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Florida Orchid Growing
Month by Month

Introduction

Orchids are easy to grow in South Florida; easy to grow badly. Tough, resilient plants, orchids find the climate of Florida much to their liking. New orchid growers are delighted to find that (with or without them) their first orchids actually survive and re-bloom. As more plants find their way into what is now becoming a collection, the grower realizes that his charges while surviving are not necessarily thriving. Many questions need answers. Where should they be put? When should they be watered? What about fertilizer? How much light do they need? Do they need re-potting? Why aren't they in soil? The answers found in general orchid culture books are not necessarily the right ones for South Florida. Many things are different here. This book illuminates those differences and provides Floridian answers to Floridian questions. While it is hoped that growers elsewhere will find much of interest in this book, it is intended as a place-specific guide for growers in South Florida.

Florida's climate is indeed favorable to orchids. One hundred or more species are native to the peninsula. While many of these are terrestrials that range far into the temperate zone, others are tropical epiphytes of the sort cultivated in our subtropical gardens. The natural success of these species in Florida provides insights into how one can be successful in cultivating tropical orchids here. Most of the year, South Florida is part of the tropics and enjoys a monsoon climate that is the natural environment for many types of orchids. Unlike the static, uniform climate of an air conditioned building, the atmosphere of South Florida changes hour by hour, day by day and most of all month

by month. Orchids are, by nature, adapted to these changes and love and need them. This book places orchid growing in Florida in the context of the seasonal changes and the cultural changes that are demanded of the grower as a result: hence *Florida Orchid Growing—Month by Month*.

More than anything else, the epiphytic species that have found a home in South Florida teach us that, to survive, these plants need some protection. Native epiphytes mostly grow in the protected environments of tropical hardwood hammocks and in deep sloughs. These niches provide the orchids the right levels of light and most of all protection from the occasional severe bouts of cold that remind us that South Florida is merely sub-tropical not truly tropical. This book will help growers decide which plants need protection, how much and how to provide it. Monthly chapters provide timely warning on the changing conditions of light, heat, rainfall and above all cold that growers need to properly protect their plants from the extremes of South Florida's climate. Guidance is given also on the placement of orchid plants in tropical gardens to maximize their growth and minimize their vulnerability.

While Florida growers have vast advantages over their northern counterparts because our warm climate makes most of our gardens, patios, and pool enclosures a virtual greenhouse for much of the year, greenhouses offer protection and control to northern growers that is seasonally unavailable to us in South Florida. Protection from the cold is an advantage to be coveted in South Florida for a few days (and more especially nights) each year but protection from the torrential rains of summer are an annual protracted need. Above all else, orchids are most like cactus and like cactus they all need to dry between waterings. The limited drying potential in our rainy season shapes every aspect of orchid culture in South Florida. Pots, potting media, light, air movement, watering and fertilizing practices, all must be adjusted

to succeed in growing top quality orchids. The chapters on these subjects are geared to the Florida-specific needs of our orchids in our rainy climate. Similarly the monthly summaries remind growers of the changes called forth by the changing seasons and offer timely solutions to the problems each season brings.

And, alas, on the long haul problems will arise because the same climatic conditions that so favor orchid growing in South Florida provide nurture to all of the diseases and pests that afflict orchids. Florida's long dry season, so sympathetic to our orchids, also proves of great benefit to the scale, mealy bugs and mites that are lurking in the tropical foliage that abounds in our gardens. The rainy season provides equal opportunity to the numerous and ubiquitous fungal and bacterial diseases that are orchids' natural enemies. This book provides Florida-oriented practices best suited to prevent problems with disease and insect pests. How to cure them if they occur is detailed. Emphasis is given to the pest control practices that are safest for the grower and the environment. Proper equipment and techniques are illustrated to make the plants, the grower and the neighborhood safer.

This is a source book on all aspects of Florida orchid growing from the selection of the genera and species best adapted to our climate, to the general and seasonal knowledge necessary to make them most likely to succeed. Growing materials, supplies, chemicals, pots, baskets and fertilizer are described and illustrated but also sources of available suppliers in South Florida. This small book attempts to give the readers all the specific knowledge they need to succeed with orchids in South Florida. It does not pretend to provide all the knowledge that a serious enthusiast will want to have. For that life long pursuit, a bibliography of suggested further reading is provided.

Florida Orchid Growing is the distillation of the author's fifty years' experience in growing orchids, man and boy, in South

Florida. In addition to sharing his love of orchids, the author attempts to share his love of South Florida and its incredible climate. Hopefully, the reader, too, will be reminded to appreciate one of the most beautiful places on the planet; not just month by month but day by day and minute by minute.

PART I

Orchid Culture in Florida



Finding a Home for Orchids in a South Florida Garden

Most peoples' first experience in growing orchids begins with a plant acquired as a gift or bought on a whim (perhaps to celebrate a special occasion). As the flowers fade, attention shifts to the problem of keeping this living plant alive and, hopefully, bringing it to bloom a second time. More immediate than even the question of "How shall I grow it?" is "Where shall I put it?" The ultimate answer to this question will vary with different genera but several locations around the home site provide the mixture of shade and sun that most orchids require. Some will even thrive in the house itself.

Trees come first to mind, since most of the commonly cultivated orchids are epiphytes that grow on other plants in nature and many of the ornamental and fruit trees in our gardens are, in slightly more tropical climes, hosts to these orchids. Except for tree species which are exceptionally densely leaved, most tropical trees are suitable for growing orchids if care is taken in where the orchid is placed.

Orchid plants suspended from wire hangers can be put in many locations in a tree but consideration of the light requirements of the plant will dictate the precise location. Shade loving types such as *Phalaenopsis* and *Miltonia* can be hung nearer to the trunk and on the larger scaffold branches where the total canopy will provide more protection from the sun during the heat of the day. Hardier genera such as *Cattleya* and *Oncidium* which require more light and air movement should be positioned further from the trunk where more sunlight will penetrate the canopy for much of the day, providing the high light and rapid drying that



Under trees is a natural selection for orchid placement.

they relish. Toward the outer edge of the tree, sun-loving types such as vandas and dendrobiums can be suspended in positions which allow them to receive direct early morning or late afternoon sun. In very large trees this can be achieved by suspending them on long hangers which allow them to be far enough below the branches for enough direct sunlight to reach them in

the early morning (till 11 a.m.) and late afternoon (after 3 p.m.). Both vandas and dendrobiums tend to be reluctant bloomers if grown in too dense a shade or even with one half of the plant in deep shadow. At least some fairly strong light should strike these plants from both sides. Benches or racks placed in the shade of oaks, mahoganies and other very suitable trees can almost rival a shade house in efficiency.

The list of trees most suitable for growing orchids always begins with the live oak (*Quercus virginianus*). This species is almost ideally suited to orchid culture because it responds to the lower light of fall and winter by shedding much of its leaf cover, thus providing brighter light to the orchids in the winter and greater protection from the sun in summer. Mahogany trees (*Sweitenia mahogany*) provide similar conditions. Citrus trees (orange, grapefruit and tangelo) possess the thin canopy that permits the strong, but diffused light, which most orchids prefer, to enter. In tropical areas many species of *Oncidium*, *Encyclia*, *Rodriguezia* and other genera are frequently encountered growing profusely on citrus. Orange and grapefruit trees are ideal homes for many cultivated orchids. Large trees of avocado, sapodilla and mango are often too densely foliated to provide sufficient light for many orchids

to flower well in areas near their trunks, but offer very suitable conditions on their larger scaffold branches and near to the edges of their canopy. When properly pruned to produce the best fruit crops by removing some of the more vertical central branches, these trees are also very desirable accommodations for orchids. In addition to the extra fruit and orchid flowers, this pruning will provide insurance against the tree being blow over in a storm.

Trees with a more open habit such as sea grape can provide not only suitable but aesthetically pleasing orchid habitats. The branches of sea grapes (*Coccoloba uvifera*) and certain similar trees such as button wood (*Conocarpus erecta*) can be pruned to create very pleasing configurations of the branches which also enhance the available light. The bottle brush trees (*Callistemon* sp.), many of which, unpruned, could be too dense for orchid culture can in the same manner by judicious pruning be made into almost ideal habitats for orchids. In their native lands their vegetative enthusiasm is tamed by limited water and nutriment effectively pruning them into much more hospitable homes to numerous orchid species.

Trees with extremely open habits such as frangipani (*Plumera* species) and golden trumpet (*Tabebuia argentea*) can be ideal homes for sun-loving types such as *Schomburgkia*, dendrobiums and vandas. Single trunk palms such as royals (*Roystonea elata*) and coconut (*Cocos nucifera*) also provide excellent light conditions for sun-loving orchids since the vertical trunk provides a stable mounting place while the spreading canopy protects plants from the direct noonday sun but permits abundant light to enter in the morning and afternoon when it is not too strong .

Orchid plants in containers can be placed in, around or under these and other trees but they can also be attached to them. This permanent attachment has the disadvantage that blooming plants can no longer be taken into the house for enjoyment or to shows for appreciation and perhaps prizes. The advantages



Firmly attached orchids become a permanent part of the tropical landscape.

of permanently attaching orchids to trees are that cumbersome or unsightly pots or baskets are eliminated and the orchids are more fully integrated into the garden, enhancing its tropical character. The fact that the orchids no longer require re-potting or staking is also a significant bonus when there is

always something else to do in the garden.

If you choose to attach an orchid to a tree, you have the responsibility to see that it is firmly attached. Loosely mounted plants that wobble in the wind will chaff all of their new roots away before they can catch hold. Such plants will never thrive. Growers use various means to stabilize plants on trees. Twine and wire are both effective. Manila twine has the advantage of self removal as it rots away after several months. Wire is stronger but must be removed after the orchid is established and before the wire cuts into the growing tree. Some growers use strips of panty hose to tie plants. Panty hose while unsightly does give a broad purchase and is soft on the plants. Plastic grafting tape (clear or green) has similar properties and is less obtrusive. Our preferred method is liquid nails (commonly used to attach molding or flooring) and green twist wire. A small dab of liquid nails (or several for large plants) is placed beneath the rhizome or woody part of the stem. The green tie wire holds the plant till the glue dries and then the unsightly wire can be removed later the same day.

Whether a small patch of sphagnum or coconut fiber helps or hinders rooting is a matter of some debate and individual preference among growers. But that spring or early summer when plants are likely to root rapidly and quickly attach themselves is universally accepted.

In addition to on, under or in trees, there are many other areas round the house that are excellent habitats for cultivating orchids. Pool enclosures and screened in patios are ideal for many types. Although the typical window screen used to cover such structures provides less shade than many genera need, trees and adjoining structures frequently provide additional shade for part of the



Patios and pool enclosures always provide various habitats for orchids.

day. Careful observation of the pattern of light that exists as the day progresses and the sun moves over various areas, will uncover many different places that have greater or lesser exposure to light. Trees, shrubs and even adjoining structures will frequently shade portions of the area for several hours. By observing these changing patterns of light and shade, nearly perfect spots for various orchids can be discovered. Vandas and dendrobiums can occupy the brightest locations (although these genera also enjoy the relief of a passing shadow or two). Because both vandas and dendrobiums are tall they can often provide additional shade to other smaller types placed near them. Cattleyas, particularly the bifoliate types, can take almost as much light as the sun loving genera. Oncidiiums, and other genera with thinner leaves can be placed in areas of deeper shade so that they receive less direct light that might over heat their foliage. When the screen needs to be replaced, the serious orchidist might consider choosing as replacement screen woven shade cloth in the 30-45% range. This will be kinder to the orchids and to the orchid grower's skin.

Solid, overhanging roofs provide the deep shade and protection from prolonged rain that *Phalaenopsis* require. Many amateurs grow these to perfection on tier benches under the



Phals and certain other genera enjoy the protection of covered roofs.

overhangs of their roofs or, even more ideally, in covered breeze-ways between house and garage or other outbuildings. The latter areas maximize the air flow over the broad leaves of *Phalaenopsis* that keep them happily cool and dry. While providing protection from the often over abundant rains, these areas provide a cozy home not only for our orchids but, over the long term, mites, which thrive in these dry locales. Areas that do not receive the

cleansing influence of rain need more careful monitoring for mites. Indeed, periodic spraying for these pests is mandated in all circumstances where rain is excluded.

Tree shaded or lattice covered entrance ways can provide the right mix of light and shade for many types of orchids which can be suspended from the structure, the trees or placed in ornamental pots on benches to greet the visitor with their rare beauty. As with



patios, such areas are best used by carefully noting the patterns of sunlight that fall on them during the course of the day. After this observation, orchids can be judiciously placed to best suit their various light needs.

Finally, many orchids can be adapted to full sun in South Florida. Terete and semi-terete vandas, renantheras, *Arachnis* and their hybrids, arandas and mokaras, thrive in full sun. These can be grown in raised beds or in large ornamental pots filled with organic material. When well grown in bright light, these flower with enough frequency to provide a constant landscape display as well as an abundant supply of cut flowers for decorating the

house. Many dendrobiums of the antelope type (section *Spathulata*) also love full sun. Because their flowers are so long lasting they too can be in nearly constant bloom.

Reed stem epidendrums and their hybrids with *Cattleya*, *Epicats*, in a range of colors are easily grown as bedding plants or pot plants in full sun. Schomburgkias, many laelias and some encyclias will also fare well in direct or nearly direct sun and can be grown on the trunks of palms or even on bare landscape rocks.



Epidendrum radicans and its hybrids thrive in full sun.

Shady nooks, too, have their orchid types. *Spathoglottis*, *Bletia*, and *Phaius* are well adapted to cultivation in beds of well-drained soil in all but the deepest shade. Charcoal or wood chips amended to the soil make these genera happier. Some growers prefer to keep these plants in pots of light organic material which are submerged in beds of mulch. This technique discourages weeds and nematodes and allows for easier renewal of the growing media. As these terrestrial types enjoy occasional drying, care should be taken that lawn irrigation does not over water them in the winter.



Spathoglottis thrive in bright, partial shaded spots.

Phalaenopsis, equitant oncidiums and other miniature types can be grown successfully indoors on window sills or under lights. Indeed, anyone with experience growing African violets indoors would have little difficulty growing many types of orchids. Windowsill and light growing are the chief methods employed by most

Northern growers. With sufficient dedication, not only “easy” genera like phals and paphiopedilums, but nearly any type of orchid can be grown in the house.

Apartment dwellers may well start with a few *Phalaenopsis* inside on a window sill and then begin to eye the balcony as a potential garden spot. In land-starved Singapore, balcony orchids have evolved into a fine art. The considerations of changing sunlight that apply to atriums and patios are relevant here as well. Watch the sun’s passage through the day and through the seasons and find the nooks and crannies suited to various orchid types. Some growers not content to grow just the more sun loving types or those adapted to the limited shade offered by the architecture, create artificial shade with lattices or shade cloth or natural shade from potted palms or other foliage. Wooden lattice attached to the wall or to the balcony railing provides an attractive support for orchids. Lattice can be stained or painted to match the decor if pressure treated green disturbs the ambient.

One can fairly say that there is no residence in South Florida that can not be a home to orchids. Fortunately, also, South Florida is home to more commercial orchid growers than anywhere else in the world, making a wide variety of these beautiful plants easily and inexpensively available to everyone.