WHEN THINKING ABOUT where one can find specimen, award quality phalaenopsis plants, we normally think of the huge standard phalaenopsis with very long, precisely arranged, perfectly shingled inflorescences, such as are prominently displayed in major orchid shows like the Taiwan International Orchid Show. Phoenix, Arizona, is not the first place that comes to mind. As it turns out, Eric Goo of Phoenix has mastered the art of growing spectacular novelty phals to perfection. Eric has consented to share his hints with the readers of the Orchid Digest.

Eric and his wife, Mary, are long term residents of Phoenix, who pursue their hobbies with great passion and perfection. They also have a pet rabbit that rules the roost. Eric has to be careful not to let the rabbit get into the greenhouse; it seems orchids are a preferred food for rabbits... who knew! But rabbit bites seem to preclude awards! Besides growing orchids, Eric is an excellent photographer and has provided all the images that illustrate this article.

Eric has grown various types of phalaenopsis for exhibition. He has grown classical standard phalaenopsis using the special grooming and training techniques that produce perfectly shingled, showy inflorescences but has come to prefer the additional challenge presented by the novelty-type phals that he loves to grow and hybridize.

To achieve the best results in growing novelty specimen phals, it is necessary to pay close attention to what the plant is doing. Eric selects plants that have a high probability of producing basal keikis. A keiki (pronounced Kay-kee) is a plant produced asexually and is an exact clone of the mother plant. Eric looks for plants that produce them at or near the base of the plant. Breeding lines that tend to do this with more regularity are the novelty hybrids which, not surprisingly, contain significant parental input by species that occasionally produce basal keikis. Then it becomes a selection process to see which individual plants appear to be the most promising at producing this type of keiki.

After selecting the plants, Eric repots them annually to larger pots. Repotting should occur during warmer months before temperatures drop, and the season of spike initiation starts. However, in Phoenix, Eric recommends that plants should not be repotted in the heat of summer as the heat stresses them as does repotting. It is important not to interrupt the growth cycle and to repot during periods of active vegetative and root growth.

One of Eric’s tricks is in his choice of pots. He always tries to use the smallest possible pot that can comfortably contain the root ball. He also is careful never to use a pot that is deeper than it is wide. Six-inch and larger bulb pots seem to be ideal for obtaining strong, healthy roots, and for helping prevent root deterioration in maturing plants. Often it is necessary to cut some roots for the plant to comfortably fit in the pot, especially if the plant has become leggy. In that case, the leggy part is buried within the media, and new roots will emerge from the stem.

Eric has not yet determined his preferred media, and he believes it may also be irrelevant unless you live in

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**Phal. Venimp 'Sedona #11' CCE/AOS**

(venosa × Malibu Imp).

Awarded with 64 flowers and 21 buds on 11 inflorescences.

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**Phal. Ambo Buddha ’Phoenix’ FCC/CCE/AOS**

(Brother Buddha × amboinensis).

Awarded with 40 flowers and eight buds on seven inflorescences.
a desert. He is currently using sphagnum moss firmly packed with a few packing peanuts at the bottom of the pot.

Fertilizer is another essential component of producing excellent culture. Eric has used the recommendations of Dr. Yin-Tung Wang, who performed controlled studies of the effect of different fertilizers (and strengths) on phals while he was at Texas A&M University. These studies were published in a series of articles in Phalaenopsis, the journal of the International Phalaenopsis Alliance. Since Eric uses reverse osmosis (RO) filtered water, all nutrients need to be added when fertilizing. Reverse osmosis water provides consistent water quality and allows Eric to provide precise nutrients for the plants. He fertilizes once a week using a balanced fertilizer, at the manufacturers recommended strength (full strength) which is usually one teaspoon per gallon. Because Eric uses RO water, the fertilizer must contain minerals, especially calcium and trace minerals. Having tried many brands of fertilizer over the years, Eric has found that the actual brand of fertilizer used makes no discernible difference. However, he prefers fertilizers that favor the ammonia form of nitrogen over the urea form.

Ideally, Eric keeps his growing temperatures between 65–85°F (18–29°C). Unfortunately, Phoenix weather conditions are extreme, making it nearly impossible to achieve that optimum. He usually can maintain temperatures between 58–92°F (14–33°C) over the course of the year. The true test is in the results he achieves and not necessarily what the literature might say.

Part of the charm of his awarded plants is the beauty of the elegantly arching, glossy leaves. Eric’s use of RO water helps in this aspect. Eric said, “It’s much easier to prevent mineral build up on the leaves than to clean it off. Another way to keep the leaves spot-free is by watering the potting media and not the leaves.” To prepare for displaying the plants, he uses a mixture of 50% water and 50% lime juice to clean and shine the leaves. The benefit of doing this is displayed in the photos of his awarded plants.
The real secret in achieving the stunning show that Eric’s phalaenopsis provide is the constant examination of the plants for inflorescence development. When the multiple basal keikis mature and begin to bloom, it is critical to begin immediately training their orientation. The basal plantlets tend to grow in a clump very close together. If left on their own, the developing inflorescences are likely to crowd and even fight each other as they elongate. With diligent observation and staking, Eric can coax the inflorescences into directions that will allow for minimal crowding of spikes and maximum display of the individual flowers, creating a bouquet-like appearance. This must be done from the beginning to achieve the desired display and prevent snapping of brittle spikes as they elongate. Eric is also very careful to keep the plants consistently oriented toward the light to prevent misalignment of the flowers as they develop.

Regardless of whether plants are grown for exhibition or fun, the most critical component is observation. As demonstrated by Eric’s success, paying attention to what your plants tell you will facilitate successful growing and happy plants.

Eric continues to garner awards on his plants, many of them receiving both quality and cultural awards. Often the Phalaenopsis hybrids that are awarded are his own crosses, as he is also a skilled hybridizer. He has registered 113 crosses and was the originator of 102. Eric’s hybridizing focus is fragrant novelty phalaenopsis. He is trying to integrate older U.S. material with the current Taiwan material. He is also trying to develop what he calls multifloral novelties.

Eric’s skill, patience, and hard work have provided a benchmark for phal growers to aspire to achieve. His love of orchids is obvious in the time and effort he spends to create the beautiful orchids he grows.

Eric is the owner of Phoenix Orchids (www.phoenixorchids.com) and may be reached at egoo1@cox.net.