We have all seen some dreadful slides of awarded plants and flowers – untidy backgrounds, careless under- or over-exposure, bad lighting, blurred images, and distracting elements, such as labels, pot rims and stakes with bright green ties. I cannot guarantee that after reading this you will always take perfect pictures of orchids, but I hope it will give some pointers to help you take acceptable slides of the awarded orchids. I will attempt to stay within the parameters of shooting slides of orchid blooms at the time and place of judging, using equipment that can readily be transported and easily set up at almost any judging site. Assuming readers have some knowledge of photographic jargon, I have made an effort to avoid unnecessarily technical language. I can report only what works for me and my equipment.

In 1980 the American Orchid Society published a booklet, *Handbook on Orchid Photography* by Grenville Seibels II, which covers very well all the things I have to say, and a lot more. This booklet is now out of print; however, I have used this source rather freely in putting these notes together.

**CAMERA** The camera and lens should be the best you can possibly afford. Any of the major brand 35 mm single lens reflex (SLR) cameras will give you excellent results. Some of the well-known names are: Nikon, Canon, Minolta, Pentax and Olympus. Stick to the big names; they gained popularity by being good. And always remember that you get what you pay for.

**LENS** For orchid photography it is absolutely necessary to have a lens that can be focused down to extreme close-ups; in other words, a macro lens. There are ways around using a macro lens – bellows, reversing the lens, adding a close-up accessory lens; however, the no-hassle way to go is a first-rate lens that is designed for the job (Also good for use in photographing the kids or the landscape.) Again, beware of incredible bargains. Macro lenses come in various focal lengths, usually 50 mm or 100 mm. My choice has been the Canon Macro FD 100 mm f/4 which comes with extension tube FD 50. With the extension tube, a subject-image ratio of 1:1 (life size) can be achieved. The 100 mm lens enables the camera to be set up farther away from the subject, which allows greater latitude in composing and lighting.

**TRIPOD** Don’t make your life more difficult by trying to use a little, spindly, wobbly, telescoping tripod. Find yourself a real hunk of a tripod constructed of heavy gauge aluminum with the outer leg castings at least a full inch in diameter. Staying in critical focus throughout the shooting of the required number of slides is certainly made easier when the camera and subject are absolutely stationary. Standard operating procedure should be the use of a heavy tripod and a cable release, ALL OF THE TIME.

**LIGHTS** Even with the inconvenience of carrying reflectors and stands, I prefer using incandescent lights rather than strobes (electronic flash). Incandescents have two important advantages over strobes: exposures can be adjusted by normal metering methods, and lighting and shadow effects can be balanced by eye instead of by guessing. I use two simple floodlight reflectors with collapsible stands. Photoflood bulbs come in two color temperatures, 3200 degrees K (Kelvin) and 3400 degrees K – your choice will depend on the color balance of the film you are using. Most of the color emulsions are
balanced for 3200 degrees K, but there are a few that required 3400 degree K. A note of caution: because of the fierce heat generated, all photoflood lights should be handled with extreme caution during and after use.

BACKGROUNDS  The background is second only to the flower itself. Award photographs are used for plant identification and comparison and publication and a busy background or one of a distracting color defeats the purpose of these slides. The backgrounds should be discreet, muted and unobtrusive and self-effacing. The simplest method is to use an artificial backdrop of flat material large enough to cover the entire field of view and positioned far enough behind the plant to be out of focus and free of shadows cast by the plant (4 or 5 feet is a good rule of thumb). For AOS award photography the orchid MUST dominate the picture. DO NOT use gaudy, dazzling or heavily patterned backgrounds. My preference is a piece of olive-drab (gray-green) cloth, 2&1/2 yards long by 60 inches wide, which is lightweight with a matte (dull) finish. Some photographers may prefer a muted brown or dove-gray material. When the cloth is tacked or taped to the wall approximately 5 feet or so behind the subject, quite often you will find the background in the slide will appear almost black with perhaps a hint of color. This blackness may be controlled by the position of the lights and the distance the subject is placed from the background.

Many photographers are familiar with the “Pantone Matching System for Printing Inks” (PMS) color system used by the printing industry. Most printers will have the same booklet of PMS colors. The color numbers I would suggest to be matched by the cloth would be:

- PMS 385 or 378 – gray-green
- PMS 424 or 431 – dove-gray
- PMS 464 or 471 – brown

Using black as a background occasionally presents problems because some dark flowers tend to get lost against the inky black. The exact shape of sepals or petals fades into the blackness and become difficult or impossible to define. The use of middle value colors as a background seems to resolve these situations. Accurate shape is very important because these slides are used for identification and to compare with other blooms during a judging session.

FILM  When using photoflood lights, the film must be balanced for tungsten light. Using standard daylight film under these lights will result in the slides having an orange or orange-red tint. Conversely, using tungsten-balanced film outdoors produces a blue cast. Filters can more or less correct these color distortions, but they sharply reduce the ASA ratings of the film.

During the past few years many advances have been made in the quality of color film. Most veteran photographers will agree that Kodachrome 25 was the number one film of years ago; however, with the sale of Kodak’s film processing operation along with today’s advancements in the chemistry and physics of film manufacturing, other films have made great improvements. I use Ektachrome 64T (tungsten) film which is balanced for use with 3200 degree K lights. Fuji has a similar 64T film which uses 3400 degree K lights. Once you find an emulsion that satisfies you as to color fidelity and saturation, stick with it.

POsing  It is important to stress that the chief purpose of awards photography is to provide future judging teams with a graphic, explicit basis for comparisons. The AOS
prefers its record slides to be typical “mug shots” – a straight-on, centered view. However, a subtle shift of camera position so that the viewing angle is just a few degrees off dead center will sometimes give the flower a more dynamic, three-dimensional appearance. The flower should fill the frame but not to the very edge. In mounting the individual 35 mm frames, the processor necessarily must mask a tiny strip along the edges of each frame. So when composing, allow a little space all around to avoid any undesirable cropping by the slide mount.

Points to remember when posing the flower: get rid of all tags, wire supports, ties, etc., that will appear in the frame of the picture. Use tape to pull unwanted flowers, stakes or leaves aside. These distractions can destroy the impact of an otherwise fine photograph.

**LIGHTING** Position the lights at least 4 feet or more away from the flower. These lights are HOT! Don’t return a fried or baked plant to the exhibitor! The second light should be a foot or so farther away from the subject to give a more three-dimensional look to the flowers. Move the lights around and up and down until the shadow pattern defines the edges of overlapping petals and gives a bit of shadow under curled segments. White and pale pastel flowers present a special problem. Using the lights as close and in the same fashion as with the darker-colored flowers, usually results in a white blob for a picture. Simply back the lights farther away and even aim them a bit to the side these flowers.

**FOCUS** Of course, this is critical. I look for a weak shadow or pattern on the flower and bring it into as clear focus as possible, checking it from time to time while shooting the required number of shots.

**EXPOSURE** I use aperture priority. In other words, I decide what aperture will give the depth of field the flower requires, or will throw the background out of focus, set to this f-stop and let the camera decide what speed to use. Most of my shots are taken between f5.6 and f16. This procedure, of course, will depend on what kind of camera is being used.

I realize that these notes certainly do not solve all the problems encountered by the awards photographers. However, these few suggestions can contribute to better quality of awards photographs far beyond their ease of implementation. Hopefully, they will also spark more interest in the improvement of awards photography in general.