The present judging standards are hopeless and the AOS effort to improve them is a waste of time and effort. The whole approach to judging the standards now reflect is inadequate, and no number of bandaids will be sufficient. To understand this, we need to return to the 1950s when the standards were written. The judging problem was far different. Only one volume of Sander's was available; the second, which split registrations into part one and part two was only published in the early 1960s. The Cymbidium used most frequently in hybrids was Cymbidium Alexanderi, followed by Cymbidium Pauwelsii and Cymbidium Pearl. Polyploids were not yet generally understood. Paphiopedilums were called Cypripediums, and the most often-used hybrids were Paphiopedilum Diana Broughton, Paphiopedilum Grace Darling and Paphiopedilum Mildred Hunter. What we know as the classic Paphiopedilums had not yet been registered. From 1945 to 1960 there were no hybrids registered between *Paphiopedilum callosum* and another species. Cattleyas were king, and the most often-bred hybrids were Cattleya Enid, Cattleya Fabia, Cattleya Remy Chollet and Cattleya Bow Bells. During the 1950s there were no hybrids with the rupicolous Laelias. In Phalaenopsis, the most frequently used hybrid was *Phalaenopsis* Doris, followed by *Phalaenopsis* Grace Palm and *Phalaenopsis* Reve Rose. *Phalaenopsis* Zada had just been registered, and from 1945 to 1960 there were no hybrids with Phalaenopsis amboinensis or Phalaenopsis equestris. It was a much simpler world, where one standard for each major alliance made sense because there was barely more than one line of breeding to consider in each alliance.

Gradually we have gotten into a deeper and deeper mess. Where in 1960 our one Paphiopedilum standard referred only to the judging of complex hybrids trying to be round, Paphiopedilums now consist of well over several dozen types, possibly as many as 200. Consider *Paphiopedilum* Dollgoldi, *Paphiopedilum* Angel Hair, *Paphiopedilum* Ito, *Paphiopedilum* Muriel Constance, *Paphiopedilum* Norito Hasegawa, *Paphiopedilum* Macabre, *Paphiopedilum* Mt. Everest and *Paphiopedilum* Brecko Sukwiss — can you find two for which you can clearly state the same requirements for the expected shape in an awardable plant? With slight effort I could triple the list of types. Moreover, in a decade, the problem itself doubles or triples as hybrids are made between *Paph*. Dolgoldi and *Paph*. Angel Hair and between *Paph*. Macabre and *Paph*. Muriel Constance. Orchid breeding is expanding the scope of judging at far more than a linear rate.

So how do we cope? When I look at a Paphiopedilum to score it, I draw on experience to tell me what the 40 points for shape should measure, the judges next to me draw on their experience to create their standard, and so forth. My experience and my shape expectations are different from that of the judge next to me and from that of all of the other judges. When we get to the next Paphiopedilum, one of a different type, what I create for a standard for the 40 points for shape is totally different from what I had for the first plant, and the same is true for all of the other judges. The supposed standard is a fraud. It changes from plant to plant and from judge to judge. It changes even more from judging center to judging center and from one part of the country to another. It is a wonder that we have any consistency at all. We are creating our judging standards on the fly, with little or no discussion of the differences rooted in personal memories. Our supposed standard is only a system of weights on an empty shell and no amount of refinement will make it anything else. This is why we can have 12-point spreads in large teams and small teams can produce truly aberrant awards. It is why weaker judges fasten on one feature of a flower where they can see a fault and ignore the rest of the flower. It is also why we have waves of judging fads and most awards go to plants in the area of fad interest. It's a matter of knowledge and comfort.

Our real problem is that judging is 10 or 20 or 80 times as complex as it was half a century ago and the approach that worked then does not work now. Even the most knowledgeable judge now occasionally encounters a plant for which he knows he lacks the personal knowledge to judge well. The weaker judges lack a clue as to what they are doing once they leave their main genera. We can no longer do adequate, consistent judging by the seat of our pants, mentally creating standards in our own minds every time we need them. I believe the unavoidable solution is to go to a system of real standards. Here is how we can do it.

- One, two, or several judges create a proposed standard for a line of breeding they define. They clearly state expectations for shape, color, size and so forth, and identify real, existing awards as benchmarks for HCC, low AM and possibly higher awards (see example, next page).
- They give the proposed standard to their judging center for consideration, and when the Center decides it acceptable, the Center votes to endorse it and forwards it to the AOS as a nominated standard.
- The AOS sends nominated standards to all judging centers for endorsement on a quarterly or semi-annual basis. The judging centers can vote to endorse some of the standards and for others can suggest improvements to the nominating judging center. When over half of the judging centers endorsed a nominated standard it would become the AOS Judging Standard until another standard was endorsed to replace it.
- The AOS would publish the AOS Judging Standards on CD-ROM annually, in the form of an HTML web that used hierarchal branching to allow the standard sought to be quickly found. It could be read with any browser and even projected onto a wall or viewed on a portable PC in a mall show. The benchmark plants would have pictures inserted next to their discussion. The public could buy the Standards CD-ROM.
- When a judge felt that a standard could be improved upon, the judge would simply prepare a replacement
 proposed standard. The only requirement would be that a replacement standard(s) has to replace all parts
 of one or more existing AOS Judging Standards. Replacement of parts of standards would create too
 much of a mess.

My guess is that between several hundred standards could be created in the first year with a concerted effort by the centers. An expert judge in an area could prepare a standard in a day and less expert groups of judges could prepare proposed standards at the rate of one every three months. The major incentive for the more expert judges to go to the work of creating standards is to get the types of orchids they particularly like judged better — it is very annoying to see good plants screened out because the team isn't comfortable judging the genus or to see a rather ordinary plant awarded highly. Other capable judges will write standards to establish their expertise while still others will do it out of a sense of duty. By the end of the second year enough standards could be in place to cover 80 or 90 percent of the plants seen for judging, enough to start using the system while refining it. Even if it takes longer to get started, very little is lost because judging will only get more difficult and erratic until we solve the problem.

What would this system of standards accomplish? It would improve judging in numerous ways:

- More uniformly sound judging. Now we have many erratic results. Any team of judges would have the basic knowledge they needed to reasonably judge a plant.
- Better judging through reflection and discussion. The standards would be much more sound than the mental gymnastic judgments on the fly we now must do. Dozens of judges working together over months will do much better sorting out what matters than any of us can do alone in a few minutes.
- Judging would be much more uniform from one part of the nation to another. We would literally all get on the same page. Now judges sitting next to each other can be on very different standards.
- Fewer problems with point spreads. Using the same standard really helps keep point spreads down. We see this now where the range is small when we deal with plants we know the standard for. Judging would be quicker for having information and not having regular re-scoring.
- The consideration of whether to endorse a standard would give fine continuing education for the accredited judges who resist it so. Accredited judges would feel that their role in approving standards was important, but it would require their learning and thinking.
- The standards would give students a more tangible body of knowledge to address. The present black art approach can be difficult to grasp.
- The process would be continuous; standards wouldn't become 50 years out of date again. The continual replacement and extension of the standards would keep things current.
- The use of real plants as benchmarks would deter "fuzzythink." Sometimes judges can confuse their hopes with what realistic standards might be. Benchmark plants with pictures would help keep us anchored in reality.
- Anyone could use the standards to learn about the plants and judging. The CD-ROMs would have great educational value. Exhibitors could also easily check to see if their plant was worth taking to judging.

We could escape the box of six concepts and fixed weights. With line-specific standards we could at least
think about whether fragrance should be considered, or whether the relative plant-to-flower-size matters.
We could also decide that in Brassias both shape and color should not get many points and that size and
flower placement should get more points.

While creating these AOS judging standards would take a major effort, the advantages of moving to a modern system of judging are immense. We would judge better and more consistently. Read the examples and ask yourself if it is not a more solid basis for judging an orchid in its scope than most judges would have dealing with a plant unaided. The system would be more open and educational. It should go a long way toward helping orchid growers to understand what makes one orchid better than another. The system would be flexible and would not become outdated like our present system. Whenever a judge didn't like a standard, they would have an open invitation to make a better one — no more stone-tablet standards handed down from on high. But most of all, we don't have a choice. AOS judging will get worse and worst until we fix our present pretense of a system. Is it bad enough yet?

Roger Cole is a Certified Judge with the National Capital Judging Center. 13200 Chestnut Drive, Bowie, Maryland 20720 (e-mail rogercole@erols.com).

Example Standard Name: White Labiate Cattleya

Scope: This standard covers hybrid labiate Cattleyas with no more than one-eighth bifoliate parentage, and without a parent from other genera.

Discussion: White Cattleya breeding is very advanced; relatively slight imperfections affect pointing substantially. Areas for particular concern are: clarity of lip color, sepal width and posture, petal flatness, substance, flower posture and spacing.

Form (40 points):

Sepals: Should be about 4.0 cm wide and oriented to a triangle. Twisting and bending back are major faults, as is poor color. A slight roll-back at the tips and sepals extending past the circle defined by the petals and lip are acceptable.

Petals: Petal attitude should be rather flat — the natural spread should be 80 percent of the petal length times two, above 90 percent is exceptional. Petal shape should be round, with the width being nearly equal to the length — under 90% is a weakness. A wavy surface of the petals is a serious fault, the petals should be each in one plane.

Lip: The lip should fully cover the column and be moderately flared. Lacking *Brassavola digbyana* parentage, the lip cannot be as wide as the petals, but should be over 75 percent of petal width. There seems to be an absolute limit however; white Cattleya lips do not appear to get much wider than 7.5 cm.

For low AM-level pointing (32 of 40), the flower should have a significant fault, such as relatively narrow petals or lip, or have two or three minor faults. For FCC-level pointing (36 of 40), the flower should have some outstanding feature and no more than one slight weakness.

Color (20 points):

Sepals: Sepal color should be close to as white as the petals, a noticeable difference is a fault.

Petals: Petals should be a bright, even paper white — dullness is a major fault.

Lip: The white of the lip should be the same as that of the petals, but the serious color issue is clarity and attractiveness of the yellow in the throat. Minimal bright lemon to a clear mid-yellow are very desirable. A slightly muddy mustard yellow is a serious fault. The near absence of yellow or a nearly entirely yellow lip is atypical and desirable.

For low AM-level pointing (16 of 20), there should be a significant color problem, such as a white that has no brightness, being tinged with green or a greyish cast. Another significant problem is a dull egg-yolk yellow color in the lip. The FCC-level flower has at most a slight problem, such as a cellular pattern in otherwise good sepals.

Size (10 points):

Normal award size is about 16 cm natural spread. Up to 18 cm should receive a higher score; size beyond 18 cm adds little. A labiate Cattleya should be downgraded for size under 14.5 cm.

A 16-cm flower is normally pointed with 8 of 10 points; at 18 cm or larger a score of 9 of 10 points is given when there are two flowers, 10 of 10 when there are three flowers. Flowers well under 16 cm should be scored at 6 of 10 or even 5 of 10.

Inflorescence (10 points):

The inflorescence should have a strong, upright stem and hold the individual flowers reasonably separated for the flower count. With a larger number of flowers, moderate misarrangement can be expected.

AM-level scoring of 8 of 10 points requires the inflorescence to hold the flower above the foliage and to present two flowers quite well. Three flowers can be slightly crowded. With five or more flowers, a flower can be substantially turned and 7 or 8 points still given. A short inflorescence, placing the flowers in or near the foliage, warrants a score of 4 to 6 of 10.

Flower Count (10 points):

Two flowers per inflorescence is quite frequent but undesirable. Four flowers and more are desirable and should be pointed highly.

Two flowers should be pointed with 6 or 7 out of 10 points, 4 or more flowers should be pointed with 9 to 10 points.

Substance and Texture (10 points):

Substance should be heavy and firm — only moderate substance should be penalized. Texture should be crystalline or sparkling, matte texture should be penalized.

Weaker substance should be penalized with 3 of 5 points for medium-heavy substance, only 2 points for medium-light substance. Matte texture should be given 3 of 5 points, dull texture even less.

Benchmarks:

HCC level: *Cattleya* Andean Mist 'Margaret Kriss', HCC/AOS (76 points) — (n.s. 16.5, d.s. 4.0, petals 9.0 x 9.5, lip 7.2)

In form, petals are held slightly forward and are longer than wide. Lip is in proportion (31 of 40 points). The white color is very good, but egg-yolk yellow in throat is not (15 of 20). Size is typical for award (8 of 10 points). Inflorescence is very good (9 of 10 points) but two flowers is a negative (7 of 10 points). Substance and texture excellent (9 of 10 points). (Total=79)

Note that both shape and color were scored conservatively, but when the inflorescence and substance are scored highly, the award needs to be close to the AM-level.

AM level: Cattleya Ruth Gee 'Mount Everest', AM/AOS (81 points) — (n.s. 19.5, d.s. 4.2 petals 10.9 x 11.0, lip 8.0)

Petals rather flat and as wide as long, lip relatively small compared to petals (34 of 40 points). Color good (16 of 20). Size outstanding (10 of 10 points). Inflorescence well-spaced (9 of 10 points). Number of flowers is 5 on 2 inflorescences (8 of 10 points). Substance medium (6 of 10 points). (Total=84)

FCC level: None current.

Comments: It was very difficult to find reasonable benchmark plants; as a consequence the benchmarks were allowed to exceed the original pointing. Over the past 15 years there have been very few awards to white Cattleyas compared to the number exhibited and the awards given have been very low by historic standards. The benchmarks presented were the more plausible awards. Since there has not been marked

improvement in the breeding of standard white Cattleyas, it appears that these orchids may be systematically judged poorly due to overly demanding expectations.