gritty to the touch.

Scattered, Irregularly and usually sparsely arranged.

scalariform (sklare-IH-form) Having ladder-like markings

scale (skayl) (1) A name given to many kinds of small, modified leaves or bracts. (2) One of a number of kinds of minute sucking insects which attack the stems and leaves of orchid and other plants, the adult scales being flattened, disk-like and immobile.

scalloped (SKAL-lopd) Crenate, with rounded teeth.

scandens (SKAN-denz) Climbing; scandent.

scape (SKAYP) An inflorescence of a long peduncle topped with a single flower, as in *Cypripedium acaule*.

Scaphosepalum (skaf-oh-SEE-pa-lum) The 30 epiphytic species in this genus come from tropical America, ranging from Mexico south to Bolivia. Pfitzer founded the genus in 1888, deriving the generic name from the Greek word meaning "bowl" and the Latin word meaning "sepal" to denote the unusual arrangement of the sepals.

Scaphyglottis (skaf-ee-GLOTT-is) There are 40 epiphytic or lithophytic species in this genus native to tropical America. Poeppig and Endlicher named the genus in 1835, deriving the generic name from two Greek words meaning "bowl" and "tongue" to denote the bowl-shaped lip.

scapiform (SKAY-pih-form) Resembling a scape.

scaposus, -a, -um (skap-OH-sus) Bearing or resembling a scape; scapose; often used for racemes or spikes borne on a long peduncle.

scariosus, -a, -um (skay-ree-OH-sus) Thin, dry and membranaceous, not green; shriveled; scarious.

Scelochilus (skell-oh-KYE-luss) Around 25 small epiphytic species in this genus range from Mexico south to Brazil and Bolivia. Klotzsch established the genus in 1841, deriving the generic name from two Greek words meaning "leg" and "lip," possibly to denote the two hornlike projections on the lip.

SCHILLER, CONSUL Prominent 19th-century German horticulturist, commemorated by many showy orchid species such as *Cattleya schilleriana* and *Phalaenopsis schilleriana*.

Schizopetalous, with cut petals

SCHLECHTER, FRIEDRICH RICHARD RUDOLF (1872—1925) This outstanding German orchidologist and indefatigable systematic botanist was born in Berlin, began as a horticulturist, embarked upon significant botanical explorations to Africa and New Guinea, and collected and described thousands of new orchid species, closing out his life as curator in the Botanical Museum at Dahlem near Berlin. His system of orchids, published posthumously in 1926, established the classification of the family as widely accepted today. His extensive bibliography includes more than 300 papers.

Schlimmia (SHLIM-ee-a) The five epiphytic species in this genus are native to the northern Andes. Planchon and Jean Linden named the genus in 1852 in honor of Louis Schlim, a cousin and collector of South American orchids for Linden.

Schoenorchis (schoen-ORE-kiss) The 10 epiphytic species in this genus range from the Himalayas southeast to New Guinea. Blume described the genus in 1825, deriving the generic name from two Greek words meaning "reed or rush" and "orchid" to denote the narrow leaves on these plants.

Schomburgkia (shom-BERG-kee-ah) A former genus of 20 species of epiphytic orchids from the American tropics and subtropics whose species have been sunk into *Laelia* and *Myrmecophila*. The genus was established in 1838 by Lindley, who dedicated it to the German botanist Sir Robert Schomburgk. (1804—1865).

SCHWEINFURTH, CHARLES (1890—1970) Orchidologist whose career at the Ames Orchid Herbarium culminated in the four-volume *Orchids of Peru*. He is commemorated in many plant names, including the genus *Cischweinfia*.

scion (SYE-on) A shoot used in grafting; a cutting; a descendant.

Sciuroid, shaped like the tail of a squirrel

sclerenchymatous (skleer-eng-KIM-uh-tuhs) Having cells with thickened and hard walls.

Sclerotic, hardened or thickened

scobicular (sco-BIK-yew-lar) In fine grains like sawdust.

Scobinate, with a roughened surface as though rasped.

scorpioid (SKORE-pee-oyd) Coiled in the bud.

scrobiculate (skrow-BIK-yuh-lit) Having shallow depressions.

scrotiformis, -e (skro-ti-FOR-miss) Pouch-shaped; scrotiform.

sculptus, -a, -um (SKULP-tus) Carved; sculpted.

scurfy (SKER-fee) Scaly.

scutellaris, -e (skew-tell-AY-ris) Dish- or shield-shaped.

Scuticaria (skoo-ti-KAYR-ee-ah) A genus of seven species of epiphytic orchids from South America. Related to *Maxillaria*, it was established by Lindley in 1843, the name referring to the whip-like character of the pendent terete leaves.

sebosus, -a, -um (seb-OH-sus) Full of grease or tallow.

sectile (SEK-til) Cut into small partitions.

section (SEK-shun) A taxonomic subdivision of a genus below the rank of a subgenus.

Seculate, sickle-shaped

secundus, -a, -um (se-KUN-dus) One-sided; borne along one side of an axis; secund.

SEDEN, JOHN (1840—1921) Early English orchid grower and hybridist employed by James Veitch & Sons. His name is commemorated in many of the early hybrids registered by that firm.

Sedirea (se-DEER-ee-a) A monotypic monopodial epiphytic genus indigenous to Japan, Korea and the Ryukyu Islands. Garay and Sweet established the genus in 1974, using the anagram of *Aerides* due to the similarity of the two genera.

seed (seed) The ripened ovule; the propagative part of a plant.

seed pod (seed pod) Horticultural and botanically incorrect term for the fruit or capsule of an orchid.

seedling (seed-ling) A young orchid plant from the time it produces its first leaves and roots until the time of its first flowering.

segment (seg-ment) A part of the perianth, as the petal, sepal or lip; any division or part of a cleft or divided organ.

Seidenfadenia (sy-den-fah-DEEN-ee-a) A monotypic epiphytic genus from Myanmar and Thailand. Garay established the genus in 1972, naming it in honor of Dr. G. Seidenfaden, who spent years studying the orchids of Thailand.

selection (see-LEK-shun) The processing of breeding through the choosing of parents with outstanding characteristics for the type with the aim of improvement.

Selenipedium (se-lee-ni-PEE-dee-um) A genus of four species of Central and South American terrestrial orchids related to *Cypripedium*, it was described in 1854 by Reichenbach, the name referring to Selene, the goddess of the moon in Greek mythology. Many species of *Phragmipedium* were previously placed in *Selenipedium*.

self-fertilization (self-fer-tih-LYE-zay-shun) The fertilization of an ovule by its own pollen (opposed to cross-fertilization); selfing.

selfing (self-ing) The pollination of a flower by its own pollen or by pollen from another flower of the same plant.

self-pollination (self-pol-in-AY-shun) The pollination of a flower by its own pollen, either through natural means or through the agency of man.

selligerus, -a, -um (sel-LIJ-er-us) Saddle-shaped.

semi- (seh-mye or seh-mee) A prefix meaning half.

semi-alba (seh-mee-al-ba) A term applied to a white flower that has a colored lip.

semi-apertus, -a, -um (sem-ee-ah-PER-tus) Half open, alluding to a flower.

semiterete (sem-ee-ter-EET) Applied to hybrid vandas produced by the intergeneric hybrids between terete-leaved Papilionanthe and strap-leaved Vanda.

senilis, -e (seh-NIL-iss) Of old people, aged.

sepal (SEP-ul or SEE-pul) One of the divisions of the calyx; one of the three parts of the outer whirl of the perianth.

sepaline (SEEP-a-leen) Belonging to or consisting of the sepals; resembling a sepal.

sepaloid (SEEP-ah-loyd) Resembling a sepal.

septate (SEP-tayt) Partitioned; divided by partitions.

septicidal (SEP-tih-SYE-dahl) Said of those capsules that dehisce through the partitions and between the locules.

septum (SEP-tum) A partition.

Serapias (sir-RAP-ee-as) This Mediterranean-region terrestrial orchid genus consists of about seven species. Linnaeus described the genus in 1753, naming it in honor of the Egyptian god Searpias, possibly because some plants are native to Egypt.

seratinous (ser-at-IH-nuss) Bearing bristles.

sericeus, -a, -um (ser-ISS-ee-us) Silky; covered with silky down; sericeous.

serpens (SER-penz) Creeping; serpent.

serratus, -a, -um (ser-AY-tus) Having sharp teeth pointing forward; serrate.

serrulatus, -a, -um (ser-yew-LAY-tus) Finely serrate; serrulate.

sesquipedalis, -e (sess-kwee-ped-AY-liss) One-and-a-half feet long.

sessilis, -e (SESS-il-iss) Attached directly by the base; without a stalk; sessile.

seta (SEE-tah) A bristle.

setaceous, -a, -um (se-TAY-see-us) Bristlelike or bristle-shaped; furnished with bristles; setaceous.

setiformis, -e (set-i-FORM-iss) Bristle-shaped; setiform.

setigerus, -a, -um (set-IJ-er-us) Bearing bristles.

setose (SEE-tohs) Covered with bristles

setulose (set-YUH-lohs) Having very small bristles

sexual propagation (seks-yu-hl pra-pa-GAY-shun) The increasing of a plant population through the production and growth of seed.

shading (SHAY-ding) The act of reducing the amount of sunlight entering a greenhouse by means of translucent panels, semi-opaque paint, or opaque screen; a substance or material used for such purpose.

shaker (SHAY-ker) A mechanical table or rotating wheel used in micropropagation to break up and encourage the growth of callus tissue.

sheath (sheeth) A protective leaflike growth that envelops the stem; especially the flattened covering that protects the developing inflorescence in genera such as *Cattleya*.

shield, the staminode of *Cypripedium*

shoot (shoot) The part of the plant derived from the plumule of the embryo, usually comprising stem and leaves.

shrub (shrub) A woody plant that remains low and branches from the base.

siculiform (sik-YUH-ih-form) Having the shape of a dagger.

siculiformis, -e (sik-yew-li-FORM-iss) Shaped like a dagger; siculiform.

Sievekingia (siv-KING-ee-a) A genus of 15 species of tropical American epiphytes, related to *Paphinia*. It was established by Reichenbach in 1871, the name commemorating Dr. Sieveking, a burgermeister of Hamburg, Germany.

Sigmatostalix (sig-mat-oh-STAY-likes) A genus of 35 species of tropical American epiphytic orchids found from Mexico to Bolivia, it is related to *Oncidium*; described in 1852 by Reichenbach, the name alludes to the sigmoid or s-shaped appearance of the column and lip.

sigmoid; sigmoidal (SIG-moyd; sig-MOY-dal) Curved in two directions, like the letter S.

signatus, -a, -um (sig-NAY-tus) Well-marked.

Silky, feels like silk

siliceus, -a, -um (si-LISS-ee-us) Growing in sand; siliceous.

silvestris, -e (sil-VES-triss) Growing in woods.

similis, -e (SIM-ill-iss) Similar; like.

simple (SIM-puhl) Not compound; of one piece.

simulans (SIM-yew-lanz) Resembling; simulate.

sinensis, -e (si-NEN-sis) Native of China; Chinese.

sinistrose (SIN-is-trohs) Turned to the left.

sinuatus, -a, -um (sin-yew-AY-tus) Having the outline or the margin strongly wavy; sinuate.

sinus (SYE-nuss). The cleft or recess between two lobes.

SKINNER, GEORGE URE (1804—1867) An outstanding English collector of plants in Guatemala, he introduced nearly 100 species of orchids into horticulture, many of his discoveries being illustrated in Bateman's Orchids of Mexico and Guatemala.

slab (slab) A plaque or similar vertical mount for the growing of an epiphytic orchid.

SMITH, JOHANN JACOB (1867—1947) One of the greatest of modern orchidologists, he was born in Antwerp, Belgium, studied horticulture, and became associated with the Botanic Garden at Buitenzorg in Java, where he spent 30 years. His outstanding works, including an eight-volume work on the orchids of Dutch New Guinea, were orchid floras of Java, Sumatra and Amboina, as well as Illustrations of Malayan Orchids.

Smitinandia (smi-tin-AND-ee-a) The three epiphytic species in this genus are found from Southeast Asia to Sulawesi. Holttum described the genus in 1969, naming it in honor of Tim Smitinand, co-author of the Orchids of Thailand.

smooth (smooth) A surface that has no hairiness, roughness or pubescence.

Sobennikoffia (so-ben-ee-KOF-ee-a) The three species in this genus from Madagascar may be epiphytic, lithophytic or terrestrial. Schlechter founded the genus in 1925, naming it in honor of his wife, whose maiden name was Sobennikoff.

sobole (SO-bowl) A shoot, usually originating from the base.

soboliferous (so-buhl-IF-er-us) Having vigorous basal shoots.

Sobralia (so-BRAL-ee-ah) A distinctive genus of 95 species of terrestrial and lithophytic orchids from Mexico, Central and South America, it is characterized by its reedlike stems, plicate leaves and Cattleya-like flowers; it was founded in 1794 by Ruiz and Pavon in honor of the Spanish physician Dr. Francisco Sobral.

socialis, -e (so-see-AY-liss) Forming colonies.

Socket, a hollowed area

solaris, -e (so-LAY-ris) Growing in sunny places.

Solenidium (sol-en-EED-ee-um) There are possibly two epiphytic species in this genus from Colombia and Venezuela and Brazil. Lindley described the genus in 1846, deriving the generic name from the Greek word meaning "small canal" in reference to the claw on the lip.

solitary (SOL-i-ter-ee) Borne singly or alone; an inflorescence of one flower.

somaclonal variant (som-a-KLONE-uhl VAHR-ee-ent) A sport that arises in plants regenerated from tissue culture.

somatic cells (so-MAT-ik) Cell types other than those that are or give rise to the germ cells (e.g., pollen or egg)

Sophranitella (sof-roh-NIT-ell-a) The single species in this genus comes from Brazil. Schlechter founded the genus in 1925, using the diminutive form of *Sophranitis* due to the close relationship of the two genera. Now the single species is correctly, *Isabelia violacea*.

Sophranitis (sof-roh-NYE-tiss) A former genus of six species of dwarf epiphytic orchids from Brazil and Paraguay. It was described by Lindley in 1824, the name alluding to the modest size of the plants. These species are now part of *Cattleya*.

sordidus, -a, -um (SOR-did-us) Dirty; usually meaning dull-colored; sordid.

sparsus, -a, -um (SPAR-sus) Few; far between; sparse.

spathaceous (spa-THAY-shus) Resembling or having a spathe.

spathe (SPAYTH) A large, stiff, usually leathery bract or pair of bracts subtending or enclosing an inflorescence.

Spathoglottis (spath-oh-GLOT-tiss) A genus of 30 species of terrestrial orchids distributed from northern India and southern China through Australia and New Caledonia and naturalized elsewhere in the tropics, especially Hawaii. It is allied to *Calanthe* and *Phaius*; described by Blume in 1825, the name alludes to the shape of the lip of the flowers.

spathulatus, -a, -um (spath-yew-LAY-tus) Shaped like a spoon or spatula, round at summit and narrow at base; spatulate.

Spatulate, like a spatula in shape

specie (SPEE-see) Gold coin; not the singular of species.

species (SPEE-sheez) (sing. and pl.) A group of plants (or animals) showing integration among its individuals and having in common one or more characteristics that definitely separate it from any other group; a kind of plant distinct from other kinds; a group of interbreeding individuals usually unable to interbreed with other groups.

specific (speh-SIF-ik) Of or pertaining to a species.

specimen (speh-SIH-men) An individual exemplifying a group; a specimen plant is a noteworthy example of cultivation to an unusually high degree; a herbarium collection.

speciosissimus, -a, -um (spee-see-oh-SISS-i-mus) Eminently handsome, uniting elegance of form and brilliancy of color.

speciosus, -a, -um (spee-see-OH-sus) Handsome in form and color; showy; fair.

spectabilis, -e (spek-TAB-il-is) Deserving especial notice by reason of intrinsic worth; spectacular.

speculum (SPEK-yew-lum) A mirror or reflector, especially one of polished metal.

Speiranthy, the condition of having twisted flowers.

spermatophyte (spur-MAT-oh-fite) A seed-producing plant.

sphacelatus, -a, -um (sfass-ee-LAY-tus) Scorched; dead; diseased; some part looking withered; sphacelate.

sphagnum (SFAG-num) A bog-moss of the genus *Sphagnum*, used dried or alive, fresh or partially decomposed (peat), in some kinds of potting media to retain moisture.

Sphenoid, wedge-shaped; cuneate

spheroidal (sfeer-OY-dul) A solid that is nearly spherical.

Sphyrarhynchus (sfeer-rah-RING-kuss) There is one, possibly two, epiphytic species in this Tanzania genus. Mansfield described the genus in 1935, coining the generic name from two Greek words meaning "hammer" and "beak" to denote the shape of the rostellum.

spicatus, -a, -um (spy-KAY-tus) Bearing flowers arranged in or resembling a spike; spicate.

spiciformis, -e (spye-sih-FOR-miss) In the form of a spike; spiciform.

spiculatus, -a, -um (spik-yew-LAY-tus) With a small, fleshy and erect point; spiculate.

spiculose (SPIK-yuh-lohs) Covered with fine points on the surface.

spike (spike) A type of inflorescence with stalkless (sessile) or short-stalked flowers borne on an upright unbranched flower stem.

spiklet (spike-let) A small secondary spike.

spilopterus, -a, -um (spy-LOP-ter-us) Having spotted wings.

Spindle-shaped, broadest near the middle and tapering toward both ends (see fusiform)

spine (spine) A sharp-pointed hard or woody outgrowth on a plant.

spinescent (SPY-ness-ent) Terminated in or bearing a spine.

spinusus, -a, -um (spy-NO-sus) Having spines; spiny; spinose.

spinulosus, -a, -um (spy-new-LO-sus) Having small spines; spinulose.

spiralis, -e (spy-RAY-lis) Spiralled; having flowers arranged in a spiral.

Spiranthes (spy-RAN-theez) A genus of 50 species of terrestrial orchids widely distributed in the temperate zones of both hemispheres. It was founded by L.C. Richard in 1818, the name referring to the spiraled arrangement of the flowers in many species. Recent studies have removed most Neotropical species to a number of other genera such as *Sarcoglottis* and *Stenorrhynchos*.

splendens (SPLEN-denz) Showy and handsome; radiant or shining; lustrous; splendid.

splendidus, -a, -um (SPLEN-did-us) Magnificent; superb; glorious; splendid.

Spongiose, soft and spongy.

sporadic (SPORE-ad-ik) Not occurring continually

spore (spore) A simple reproductive body, usually composed of a single detached cell and containing no embryo.

sport (sport) (1) A sudden spontaneous deviation from a typical form; a mutation; (2) a plant or part of a plant that arises through mutation and is phenotypically different from the parent.

Sprawling, bending or curving downward.

spray (spray) (1) To scatter a liquid or powder in the form of fine particles; a substance used for spraying (referring either to watering of plants or to the application of pesticides); (2) a term for an inflorescence.

spreading (SPREH-ding) Extending outward or horizontally over a relatively large area; diverging; said of floral segments that diverge to present a wide open flower.

spur (spuhr) A hollow, saclike or tubular extension of the base of the lip, often bearing nectar.

squalens (SKWAL-enz) Dirty; becoming dull in color; squalid.

squalidus, -a, -um (SKWAL-id-us) Dirty; usually applied to flowers of dull color.

squamellate (SKWAM-ell-eyt) Having tiny scales.

squamosus, -a, -um (skwam-OH-sus) Covered with scurf; having a rough or ragged surface.

squarrose (SKWAR-rohs) With parts spreading or recurved at ends.

stachys (STAK-iss) In Greek compounds, signifying a spike.

stalk (stawk) The supporting stem of an organ, such as petiole, peduncle, pedicel, filament or stipe.

stamen (STAY-men) The male organ of the flower, which bears the pollen.

staminate (STAM-in-ayt) Male; having stamens only.

staminode (STAM-in-ohd) A sterile stamen, or any structure (without anther) corresponding to a stamen.

standard (STAN-dard) Said of a digital dorsal sepal or petal

Stanhopea (stan-HOPE-a, although usually mispronounced stan-HOPE-ee-a) A genus of 55 species of epiphytic orchids from the American tropics related to *Gongora* and *Coryanthes*. Described by Frost in 1829, the name honors the Right Honorable Philip Henry, fourth Earl of Stanhope, then just elected president of the London Medico-Botanical Society.

stapeliaeflorus, -a, -um (stap-ee-lee-aye-FLOR-us) Having flowers like a *Stapelia* (Asclepiadaceae).

stapelioides (sta-pee-lee-OY-deez) Resembling a *Stapelia* (Asclepiadaceae).

Staurochilus (star-oh-KYE-luss) There are about a dozen epiphytic monopodial species in this Southeast Asian genus ranging from the Himalayas east to the Philippines and south to Borneo. Ridley described the genus in 1896, deriving the generic name from two Greek words meaning "cross" and "lip" to denote the shape of the lip.

Stenopetalus, with narrow petals

Stenophyllous, with narrow leaves

stele (STEE-lahy) An axial cylinder of vascular tissue; the primary arrangement of a vascular system.

Stelis (STEE-lis) A genus of 370 species of minute-flowered epiphytic orchids from the American tropics and subtropics characterized by greatly reduced petals and lip. Related to *Pleurothallis* and *Masdevallia*, it was established in 1899 by Swartz, the name alluding directly to the epiphytic habit of the genus.

stellatus, -a, -um (stell-AY-tus) Star-shaped; resembling a star; stellate.

stem (stem) The main axis of a plant, bearing leaves and flowers; distinguished from the root-bearing axis.

Stenia (STEEN-ee-a) This genus consists of eight epiphytic species native to Central America and northern South America. Lindley identified the genus in 1837, deriving the generic name from the Greek word meaning "narrow" to denote the slender pollinia in this genus.

Stenoglottis (sten-oh-GLOT-tiss) A genus of four species of terrestrial orchids from Africa related to *Habenaria*. It was described in 1836 by Lindley, the name apparently referring to the narrow irregular lobes of the lip.

stenophyllus, -a, -um (sten-oh-FILL-us) Narrow-leaved.

Stenorrhynchus (sten-or-RING-kuss) The 60 terrestrial species in this genus come from the West Indies, Central America and tropical and temperate South America. Richard identified the genus in 1818, deriving the generic name from two Greek words meaning "narrow" and "snout" in reference to the flower's narrow rostellum.

sterile (STER-ill) Barren; imperfect.

sterile culture (STER-ill kuhl-chure) The growing of organisms under laboratory conditions in an aseptic environment.

stigma (STIG-ma) That part of the pistil of a flower that is receptive to pollen.

stigmatic (stig-MAT-ik) Pertaining to the stigma.

stipe (stipe) The stalklike support of a pistil or other small organ such as a pseudobulb or pollinium.

stipel (STAHY-puhl) A leaf appendage similar to a stipule

stipitatus, -a, -um (stip-i-TAY-tus) Having a stipe; stipitate.

stipule (SIP-yuhl) An appendage at the base of a leaf petiole

stolon (STOH-lon) An above-ground creeping stem producing roots or new shoots, usually giving rise to new individuals.

stoloniferous (sto-lon-IFF-er-us) Producing or bearing stolons.

STOLZ, ADOLF (1871-1917) Early 20th-century German missionary and plant collector in the former German East Africa (Nyassaland), commemorated in the genus *Stolzia*.

Stolzia (STOLST-ee-a) The 15 epiphytic, rarely lithophytic, species in this genus are native to tropical Africa. Schlechter named the genus in 1915 in honor of Adolf Stolz, a German missionary in Africa.

stoma (STOH-mah); pl. stomata (sto-MAH-tah) A pore or aperture in the epidermis of leaves and some stems, surrounded by crescent-shaped guard cells and facilitating gas exchange.

stramineus, -a, -um (stra-MIN-ee-us) Strawlike or straw-colored; stramineous.

Strap-shaped, elongate and flat

stratiotes (strat-ee-OH-teez) Soldierly; resembling Stratiotes, an aquatic herb with sword-like leaves.

streptopetalus, -a, -um (strep-toh-PET-a-lus) With twisted petals.

striatus, -a, -um (stry-AY-tus) Striped; marked with longitudinal lines, grooves, or ridges; striate.

strictus, -a, -um (STRIK-tus) Very straight and upright; erect.

strigosus, -a, -um (strig-OH-sus) Set with stiff bristles; hispid; strigose.

striolatus, -a, -um (stry-oh-LAY-tus) Somewhat or faintly striped, or with fine lines.

strobilus (STROH-bil-us) An inflorescence with imbricate scales like a cone.

structural gene (STUK-chure-uhl jeen) A gene that codes for an enzyme or other protein required for the structure or metabolism of a cell.

stylar canal (STY-lahr KAN-al) A tube connecting the stigmatic surface with the ovary that allows the pollen tubes grow down into the ovary and thus fertilize the ovules.

style (STY-uhl) The narrowed portion of the pistil that connects the ovary and the stigma, not usually applicable to orchids.

stylidium (pl **stylidia**) (sty-LID-ee-um) An appendage to the column, typical of most Bulbophyllum, usually filiform and less pronounced than structures referred to as column wings.

suaveolens (swahv-ee-OH-lenz) Sweet-smelling.

suavis, -e (SWAH-viss) Sweet-scented; agreeable; delightful.

suavissimus, -a, -um (swahv-ISS-i-mus) Very fragrant.

sub- A prefix denoting an approach to the condition designated; nearly.

subacute (sub-a-KEWT) Somewhat or partially acute.

subcordatus, -a, -um (sub-kor-DAY-tus) Almost heart-shaped; subcordate.

subcoriaceous (sub-kor-ee-AY-shus) Somewhat or approaching leathery in texture.

subequal (sub-ee-KWAL) Nearly equal in size.

suberect (sub-ee-REKT) Nearly or almost upright.

suberosus, -a, -um (soo-ber-OH-sus) Cork-barked; corklike or corky; suberose.

subfalcatus, -a, -um (sub-fal-KAY-tus) Somewhat curved or hooked; subfalcate.

subgenus (sub-JEE-nus) One of the divisions into which large genera are sometimes taxonomically divided; between the ranks of genus and section.

submersus, -a, -um (sub-MER-sus) Submerged; growing under water.

suborbicular (sub-or-BIK-yew-lar) Almost circular.

sessile (sub-SESS-ill) Almost stalkless.

subspecies (sub-SPEE-sheez) Taxonomic category between a species and a botanical variety, referring to a population having minor morphologic differences and a distinct geographic range, abbreviated "ssp.": e.g., *Rhynchosstylis gigantea* ssp. *violacea* (Lindl.) Christ. for the Philippine plants of the Indochinese-Borneo species.

substance In evaluating orchid flowers, the qualities of firmness and durability.

substratum (SUB-strat-um) The material upon which a plant or germinating seed grows; substrate.

subtended (sub-TEN-ded) Enclosed or embraced in its axil.

subterete (sub-ter-REET) Somewhat or imperfectly terete.

subterraneus, -a, -um (sub-ter-RAY-nee-us) Underground; subterranean.

subtribe (sub-TRY-b) Taxonomic category below a tribe, ending in "-inae": e.g., subtribe Angraecinae is one of the subtribes in the tribe Vandeeae.

subulatus, -a, -um (sub-yew-LAY-tus) Awl-shaped; more or less cylindrical and tapering to a point; subulate.

subulifolius, -a, -um (sub-yew-li-FOH-lee-us) Having foliage shaped like an awl.

succulent (suk-YUH-lent) Soft and juicy; fleshy; adapted to the retention of water.

sucker (suk-er) A shoot arising from the roots or beneath the surface of the ground.

suecicus, -a, -um (soo-EE-sik-us) Native of Sweden; Swedish.

suffrutescent (suf-FREW-tess-sent) Said of plants slightly woody at the base.

Suffused, tinted or tinged

sulcatus, -a, -um (sull-KAY-tus) Grooved or furrowed longitudinally; sulcate.

sulphureus, -a, -um (sull-PHUR-ee-us) Sulfur-colored, light yellow

sumatranus, -a, -um (soo-ma-TRAY-nus) Native of Sumatra; Sumatran.

SUMMERHAYES, VICTOR SAMUEL (1897—1974) English orchidologist whose career was largely devoted to monographic and floristic study of African orchids.

Summerhayesia (Sum-mer-HAYZ-ee-a) There are two epiphytic species in this tropical African genus. Cribb named the genus in 1977 in honor of Victor Summerhayes, an expert on African orchids.

Sunipia (SU-nip-ee-a) The 18 epiphytic species in this genus are native from India east to Taiwan. Smith described the genus in 1816, using a vernacular name from Nepal.

super- (SOO-per) Prefix meaning above.

superbiens (soo-PER-bee-enz) Becoming grand and stately.

superbus, -a, -um (soo-PER-bus) Excellent, splendid; superb

superposed (soo-per-POHZD) Placed one on top of another.

Superior ovary (SOO-peer-ee-or OH-vah-ree) Said of an ovary that is completely above the attachment of the calyx.

supinus, -a, -um (soo-PYE-nus) Prostrate; lying on its back; supine.

surculose (SUR-kyuh-lohs) Sucker-producing.

suture (SOO-cher) A line or groove marking a natural division or union.

SWARTZ, OLOF (1760—1818) The first Western orchidologist, he published the first enumeration of West Indian plants, including orchids, in 1788, and the first article devoted exclusively to orchids in 1800, in which he established the two great divisions of the orchid family that later were designated Monandreae and Diandrae.

SWAMY, B.G.L. Anatomist who laid the groundwork for the study of vascular anatomy and embryology in orchid flowers.

SWEET, HERMAN R. (1909—1991) Harvard orchidologist who made numerous contributions to Andean orchid taxonomy and monographed *Phalaenopsis*.

sylhetensis, -e (sill-het-TEN-siss) Native of Sylhet, India.

sylvaticus, -a, -um (sill-VAT-i-kus) Of the woodlands or forests.

sylvestris, -e (sill-VEST-ris) Growing in woods; forest-loving.

symbiosis (sim-bi-OH-siss) The living together of dissimilar organisms with benefit to both; in particular, the relationship between certain fungi and orchid seeds germinating in the wild.

symbiotic (sim-bi-OT-ik) Referring to symbiosis.

symmetrical (sim-MET-rih-cuhl) Said of a flower that is regular as to the number of parts and their arrangement in the perianth.

sympetalous (sim-PET-ah-luss) The petals being united, gamopetalous.

Symphyglossum (sim-fee-GLOSS-um) A small, possibly monotypic, genus of epiphytic orchids from the Andes of South America. Related to and often merged with *Cochlioda*, it was described by Schlechter in 1918, the name alluding to the strong adnation of the lip to the column.

symphysis (SIM-fiss-iss) Growing together; coalescence.

symplesiomorphy (sim-PL EEZ-ee-oh-more-fee) A cladistic term meaning a shared ancestral character state, as opposed to synapomorphy.

sympodial (sim-PO-dee-al) A form of growth in which each new shoot, springing from a bud of the rhizome, is complete in itself and terminates in a potential inflorescence, such as in the genus *Cattleya*, the plant usually growing in a horizontal direction.

synapomorphy (syn-APP-oh-more-fee) A cladistic term meaning a shared derived character state, implying a common phylogenetic history, as opposed to symplesiomorphy (which see).

synonym (SIN-uh-nim) A scientific name considered the same as an earlier name for a species of plant or animal, hence superfluous.

synsepalum (sin-SEP-a-lum) The ventral portion of the flower of the lady's-slipper orchids formed by the fusion of the lateral sepals; synsepal.

syringe (sih-RINJ) To sprinkle or spray lightly with fine jets.

syringothyrsus, -a, -um (si-ring-oh-THEER-sus) With trusses of flowers like a lilac.

systematics (sis-tuh-MAT-iks) The science of nomenclature, identification and classification of organisms.

T

tabeculate (tab-ih-KUY-layt) Cross-barred.

tabularis, -e (tab-ew-LAY-riss) Having a flat surface like a table or board; tablelike.

taedigerus, -a, -um (tee-DIJ-er-us) Torch-bearing.

taenialis, -e (tee-nee-AY-liss) Ribbonlike; banded.

TANG, T. (1894—1984) Chinese orchidologist who published with F.T. Wang.

taurinus, -a, -um (taw-RYE-nus) Having horns like a bull; bull-like.

Tawny, tan in color

taxon (pl. **taxa**) (TAKS-on) A general term applied to a taxonomic category of any rank, such as species, genus, family, order, etc.

taxonomy (tak-SON-oh-mee) The science of classification, dealing with the arrangement of plants (or animals) into groups according to natural relationships.

tardus, -a, -um (TAR-dus) Late.

Telipogon (tel-i-POH-gon) A genus of 100 species of tropical American dwarf epiphytic orchids found in the high cloud forests from Costa Rica to Peru. It was established by Humboldt, Bonpland and Kunth in 1815, the name descriptive of the bearded column.

tendrill (TEN-drill) A twisting threadlike process of extension by which a plant grasps an object and clings to it for support; morphologically it may be stem or leaf.

tenebrosus, -a, -um (ten-eh-BROH-sus) Dark; growing in shaded places.

tenuifolius, -a, -um (ten-yew-ee-FOH-lee-us) Slender-leaved.

tenuis, -e (TEN-yew-iss) Slender; delicate.

teratological (ter-a-toh-LOJ-ik-ul) Monstrous; relating to a monstrosity.

teres (TEH-reez) Long and cylindrical; terete.

terete (teh-REET) Cylindrical; circular in cross section.

teretifolius, -a, -um (teh-ree-ti-FOH-lee-us) Having terete leaves.

terminal (ter-MIN-uhl) Apical; produced at the end.

terminology (ter-min-OL-a-gee) The system of terms dealing with a given science or subject.

ternatus, -a, -um (ter-NAY-tus) In clusters of three; ternate.

terrestrial (ter-RESS-tree-uhl) Growing in the ground and supported by soil.

terrestris, -e (ter-REST-tris) Of the ground; growing in the ground as opposed to growing in trees, on rocks, or in water.

tessellatus, -a, -um (tess-sel-LAY-tus) Arranged in a checkered or mosaic pattern; tessellated.

testa (pl. **testae**) (TESS-ta; TESS-tee) The outer seed coat, particularly when bony, hard or brittle.

testaceus, -a, -um (tes-TAY-se-us) Of a brick-red or brownish-red color; testaceous.

Testiculate, resembling testicles

tetrad (TET-rad) A structure formed of four cells, as in the pollen mother-cells; a group of four.

tetragonus, -a, -um (tet-trah-GO-nus) Having four angles.

tetramerous Any group with four members.

Tetramicra (te-tra-MYE-kra) A genus of 11 species of epiphytic orchids from the Caribbean related to *Laelia* and *Cattleya*. It was established in 1831 by Lindley, the name referring to the four small compartments of the anthers.

tetraploid (TET-tra-ployd) Having four sets of chromosomes (4N).

TEUSCHER, HEINRICH ("Henry") (1891—1984) German botanist at the Montreal Botanical Garden (curator; 1936—1972) who authored the long-running series "Collector's Item" in *American Orchid Society Bulletin* (1953—1978).

Teuscheria (TOY-shur-ee-a) The six epiphytic species in this genus range from Costa Rica south to Peru. Garay established the genus in 1958, naming it in honor of Canadian botanist Henry Teuscher.

thalloid (THAL-loyd) Looking like a thallus.

thallus (THAL-uhs) Said of a plant part that does not have true roots, stem or leaves

Thecopus (THEE-ko-puss) A small genus of two epiphytic species native from Thailand southeast to Borneo. Seidenfaden described the genus in 1983, deriving the generic name from two Greek words "box" and "foot," possibly a reference to the shape of the column.

Thecostele (THEE-ko-stee-lee) A monotypic epiphytic genus widespread throughout southeast Asia, from northern and eastern India, east to the Philippines and south to Borneo and Java. Reichenbach identified the genus, in 1857, coining the generic name from two Greek words "box" and "column" to denote the shape of the column.

Telephorous, with nipple-like protuberances

Thelymitra (thel-lee-MYE-tra) A genus of 50 species of terrestrial orchids chiefly from Australia and New Zealand, popularly called "sun orchids." It was established in 1776 by Forst, the name possibly alluding to the ornate wings of the column.

thorn (thorn) A spine.

Thrixspermum (THRIKS-sper-mum) The 100 epiphytic or lithophytic species in this genus are widespread from the Himalayas east to the Philippines and the tropical southwest Pacific Islands. Loureiro described the genus in 1790, deriving the generic name from two Greek words "hair" and "seed" to denote the hair-like seeds.

throat (throat) The lower part of the tube of orchids having a tubular lip.

Thunia (THOO-nee-ah) A genus of five species of terrestrial and semiterrestrial orchids from the mountains of northeast India and Burma to Malaya related to *Arundina*. It was named by Reichenbach in 1852 in honor of Count von Thun Hohenstein of Tetschin, Bohemia.

thyse, thyrus (THURSS, THUR-sus) A compact, more or less compound panicle; more correctly a paniclelike cluster with main axis indeterminate and other axes cymose; the inflorescence of a grape.

thyriflorus, -a, -um (thur-si-FLOR-us) Having flowers in a thyse or compact clustered panicle.

tibicinis, -e (tib-i-SIN-iss) Of a flute-player; resembling a flute or trumpet.

Ticoglossum (tee-ko-GLOSS-um) The two epiphytic species in this genus are native to Costa Rica and Panama. Halbinger described the genus in 1983, deriving the generic name from the Costa Rican word "tico," an affectionate name for Costa Ricans and the Greek word "tongue" to denote the similarity of this genus to *Odontoglossum*.

tigrinus, -a, -um (ti-GRYE-nus) Striped or spotted like a tiger.

tissue culture (TISH-yu KULL-chure) The culture of cells in vitro.

titanus, -a, -um (tye-TAY-nus) Very large; titanic.

Tolumnia (toh-LUM-nee-ah) A genus of 35 species of diminutive fan-shaped epiphytes from the West Indies, formerly included in a broadly defined *Oncidium* and known horticulturally as equitant, or variegata oncidiums.

tomentosus, -a, -um (to-men-TOH-sus) Densely pubescent with matted hairs; woolly; tomentose.

tomentum (toh-MEN-tum) A covering of densely matted hairs.

Tongue, ligule.

tonsus, -a, -um (TON-sus) Sheared; smooth-shaved.

Tooth, any small lobe or point along a margin. Toothed, dentate.

torose (TAWR-ohs) Round with swellings at the internodes.

torridus, -a, -um (TOR-rid-us) Growing in hot, dry places.

tortilis, -e (TOR-ti-liss) Twisted; coiled; tortile.

Tortuous, twisted or bent

torus (TORE-uhs) The receptacle of the flower.

totipotency (toh-TIP-oh-ten-see) The principle that each cell has the genetic information needed to code for an entire individual, and hence small pieces of tissue can be used to generate adult plants through micropropagation.

toxicarius, -a, -um (tok-si-KAY-ree-us) Poisonous; toxic.

Trace, a vein.

trailing (TRAY-ling) Said of plants with stems growing horizontally but not rooting along the stem.

transcription (tranz-CRIP-shun) The process of producing RNA from a DNA template.

translation (tranz-LAY-shun) The process of producing proteins from a RNA template.

translucent (tranz-LOO-sent) Partially transparent to light.

transpiration (tran-spir-AY-shun) The evaporation of water through stomata of leaves and stems.

transplanting (tranz-PLAN-ting) The transferring of seedlings from the original germinating flask to pots, or older plants from one container to another.

transversely (tranz-VERS-lee) Broader than long; at right angles to an axis.

trapeziformis, -e (trap-ee-zi-FORM-iss) An unsymmetrical four-sided figure; with four unequal sides; trapeziform.

tree fern A large tropical or subtropical fern, generally of the family Cyatheaceae, whose fibrous trunk is used as a potting medium for orchids, either in shredded form, in the form of logs or in shaped blocks; it is commonly known by the Hawaiian term hapuu or the Brazilian xaxim .

tremulus, -a, -um (TREM-yew-lus) Quivering; trembling; tremulous.

Trevoria (treh-VORE-ee-a) The five epiphytic species in this genus are native from Nicaragua south to Bolivia. Lehmann described the genus in 1897, naming it in honor of Sir Trevor Lawrence, president of the Royal Horticultural Society and an avid orchid grower.

tri- (tri) A prefix meaning three.

triad (TRI-ad) In a group of three

triandrus, -a, -um (trye-AN-drus) With three stamens; triandrous.

Trias (TREE-ahs) There are some 10 epiphytic species in this genus ranging from India east to Thailand and Laos, with Thailand the richest in species. Lindley founded the genus in 1830, deriving the generic name from the Greek word "three" to denote the triangular flowers.

tribe (tribe) A primary taxonomic category of related genera, or the fundamental division of an order.

tricarpus, -a, -um (try-KAR-pus) Having three carpels or fruits.

Trichocentrum (trik-oh-SEN-trum) A genus of 70 species of epiphytic orchids distributed from Mexico to Brazil and Peru. It is related to *Oncidium*, the name applied in 1837 by Poeppig and Endlicher, referring to the long, slender spur of the flowers of most species. The genus now includes what were formerly known as "mule ear" and "rat tail" oncidiums.

Trichoceros (trik-oh-SER-os) A genus of five epiphytic or lithophytic species of South American compact epiphytic orchids from the Andes of Colombia, Ecuador, Peru and Bolivia. Related to *Telipogon*, it was described in 1815 by Humboldt, Bonpland and Kunth, the name referring to the hairy antenna-like processes on each side of the column.

Trichoglottis (trik-oh-GLOT-tiss) A genus of 60 epiphytic species of vandaceous orchids from Sri Lanka to New Guinea, it was established by Blume in 1825, the name referring to the pubescence on the lip of the flowers.

trichome (TRYE-kohm) The correct botanical term for any hairlike outgrowth of the epidermis, as a hair or bristle.

Trichopilia (trik-oh-PILL-ee-ah) A genus of 33 epiphytic species of rather showy, pseudobulbous orchids distributed from Mexico to Bolivia and Brazil. It was described in 1836 by Lindley, the name derived from the fringed margin of the column.

Trichosalpinx (trik-oh-SALL-pinks) A genus of 90 epiphytic species of diminutive Neotropical epiphytes formerly included in a broadly defined *Pleurothallis*, characterized in part by lepanthiform leaf sheaths. The genus was established by Luer in 1983 when he removed these species from *Pleurothallis*.

Trichotomia (trik-oh-TOH-see-ah) A genus of 45 epiphytic species of Asian and Pacific orchids formerly included in a broadly defined *Eria*, usually characterized by the presence of dense, prominent trichomes. Blume founded the genus in 1825, deriving the generic name from the Greek word meaning "hairy" to denote the hair on the lip.

tricolor (TRI-kuhl-er) Three-colored.

tricostate (trye-KOSS-tayt) With three ribs.

Tridactyle (tri-DAKT-ee-lee) The 45 epiphytic species in this genus are found in tropical Africa and South Africa. Schlechter described the genus in 1914, coining the generic name from two Greek words "three or thrice" and "finger" to denote the distinct three-lobed lip.

tridentatus, -a, -um (trye-den-TAY-tus) Three-toothed; tridentate.

trifidus, -a, -um (TRYE-fid-us) Three-cleft; trifid.

trifoliatus, -a, -um (trye-foh-lee-AY-tus) Having three leaves; trifoliate.

trigeneric (trye-jen-ER-ik) Of or pertaining to three genera, usually applied in reference to hybrids derived from the combination of three parent genera.

Trigonidium (trye-goh-NID-ee-um) A small genus of epiphytic orchids that range from Mexico to Brazil. Related to *Maxillaria*, it was described in 1837 by Lindley, who derived the name from the strongly triangular form of the sepals.

trigonous (TRI-go-nus) Three-angled.

trilinguis, -e (trye-LING-gwiss) Three-tongued.

trilobate (trye-LOH-bayt) With three lobes.

trimerous (tri-MER-us) Occurring in threes.

Trimonoecious (or trioecious), with male, female and bisexual flowers on the same plant.

trimorphous (tri-MOR-fuss) Having three forms.

Tripartite, three-parted

triploid (TRIP-loyd) Having three sets of chromosomes (3N).

tripudians (trye-PEW-dee-anz) Dancing.

tripunctatus, -a, -um (trye-punk-TAY-tus) Three-spotted.

triquetrus, -a, -um (trye-KWET-rus) Three-cornered.

trisected (tri-SEK-ted) Divided into three deeply cut parts.

Trisetella (try-se-TELL-ah) A genus of 20 Neotropical casespitose epiphytic species formerly included in a broadly defined *Masdevallia*. Luer founded the genus in 1989, deriving the generic name from the Latin word meaning "three hairs" to denote the tail-like projections ("tails") on the sepals.

tristis, -e (TRIS-tiss) Dull-colored; dull; sad.

triumphans (trye-UM-fanz) Conquering; excelling all others; triumphant.

Trizeuxis (trye-ZEWK-siss) A monotypic genus of tropical American dwarf epiphytes from Costa Rica to Bolivia related to *Oncidium*. It was founded by Lindley in 1821, the name derived from the cohesion of the three sepals.

tropicus, -a, -um (TROP-ik-us) Of or from the tropics.

Trudelia (TRUE-dell-ee-a) The five sympodial epiphytic species in this genus range from the Himalayas east to Vietnam. Garay described the genus in 1986, naming it in honor of Niklaus Trudel, a Swiss orchid grower and photographer.

trulla (TRULL-ah) Trowel-shaped.

trulliferus, -a, -um (trul-LIFF-er-us) Trowel-bearing.

trulliformis, -e (trull-i-FORM-iss) Trowel-shaped; trulliform.

truncatus, -a, -um (trun-KAY-tus) Terminating abruptly, as if shortened by removal of the apex; truncate.

tubatus, -a, -um (tew-BAY-tus) Trumpet-shaped.

tuber (TEW-ber) An underground stem or root, giving rise to new shoots and roots.

tubercle (TEW-ber-kul) A small tuber or tuberlike body, not necessarily subterranean.

tuberculatus, -a, -um (tew-ber-kew-LAY-tus) Covered with wartlike excrescences; tuberculate.

tuberiferous (TEW-ber-if-er-us) Having tubers

tuberoid (TEW-ber-oyd) A thickened root resembling a tuber, as those found in many terrestrial orchids.

tuberosus, -a, -um (tew-ber-OH-sus) Having the character of a tuber; tuberlike in appearance; tuberous.

Tufted, arrange in a dense cluster.

tumidus, -a, -um (TEW-mid-us) Swollen; tumid.

tunicatus, -a, -um (tew-ni-KAY-tus) Provided with concentric or enwrapping coats or layers, as the bulb of an onion; tunicate.

turbinatus, -a, -um (ter-bin-AY-tus) Inversely conical; shaped like a top; turbinate.

turface (TER-face) An extruded clay product used as an ingredient in orchid composts.

turgidus, -a, -um (TER-jid-us) Inflated, swollen to fullness; turgid.

type (tipe) The original representative of a species, genus or other taxon, upon which the distinguishing characters of the taxon are based; type specimen.

type specimen (tipe SPEH-sih-men) The original material used to describe a new species, used to anchor nomenclatural usage, variously modified as: holotype, the one original element before a scientist; isotype, duplicates of the holotype; lectotype, a secondary original element selected as the nomenclatural type when the holotype has been destroyed; neotype, a specimen designated as the nomenclatural type when all original material is lacking; topotype, a specimen from the same locality as the holotype; etc.

typicus, -a, -um (TIP-ik-us) Agreeing with the type of a group; typical.

U

ubiquitous (yoo-BIK-wi-tuhs) Everywhere; growing in all types of habitats.

uliginosus, -a, -um (yew-lij-in-OH-sus) Of or from marshes and wet places.

umbel (UM-bell) An inflorescence in which the peduncles or pedicels of a cluster spring from the same point on the floral axis.

umbellate (UM-bell-ayt) Like an umbel

umbellet (UM-bell-et) A secondary umbel

umbilicate, with a depression in the middle, like a navel.

Umbo, a blunt or rounded protuberance.

umbrosus, -a, -um (um-BROH-sus) Shade-loving.

uncinatus, -a, -um (un-sin-AY-tus) Hooked; bent at the end; like a hook; uncinat.

Unctuous, greasy, or oily

undulatus, -a, -um (un-dew-LAY-tus) Waved; wavy; with a wavy margin or surface; undulate.

unguiculatus, -a, -um (un-gwik-yew-LAY-tus) Contracted at the base into a claw or narrow stalk; unguiculate.

uni- (YOO-nee or YOO-nih) A prefix meaning one.

unicornis, -e (yew-ni-KOR-niss) One-horned.

uniflorus, -a, -um (yew-ni-FLOR-us) One-flowered, or having single-flowered peduncles.

unifoliate (yew-ni-FOH-lee-ayt) One-leaved.

unilateral (yew-ni-LAT-er-ul) One-sided; arranged on a single side only; secund.

unisexual (yew-ni-SEK-shu-al) With flowers of one sex only, either staminate (male) or pistillate (female).

urceolatus, -a, -um (er-see-oh-LAY-tus) Hollow and cylindrical or ovoid, and contracted at or below the mouth like an urn; urn-shaped; urceolate.

urens (YEW-renz) Stinging; burning.

urophyllus, -a, -um (yew-roh-FILL-us) With leaves like a tail.

ursinus, -a, -um (er-SYE-nus) Like a bear, in smell or other respects.

utilis, -e (YEW-till-iss) Useful.

utricle (YEW-trih-kuhl) A bladder-like body

utricularioides (yew-trik-yew-layr-ee-OY-deez) Resembling the bladderwort, Utricularia (Lentibulariaceae.)

utriculatus, -a, -um (yew-trik-yew-LAY-tus) Bladderlike; inflated; utriculate.

V

vagans (VAY-ganz) Of wide distribution; wandering.

vaginatus, -a, -um (vaj-i-NAY-tus) Having sheaths; vaginate.

valid publication (VAL-id) Publication in accordance with the rules of the International Codes of Nomenclature.

validus, -a, -um (VAL-id-us) Strong; well-developed.

vallecula (vuh-LEK-yuh-luh) Said of grooves between ridges.

valvate (VAL-vayt) Opening by valves or pertaining to valves; meeting at the edges without overlapping, as leaves or petals in the bud.

valve (valv) A separable part of a pod; the units or pieces into which a capsule slits or divides in dehiscing.

Vanda (VAN-da) A genus of about 50 showy epiphytic orchids of monopodial habit found in the Asiatic tropics, it was described by Jones in 1795, the name being derived from the Sanskrit for the orchid *Vanda tessellata*.

vandaceous (van-DAY-shuss) An adjective referring to any large monopodial orchid, usually restricted to Asiatic genera with the parallel term angraecoid applying to African plants.

Vandopsis (van-DOP-siss) A genus of five species of vandaceous orchids, distributed from Myanmar and Thailand to the Philippines and New Guinea, closely allied to *Sarcanthopsis* and *Trichoglottis*, it was described in 1889 by Pfitzer, the name implying a resemblance to *Vanda*.

Vanilla (va-NIL-la) A genus of 100 species of vinelike orchids, widely distributed in the tropics and subtropics of both hemispheres, it is related to *Epistephium*; described in 1799 by Swartz, the name is derived from the Spanish *vainilla*, meaning "little pod," and refers to the slender podlike fruit.

variabilis, -e (vair-ee-AY-bil-liss) Varying in form or color; variable.

variegatus, -a, -um (vair-ee-GAY-tus) Irregularly colored in patches; blotched; variegated.

varietal (vuh-RYE-eh-tuhl) Of or pertaining to a variety; having the character of a variety or subspecies.

variety (vuh-RYE-eh-tee) A subset of the population having minor characteristics which distinguish it from the type of the species. (For horticultural variety, see cultivar)

vascular (VAS-kewl-er) Pertaining to, composed, of, or provided with vessels or ducts which convey fluids such as water and sap.

vegetative (VEJ-i-tay-tiv) That part of the plant, such as the stem and leaves, not directly concerned with reproduction.

vegetative propagation (VEJ-i-tay-tiv prah-pah-GAY-shun) The increasing of a plant population through cuttings, divisions, bud stimulation, protocorm proliferation, and various techniques of tissue culture.

vegetus, -a, -um (VEJ-et-us) Lively; vigorous.

vein (vayn) A strand of fibro-vascular tissue (vascular bundle) in a leaf or other organ through which water and other fluids are conducted.

velamen (VEL-lah-min) The layer or layers of cells covering the roots of epiphytic orchid which aid in the rapid absorption and assimilation of water and mineral nutrients.

velamentous (vel-ah-MEN-tus) Resembling or having a velamen.

velaris, -e (vel-AY-riss) Pertaining to a veil.

velatus, -a, -um (vel-LAY-tus) Veiled.

velox (VEE-loks) Quick-growing.

velutinus, -a, -um (vel-YEW-tin-us) Velvety; soft; velutinous.

venosus, -a, -um (vee-NOH-sus) Veined; having many or prominent veins; venous; venose.

ventral (VEN-trahl) Referring to the lower surface of an organ such as a leaf; that surface that faces the center or axis of a flower; opposite of dorsal.

ventricosus, -a, -um (ven-tri-KOH-sus) Distended; swelling, especially on one side; unevenly inflated; ventricose; ventricose.

venustus, -a, -um (vee-NOOS-tus) Comely; graceful; ladylike; charming.

veratrifolius, -a, -um (veh-rat-tri-FOH-lee-us) Having leaves like *Veratrum nigrum*, the black hellebore.

verecundus, -a, -um (veh-re-KUN-dus) Modest, shy, coy; blushing; verecund.

vermiculite (ver-MIH-cuhl-ite) A heat-expanded mica sometimes used to provide aeration in orchid-potting media.

Vermiform, worm-shaped

vernal (VER-nuhl) Appearing in the spring.

vernalis, -e (ver-NAY-liss) Of the spring; spring-flowering; vernal.

vernation (ver-NAY-shun) The disposition or arrangement of leaves within the bud.

vernicosus, -a, -um (ver-ni-KOH-sus) Shiny, as though varnished; vernicose.

verrucosus, -a, -um (ver-rew-KOH-sus) Covered with wartlike elevations or excrescences; verrucose.

versicolor (VER-si-kul-er) Changeable in color; variously colored; versicolor.

verticil (VER-ti-sill) A circle of foliar organs, flowers or inflorescences about the same point on the axis; a whorl.

verticillastrate (VER-ti-sill-a-strayt) Said of leaves arranged in a group resembling a whorl.

verticillatus, -a, -um (ver-tis-sil-LAY-tus) Arranged in a whorl, like the spokes of a wheel; verticillate.

verus, -a, -um (VEE-rus) True; genuine; true to type; standard.

vesicle (VESS-i-kul) A small bladder or air-cavity.

vescus, -a, -um (VESS-kus) Thin; feeble; gross-feeding.

vespertinus, -a, -um (ves-per-TYE-nus) Of the evening; evening-blooming.

vestalis, -e (ves-TAY-liss) Virgin-like; chaste; vestal.

vestigial (ves-TIJ-ee-al) Rudimentary; imperfectly developed or underdeveloped.

vestitus, -a, -um (ves-TYE-tus) Clothed with soft hairs; covered.

vexillaris, -e (vek-sill-AY-riss) Showy, like a banner or vexillum, the flag carried by an ancient Roman soldiers.

vexillarius, -a, -um (vek-sil-LAY-ree-us) Bearing a flag or banner; a standard-bearer.

viability (vye-a-BILL-ih-tee) The capability of survival.

viable (VYE-a-buhl) Capable of survival and development, as the germination of seed.

viatical (VYE-at-ih-kuhl) Said of plants growing by paths or streams.

villosus, -a, -um (vill-OH-sus) Shaggy; clothed with long, soft hairs; villous; villose.

vinosus, -a, -um (vye-NOH-sus) Wine-red in color. Also vinaceous

violaceus, -a, -um (vye-oh-LAY-see-us). Violet-colored; violaceous.

violescens (vye-oh-LESS-enz) Almost violet-colored; turning violet.

virens (VYE-renz). Fresh-looking; lively green.

virescens (vih-REH-senz). Light green; having a tendency to turn green.

virgatus, -a, -um (ver-GAY-tus). Rodlike; long, slender, and straight; twiggy; virgate.

virginalis, -e (ver-jin-AY-liss). Maidenly; pure white; virginal.

viridescens (veer-i-DESS-enz). Becoming green.

viridipurpureus, -a, -um (vi-rid-i-purr-PURR-ee-us). Greenish purple.

viridiflorus, -a, -um (vi-rid-i-FLOR-us). With green flowers; green-flowered.

viridis, -e (VEER-i-diss). Green.

virus (VYE-russ) An infective or disease-producing parasitic agent smaller than common microorganisms and requiring living cells for multiplication.

viscid (VISS-id). Sticky; glutinous.

viscidium (vi-SID-ee-um). The portion of a rostellum that affixes the pollinarium to a pollinator

vitellinus, -a, -um (vye-tell-LYE-nus). The color of an egg yolk; vitelline.

Vitreous, transparent

vittatus, -a, -um (vit-TAY-tus). Banded; marked with longitudinal stripes; also, provided with a vitta or vittae; vittate.

viviparous (vye-VIP-a-ruhs) Growing or sprouting on the parent plant.

volute (VOH-lewt) Rolled.

volutus, -a, -um (voh-LOO-tus). Rolled up like a scroll; having rolled leaves; volute.
volubilis, -e (vol-YEW-bil-iss). Twining; rolling; turning.

vulcanicus, -a, -um (vul-KAN-ik-us). Growing on the sides of a volcano.

vulgaris, -e (vul-GARE-iss). Common; ordinary.

Vuylstekeara (vowl-schtayk-ee-AH-rah). A former hybrid genus derived from *Cochlioda*, *Miltonia* and *Odotoglossum* created in 1912 and named in honor of C. Vuylsteke, an orchid hybridizer. With the reordering of the Onciinae most of these hybrids are now called *Oncidopsis*.

W

Wang, F. T. (1929—) Prominent Chinese botanist who published with T. Tang.

warm house (wawrm hous) A greenhouse intended for the growing of warm-growing tropical plants, the minimum night temperature usually maintained at 60 F.

Warmingia (war-MING-ee-a) The four epiphytic species in this genus are native to Brazil. Reichenbach described the genus, in 1881, naming it in honor of Prof. Eugenius Warming, who founded the science of Ecology.

Warrea (WARR-ee-ah) A genus of four species of mainly South American terrestrial orchids, related to *Zygopetalum*. It was established in 1843 by Lindley who named it in honor of Frederick Warre, Esq., who first collected the type species in Brazil in 1829.

Warrella (WAR-ee-a) The two terrestrial species in this genus come from the mountains of Colombia and Venezuela. Schlechter founded the genus, in 1914, using the diminutive form of *Warrea* to denote that this was a segregate genus.

Warczewiczella (var-shuh-vi-CHEL-lah) A small genus of tropical American epiphytic orchids with eleven species. *Warczewiczella* was described by Reichenbach in 1852 in honor of the Polish botanist Dr. Josef Warszewicz (1812—1866), who collected in Central and South America.

Wart, a firm protuberance

Webbed, with an interlacing network of filaments, fiber, hairs or veins.

weed (weed) Any plant growing out of place.

wetting agent (WET-ing AY-gent) Any surfactant, functionally aiding the even dispersal and application of pesticides.

whorl (wurl) The arrangement of parts, such as leaves, in a circle around an axis.

WILLIAMS, LOUIS O. (1908—1991) American botanist, expert on Mesoamerican plants, orchidologist specializing in Fiji, Argentina, and Mexican and/or Mesoamerican floristics, commemorated by numerous plants including the genus *Neowilliamsia*.

Wilsonara (wil-sun-AH-ra) A former hybrid genus derived from *Cochlioda*, *Odontoglossum* and *Oncidium* created in 1916. With the reordering of the Oncioidinae these hybrids are now *Oncidium*.

wing (wing) Any more or less membranaceous expansion of an organ or part.

woolly (WUL-lee) Provided with long, soft, and more or less matted hairs; like wool; lanate.

World Orchid Conference (WOC) A triennial event established in October 1954, the first one held in St. Louis, Missouri.

wort (wort) An old word for a plant or herb; now used only in combination, as "motherwort," "spiderwort," "liverwort."

X

xanthinus, -a, -um (zan-THYE-nus) Yellow; yellowish; xanthous.

xanthodon (ZAN-thoh-don) Yellow-toothed.

xantholeucus, -a, -um (zan-tho-LEW-kuss) Yellowish white.

xanthophlebius, -a, -um (zan-tho-FLEE-bi-us) Yellow-veined.

xanthophyllus, -a, -um (zan-tho-FILL-us) Yellow-leaved.

xanthous Yellow or yellow-green.

xaxim (SHAH-sheem) Brazilian term for tree fern and also for the fiber from it.

xerophyte (ZEER-oh-fite) A plant adapted for growth under dry conditions.

xiphifolius, -a, -um (ziff-i-FOH-lee-us) Having leaves like an Iris; iris-leaved; swordlike.

xylem (ZYE-lem) That part of a vascular bundle which consists of vessel elements, tracheids and associated cells, which function in water transport throughout the plant.

Xylobium (zye-LOH-bee-um) A genus of 29 species of pseudobulbous epiphytic orchids from Central and South America, related to *Bifrenaria* and *Lycaste*. It was established by Lindley in 1825, the name referring to the epiphytic habit of the species.

Y

YOUNG, ERIC (1911—1984) Avid orchid horticulturist and benefactor, founder of the pre-eminent Eric Young Orchid Foundation on Jersey and the Eric Young Micropropagation Centre at the Marie Selby Botanical Gardens, Sarasota, Florida.

Ypsilopus (YIP-sil-oh-puss) The four epiphytic species in this genus come from tropical East and Central Africa. Summerhayes established the genus, in 1949, deriving the generic name from two Greek words "the letter Y" and "foot" to denote the "Y" shaped stipe of the pollinarium.

Z

zebrinus, -a, -um (ze-BRYE-nus) Zebra-striped; striped.

Zeuxine (zook-SEEN-ee) A genus of 30 species of terrestrial orchids extending from Africa through India and Malaysia to Samoa, and recently introduced into southern United States. Many *Zeuxine* species are "jewel orchids" related to *Erythrodes* and *Goodyera* and were established by Lindley in 1825, the name probably referring to the partial union of the lip and column.

zeylanicus, -a, -um (zee-LAN-ik-us) Native of Ceylon; Ceylanese.

zonatus, -a, -um (zoh-NAY-tus) Banded or marked with a zone of a distinct color; zonate.

Zootrophion (zo-oh-TRO-fee-on) A small genus of 11 epiphytic species from Jamaica, Central and South America. Luer founded the genus, in 1982, coining the generic name from the Greek word "menagerie" as he likened the flowers to animal heads.

zygomorphic (zye-go-MOR-fik) Capable of being divided into symmetrical halves in one plane only (usually the anterior-posterior), as the flowers of orchids; bilaterally symmetrical.

Zygopetalum (zye-go-PET-a-lum) A genus of 15 species of terrestrial and epiphytic orchids restricted to South America. It is related to *Colax* and *Promenaea*, having been founded by Hooker in 1827, the name referring to the yokelike callus on the base of the lip.

Zygosepalum (zye-go-SEP-ah-lum) A genus of seven species of handsome epiphytic orchids from northern South America, related to *Zygopetalum* and formerly known as *Menadenium*. It was founded by Reichenbach in 1803, the name referring to the sepals that are basally connate.

Zygostates (zye-go-STAY-teez) A genus of seven species of dwarf epiphytes from South America, related to *Ornithocephalus*. It was established by Lindley in 1837, the name referring to the well-developed staminodes at the base of the column.

zygote (ZYE-goht) The cell produced by the union of two gametes; the individual developing from such a cell.