

Orchid House

A SIMPLE boardwalk leads into the Orchid House, a misty forest sanctuary heavy with fragrance where every branch and stone cradles a spectacular blossom. Orchids are among the most adaptable of plant species, growing in just about every habitat throughout the world. Their growth cycle varies depending on the climate in which they are found. More than 25,000 wild species of orchids are thought to exist, and artificial hybrids may add another 100,000 to their numbers. The noteworthy orchid collection at the U.S. Botanic Garden contains more than 5,000 species and hybrids, many of which are rare, endangered, and threatened specimens that have been deposited here through CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora). Only 200 orchids are on display at any time, but these represent the incredible variety of forms, sizes, and colors that are found in this coveted family of plants.

Epiphytic orchids perch delicately on the tree trunks and branches that surround the walkway. Most tropical orchids are epiphytes, plants that grow without soil on other plants. The roots have a special outer covering that soaks up any available moisture in the air and can absorb nutrients from decaying organic matter. Although epiphytes use their roots to anchor onto trees and shrubs, they take nothing away from the host plant. Some epiphytic orchids dangle long chains of ethereal blossoms that look like fluttering insects, while others trumpet their existence through a clump of two or three huge purple or pink flowers. Shape and color are two of the strategies orchids have evolved to attract pollinators.

The same principles that apply to the roots of epiphytes also work for orchids that have adapted to survival on rocks and stones. Called lithophytes, these grow in the cracks between stones or creep along the surface of boulders, soaking up whatever moisture accumulates there. Terrestrial orchids grow in the ground like other familiar plants.



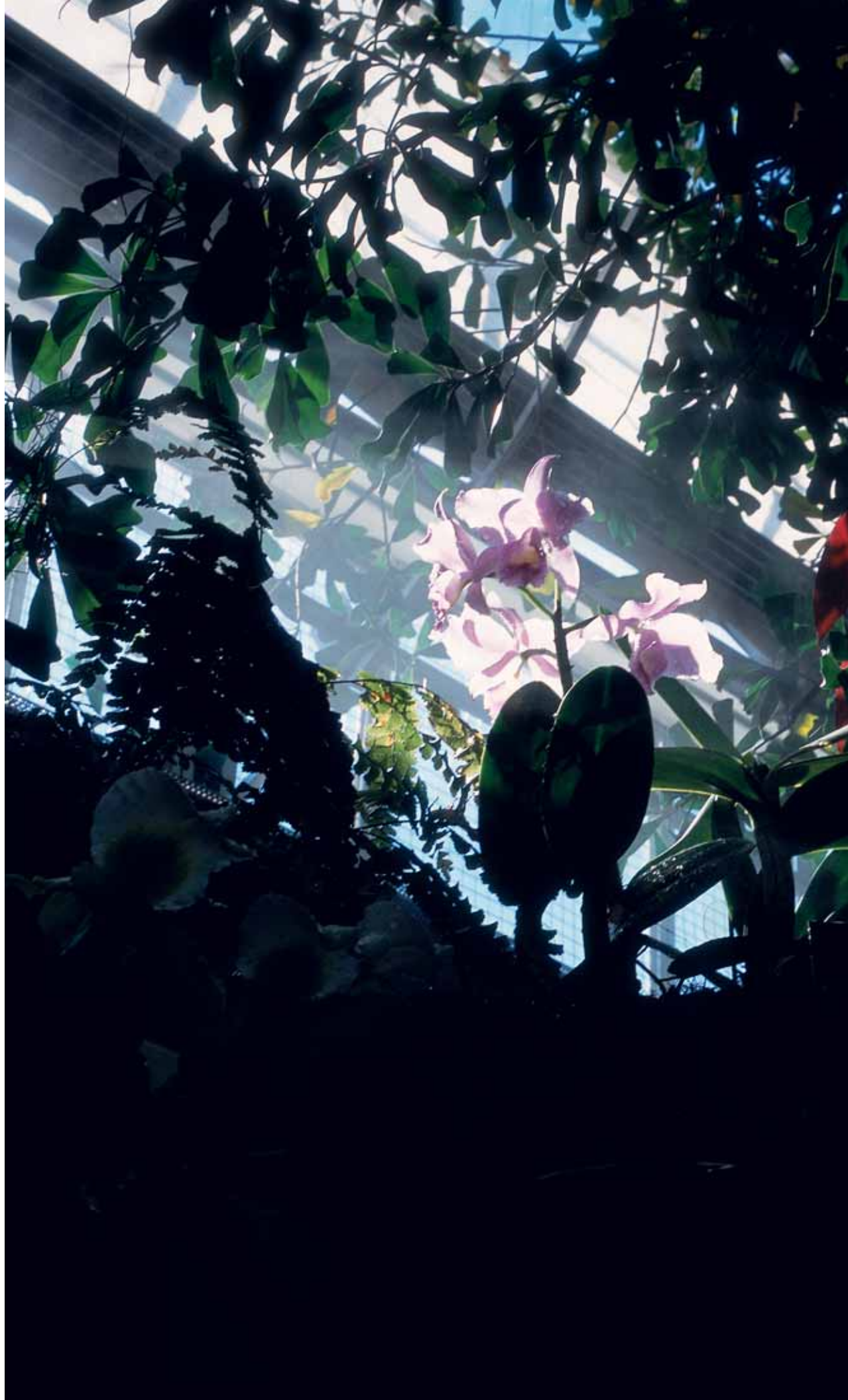
(OPPOSITE)
PANSY ORCHID
(*Miltoniopsis* DRAKE WILL
'RUBY FALLS').

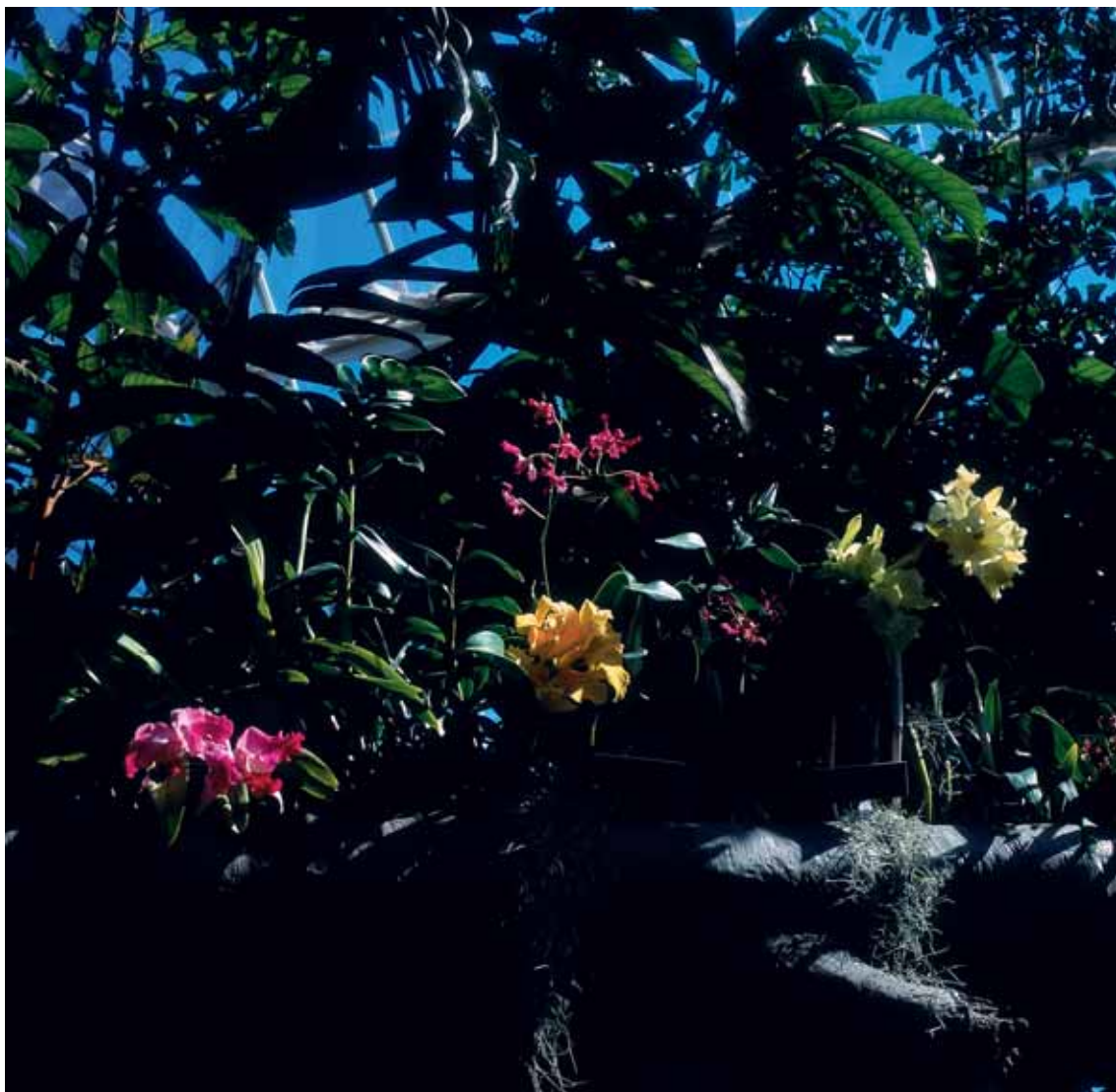
(ABOVE)
SPIDER ORCHID
(*Brassia verrucosa*).

Since the eighteenth century, orchids have been sought by collectors, leading to the disappearance of wild species and the destruction of their habitats. Many orchids in the Botanic Garden have been confiscated by customs agents and deposited here for preservation through CITES (see page 43 for more information).



(ABOVE)
ORCHID
(*Laeliocattleya* BARRY STARKE
'THE KING').





(CENTER AND ABOVE)

ORCHID HOUSE.

Hundreds of colorful orchids festoon the rocks and branches of the Orchid House. Plants are rotated constantly from the Production Facility, where thousands of species and hybrid orchids are grown.



(ABOVE LEFT)
GOLDEN SHOWER ORCHID
(*Oncidium sphacelatum*).



(ABOVE RIGHT)
ASIAN SLIPPER ORCHID
(*Paphiopedilum* F. C. PUDDLE).

(RIGHT)
ORCHID
(*Catasetum saccatum*).

(OPPOSITE)
ORCHID
(*Cattleya maxima*).







HYBRID ORCHIDS.

The mania for new orchids has contributed to the creation of spectacular hybrids by crossing different species. The science of tissue culture revolutionized propagation, and modern genetics has opened the door to designing plants with only desired traits.

(ABOVE)
ORCHID
(*Beallara* MARFITCH
'HOWARD'S DREAM').

(RIGHT)
ORCHID
(*Cattleya* PORTIA 'COERULEA').





(ABOVE)
ORCHID
(*Catasetum JUMBO EAGLE*).

