

Our speaker this month was Dr. Charles Thomas of Lecanto, Florida. Dr. Thomas has operated a successful, small dental practice along with his wife for the past 37 years in Homosassa. He began growing orchids nearly 40 years ago upon receiving some divisions of plants from Ms. Ruby Ray, a florist friend during his time living in Gainesville. When first introduced to the *Phalaenopsis* alliance he did not consider them to be actual orchids. His vision of an orchid was the typical *Cattleya* corsage orchids of the day. He became intrigued by the longevity of the plants and the charm of their blooms. He now enjoys growing several varieties of orchids in his greenhouse at home and has a real love for *Phalaenopsis* orchids, both species and hybrids. Today Dr. Thomas gave a discussion on *Phalaenopsis* orchids, their culture, and their use in breeding.

*Phalaenopsis* orchids are distributed throughout tropical Asia from southern India and Nepal, east to Papua New Guinea, north to China and Taiwan, and south to tropical Australia. *Phalaenopsis amabilis* is one of the largest flowered species in the genus that is found from the Philippines and Borneo to Australia. The sepals and petals of the flower are pure white with the callus of the midlobe a variety of yellow and red, depending on the individual plant. In hybridizing this species is often utilized to create our modern white hybrids. *Phalaenopsis amboinensis*, a species from the Ambon islands with creamy, yellow to orange flowers with red-brown stripes are used in breeding to create plants with heavily spotted flowers. In hybrids the yellow background color apparent on the flowers will often come through in the hybrids, and the red-brown bars apparent on the species become transposed into spots. An example of this spotting can be seen in the hybrid, *Phal.* Dos-Ambos, created by Dr. Henry Wallbrunn. He crossed a large, white *Phalaenopsis*, *Phal.* Dos Pueblos, with the species *Phal. amboinensis* to create the hybrid *Phal.* Dos-Ambo, which features creamy yellow flowers that are heavily spotted throughout, as though they have the measles. *Doritis pulcherrima* (now known as *Phal. pulcherrima*) is a species that is mostly terrestrial in habit with several color forms of varying shades due to its wide distribution within southeast Asia – with purple and yellow color forms being the most common. This species when used in hybridizing will yield hybrids with good flower color, longer spikes, and an extended (summer) blooming period. *Phalaenopsis schilleriana* is a beautiful wild species native to the Philippines with striking mottled foliage and arching, pendant inflorescences with large, rose colored flowers. This species is responsible for giving us our pink colored hybrids and can often pass along its fragrance to hybrids too. Named after the French orchid grower who first flowered the species, *Phal. lueddemanniana* is an epiphytic orchid native to Manilla in the Philippines. The flowers are of a fleshy or waxy substance and highly variable in color with a white background and bars of magenta, violet, amethyst, reds, or browns. When used in breeding this species will yield hybrids with flowers in shades of reds and browns, often spotted, and have a slight curly cue detail around the edges of the petals. *Phalaenopsis lindenii* is an attractive species from tropical moist lowland forests endemic to the island of Luzon in the Philippines. This is a petite species with one inch flowers with faint purple lines and tint on the sepals and petals, a bright pink lip, and a yellow throat. When utilized in breeding this species will pass along petal veining and stripes to its offspring. A native to the Malaya peninsula and the Indonesian island of Sumatra, *Phal. violacea* is an epiphytic species with lustrous green leaves and vivid flowers in shades of pinks, magenta, yellowish-green, indigo, and blue colors. This beautiful species is used in hybridizing to provide great fragrance and in creating red colored *Phals.* *Phalaenopsis equestris*

is a charming species native to the Philippines and southern Taiwan that blooms from February to May and again in Autumn with a flurry of tiny, clustered flowers. Hybrids created using this species will feature spikes of flowers with clustered blooms. Native to Borneo *Phal. gigantea* is the largest known *Phalaenopsis* species named for the giant size of its leaves, which can grow to over two feet in length on a mature plant. This species is capable of passing along several desirable traits to its hybrids including spotted flowers, thick flower substance with a glossy texture, as well as round, full floral segments. Although not difficult to grow, this species can take significantly longer to reach maturity than other species, as long as 15 years from seed to first bloom.

Dr. Thomas discussed with us as well some of his culture tips on how he grows his orchids. Keeping in mind that everyone's growing conditions are unique, and what works for one may not work for everybody. He grows his orchids in plastic pots that comfortably fit the plant and uses a potting mix of 3 parts fir bark, 2 parts charcoal, 1 part hardwood chunks, 1 part perlite, with a 1" layer of sphagnum moss as a top dressing. This standard potting mix of his has worked very well for his *Phalaenopsis* and *Paphiopedilum* orchids for his particular greenhouse conditions. His *Cattleya* orchids, however, do not get the sphagnum top dressing. He repots his orchids frequently with most of the orchids getting repotted once a year. His orchids are watered weekly, every 4-7 days during the summer and less in the winter months. The orchids are grown in bright indirect light without any hard shadows within the greenhouse. He fertilizes his orchids once a month using a balanced fertilizer indicated for use on orchids. Also, once a month he uses Epsom salts on his orchids, at a concentration of one teaspoon per gallon of water. To treat for pests he uses a house plant spray suitable for use on flowers, but recommends not using oil products. In his experience oil applications have been harmful and even fatal to some of his *Phalaenopsis* orchids, in particular *Phal. violacea* seems sensitive.

We all appreciate and grow orchids for different reasons. For Dr. Thomas he finds growing orchids to be a great way to relieve stress and he appreciates the beauty of their flowers. Orchids can allow us to feel connected to the environment. When we grow orchids from other parts of the world we are often inspired to learn more about their native habitats in order to grow them optimally. Closer to home we might be inspired to find native orchids and discover wild places we did not know existed. Since most orchids are extremely long lived they can provide a unique connection to the past. Within Dr. Thomas' collection of orchids is a *Paphiopedilum callosum* that is over 40 years old and used to belong to his grandmother. Now her memory lives on through her plant every time the flowers come into bloom.

