AKATSUKA
ORCHID GARDENS

Cultural Requirements of Angraecum

By Fred E. Hillerman

ANGRAECUM*,* and some related genera, are constantly gaining popularity. Collectively, they are called angraecoid orchids. Though lacking the sensational colors of attleyas, vandas and paphiopedilums, the angraecoids bring to the discerning hobbyist a wealth of exotic forms, spicy scents and the purest of whites, as well as the greenest of greens. And the compact size of many species permits their cultivation beneath lights and on the windowsill. Angraecoids range from 6-foot giants to the tiniest of miniatures. Most, however, are modest in size and are suited to 3-to 6-inch pots or tiny slabs.

Angraecoids come mainly from Africa and Madagascar; the latter is home to most of the more showy species. With a large number of species, one would expect them to originate from a wide range of climates, altitudes and latitudes, and such is the case here. Fortunately, those that are most popular and provide the best flowers come mainly from altitudes of 3,000 to 6,000 feet; these are well suited to intermediate greenhouses. A much smaller number of showy species is found at low altitudes and hence are warm growers, but these also do fairly well in intermediate conditions. Fortunately, although many of these species can tolerate quite low temperatures, they also thrive with warm, bright days and do not suffer from an occasional 90°F day in the greenhouse. It is easy to make selections from the nearly 1,000 species that will provide white and green flowers year-round. About 200 species have showy flowers.

The genus *Angraecum* (an-GRY-kum), native mainly to Madagascar, has more than 50 species with showy white flowers ranging in size ranging in size from 1 to 8 inches wide and, if the nectary is included, up to 18 inches long. (The nectary is a slender tubular spur that projects behind the flower.) Most of these are very white, but a few have green-to-ivory-colored sepals and petals. Many are exotic in shape. *Aeranthes* (ay-er-AN-theez) is characterized by green flowers at the ends of long, thread-like inflorescences which bloom for several months up to several years. Forty species are native to Madagascar and neighboring islands. *Aeranges* (ay-er-AN-gis), with about 60 species, is noted for its long spikes of highly fragrant flowers that give the illusion of a flock of white birds all poised for flight. The 45 species of *Jumellea* (joo-MEL-ee-ah) bear strongly scented, snow-white flowers. These are only a few of the genera of angraecoids orchidists relish.

Temperature and Humidity-Most angraecoids grow well with 60- to 80-percent humidity and temperatures of 57 to 85°F. Short periods of temperatures 10 degrees higher or lower are tolerated with little or no damage. Obviously, those species from warm, tropical climates do best in a warm house, while those from 3,000 to 6,000 feet grow best under intermediate conditions. Only a few, including *Angraecum sororium* and *Angraecum protensum*, require three months of chilling to flower.

Light -A few of the species, such as *Angraecum sororium* and *Angraecum magdalenae*, need high levels of light; most grow and flower reliably in 50- to 75-percent shade, and many flower under very shady conditions. *Angraecum leonis*, *Angraecum magdalenae* and *Aerangis fastuosa* will grow and flower when cultivated under lights.

Air Movement-Reliable air movement in the greenhouse benefits most orchids, angraecoids included. Plants should be moving and swaying, but not thrashing. In warmer southern states, adequate air movement is especially important.

Watering-Provide *Phalaenopsis*-like watering conditions for species with fine roots. Those species with large, aerial roots grow best with *Vanda*-like watering conditions. Most angraecoids are quite sensitive to water quality and will eventually decline where high amounts of dissolved salts pollute the water. Species of *Aerangis* especially require water with low salt content; if such water cannot be supplied continuously, it is very helpful to dunk the entire plant occasionally in distilled or rain water for 20 or 30 minutes. Where water has less than 100 ppm (parts per million) of salts, this is unnecessary; growers in areas with 300 ppm salts in their water need to be more concerned. Slab culture will suffer with hard water.

Fertilizing-Apply 30-10-10 or 20-10-10 year round: bimonthly during the summer, which is the growing season, and once every four to six weeks in the winter.

Potting-Practices that apply to *Cattleya, Phalaenopsis* and *Oncidium* satisfy most angraecoids. There are some species with special requirements. *Aerangis* species do well mounted on slabs if adequately watered and seem to benefit from air circulating around the roots. In the past, culture on slabs or in baskets was stressed; however, experimenting has shown that most *Aerangis* will tolerate potting (in fir bark mix or in New Zealand sphagnum moss), if the mix allows plenty of air movement. A few angraecums come from semi-terrestrial habitats and need finer mixes.

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