



The person charging this material is responsible for its return to the library from which it was withdrawn on or before the **Latest Date** stamped below.

Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University.

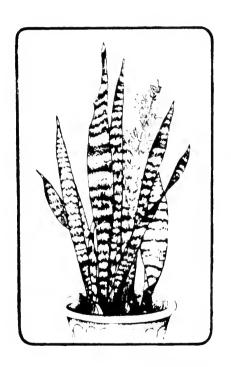
UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN



45f 20,00p.2

HOUSE PLANTS

BY ROBERT VAN TRESS



THE LIBRARY OF THE APR $20\,1937$ Botany University of Illinois Leaflet $20\,$

FIELD MUSEUM OF NATURAL HISTORY
CHICAGO
1937

The Botanical Leaflets of Field Museum are designed to give brief, non-technical accounts of various features of plant life, especially with reference to the botanical exhibits in Field Museum, and of the local flora of the Chicago region.

LIST OF BOTANICAL LEAFLETS ISSUED TO DATE

| No. 1. | Figs | .10 |
|---------|--|------|
| No. 2. | The Coco Palm | .10 |
| No. 3. | Wheat | .10 |
| No. 4. | Cacao | .10 |
| No. 5. | A Fossil Flower | .10 |
| No. 6. | The Cannon-ball Tree | .10 |
| No. 7. | Spring Wild Flowers | .25 |
| No. 8. | Spring and Early Summer Wild Flowers | .25 |
| No. 9. | Summer Wild Flowers | .25 |
| No. 10. | Autumn Flowers and Fruits | .25 |
| No. 11. | Common Trees (second edition) | . 25 |
| No. 12. | Poison Ivy | .15 |
| No. 13. | Sugar and Sugar-making | .25 |
| No. 14. | | .25 |
| No. 15. | Spices and Condiments | .25 |
| No. 16. | Fifty Common Plant Galls of the Chicago Area | .25 |
| No. 17. | Common Weeds | . 25 |
| No. 18. | Common Mushrooms | .50 |
| No. 19. | Old-Fashioned Garden Flowers | .25 |
| No. 20. | House Plants | .35 |

CLIFFORD C. GREGG, ACTING DIRECTOR

FIELD MUSEUM OF NATURAL HISTORY CHICAGO, U. S. A.

THE LIGRARY OF THE UNIVERSITY OF ILLINOIS



FIDDLE-LEAF RUBBER PLANT (Ficus pandurata)

580 F45l

0

No. 20 FIELD MUSEUM OF NATURAL HISTORY

DEPARTMENT OF BOTANY

Сисадо, 1937

THE LIBRARY OF THE

COPYRIGHT 1937 BY FIELD MUSEUM OF NATURAL HISTORY 2 0 1937

UNIVERSITY OF ILLINOIS

HOUSE PLANTS

As a means of satisfying an interest in plant life and a love of flowers, window gardening is open to practically everyone. For thousands of persons residing in apartments or hotels there is no other way of having growing plants.

The plants illustrated in this booklet are the ones most favored as house plants in this country. A few of them, e.g. *Beloperone* and *Dieffenbachia*, are not so well known as the others but they are rapidly growing in popularity. Approximately one half the plants described here are esteemed especially for their foliage, and where conditions in general are unfavorable to plant life one of this group may be grown.

To be at their best, house plants require plenty of light, humidity in the air, and good soil. For most of them, light is more important than a high temperature, and for flowering plants a southern or southeastern exposure is best. Even when plants are well placed in good light they should be turned occasionally so that all sides may receive it equally.

The hot, dry air of our living rooms is more injurious to plants, especially to flowering ones, than any other factor. Opening the doors or windows and thoroughly airing the room at least once a day is helpful, as is the use of humidifiers to increase the moisture in the air.

The amount of water that a plant requires depends entirely upon the nature of the plant and whether it is in a growing or dormant condition. Plants in a dormant or resting stage require very little water—only enough to keep the stems from shriveling. On the other hand, just before blooming and while they are in bloom an abundance of water is necessary. In watering, it is not sufficient to wet merely the surface but water should be given until the whole ball of earth in the pot is moistened, which is indicated by water coming through the drainage hole at the bottom. When water is necessary it should preferably be applied in the morning of a sunny day.

Foliage plants should have their leaves washed frequently to free the pores of dust. For close handling of leaves a soft sponge is a great service and it can be used in the house without danger of dripping. Never use an oily cloth to shine the leaves of your rubber plant! Syringing the whole plant is very beneficial and helps keep the leaves clean as well as to keep insects under control.

Insects which are most prevalent on pot plants are red spider, scale insects, aphids or plant lice and mealy bugs. Red spider is so small that good eyes are required to see it but it may be detected by examining carefully the leaves which look yellow and sickly. The most effective way to rid a plant of red spider is by repeated syringing. Scale insects which appear frequently on palms, and mealy bugs which look like little specks of cotton are kept in check by a combination spray of "Volck" and nicotine sulphate (5 tablespoonfuls of the former and 2 of the latter to one gallon of water—ingredients to be had from any seed dealer).

Some plants, like the Amaryllis, which do not need repotting yearly, are benefited by fertilizing, which should only be done when they are in a healthy growing condition. For this purpose there are a number of commercial plant foods containing the principal essential elements—nitrogen, phosphorus and potassium—in suitable proportions. They are convenient to use and safe when directions are followed.



BOSTON FERN

 $(\,Nephrolep is\; exaltata\; {\rm and}\; {\rm vars.})$

The Boston Fern ranks as one of the most popular of all house plants and one that will succeed in a north window. There are many forms or mutants with finely cut or crested foliage, of which Whitman's Fern is probably the best. Varieties with more finely divided leaves are not suitable in the home. A common reason for failure with Boston Fern is the use of a jardiniere in which water is allowed to stand.



NORFOLK ISLAND PINE

 $(Araucaria\ excelsa)$

This exotic conifer is a beautifully symmetrical plant for decorative purposes, and is often justly prized above all other evergreen pot plants. It keeps well in a cool room near a window during winter, and the temperature should not be above 60 degrees at night. In summer, place it outside on a veranda or in some place protected from direct sunlight.



SCREW PINE (Pandanus Veitchii)

The sharp-toothed, pendulous, green and white leaves give the Screwpine a graceful appearance. In time it grows too large for the small house. In its native home, Polynesia, or when planted in the tropics, it forms a large, widely branching shrub or tree supported by a mass of proproots. As a house plant, the Screw Pine stands up well under adverse conditions but for best results abundant moisture and heat are required.



DWARF PHOENIX

(Phoenix Roebeleni)

The smallest of all the Phoenix palms, from Farther India, a dwarf relative of the Date palm, is named for its discoverer Roebelen, an orchid collector of Singapore. Its graceful, fountain-like aspect, its extreme hardiness, and its slow growth make it one of the finest of all room plants.



KENTIA PALM (Howea Forsteriana)

If conditions to meet their requirements of space and a night temperature of 60 degrees can be furnished, several species of Palms may be grown in the house. The most popular are *Howea Belmoreana* and *H. Forsteriana*, both natives of Lord Howe's Island in the South Pacific, better known under their synonym of Kentia. The two species are similar, but the former, with curving pinnae, is the more graceful of the two.



DUMB CANE (Dieffenbachia Seguine)

The Dieffenbachia of Tropical America is decidedly ornamental with large leaves spotted and feathered with yellow, cream or white. The stems contain a very acrid juice, which has a paralyzing effect if taken in the mouth and will cause temporary loss of speech.

A warm temperature is necessary and an abundance of water in the growing season. Arum Family.



WANDERING JEW (Zebrina pendula)

For a hanging basket no plant will give more satisfaction under adverse conditions than Wandering Jew. Although a native of Mexico and other tropical American countries it thrives in a wide range of environment. It propagates so readily from cuttings that it is always possible to have a supply of plants. Frequent pinching of the tips causes the plant to become bushy and therefore more decorative.

A closely related plant, *Tradescantia fluminensis*, a native of Brazil, commonly grown in greenhouses, shares with *Zebrina* the appellation Wandering Jew. Both are of the Spiderwort Family.



ASPARAGUS FERN

(Asparagus Sprengeri)

As a substitute for ferns the South African climbing asparagus plant A. plumosus and its relative A. Sprengeri are suitable basket plants. The former has finer foliage but is not as easy to grow as the latter. Lily Family.

A rich soil and plenty of water in the growing season are important points in its culture. Less water is required in winter when the plants are relatively at rest.



HYACINTH (Hyacinthus orientalis)

Because of the beauty and fragrance of its blossoms the Hyacinth has long been a favorite. A native of the Levant, it was introduced to cultivation about 1590. Lily Family.

The bulbs should be obtained early in September and potted without delay. The usual practice is to force the bulbs for one season only and then throw them away. Although they are not suitable for forcing again they may be planted out in the open borders if the foliage has been allowed to develop properly and will bloom there for several years.



CORN PLANT (Dracaena fragrans)

The Dracaena is a straight stemmed African plant related to the Dragon-blood tree. It is esteemed as a foliage plant. Its common name suggests the resemblance of its leaves to those of the Maize plant. Variety *Lindeni* has creamy-white bands on the leaves and *Massangeana* has a broad yellow stripe down the center. A native of the tropics of Upper Guinea, it does not thrive in drafty places or where the temperature falls below 55 degrees at night. Lily Family.



BOWSTRING HEMP (Sansevieria zeylanica)

The Bowstring Hemp comes from Ceylon. Its large, sword-shaped leaves are firm and leathery. The form with leaves banded by creamy yellow (var. Laurentii) seems to be most in demand. S. cylindrica is an interesting species with round tapering stems. The latter are both from western Africa, respectively Belgian Congo and Angola. Lily Family.



CAST IRON PLANT (Aspidistra elatior)

This stemless foliage plant lives up to its common name by withstanding hard usage, dull light and poor soil to a greater degree than any other house plant, with the possible exception of the Wandering Jew. Its native home is China. There is a form with variegated, green and white foliage.

When the plant becomes pot-bound it will astonish you by producing purple, intensely fragrant flowers just above the surface of the soil. Lily Family.



AMARYLLIS

(Hippeastrum vittatum and hybrids)

Hippeastrums are large-flowered bulbous plants of tropical America. Lily Family.

As the flowers fade, the leaves will appear in profusion; give plenty of water, light and air, for on the growth of these depend your next year's flowers. When growth is completed give less water until the leaves turn yellow and fall from the bulb. Then keep the bulb dry through the winter in a temperature of 45 to 50 degrees until the flower spike shows an inch or two of growth.



INDIA RUBBER PLANT

 $(Ficus\ elastica)$

Although there are many more desirable plants, the common Rubber Tree is a favorite. It has the advantage of thriving in a hot, dry atmosphere in places where the light is poor. A slower growing, broad-leaved species, the Fiddle-leaf Rubber Tree, *Ficus pandurata* (see Frontispiece), seems to be replacing the commoner one. Mulberry Family.



HOUSE HYDRANGEA

(Hydrangea macrophylla var. hortensia)

A favorite house plant seen about Easter time is the Hydrangea, a small shrub with large bolls of white, blue or pink, papery flowers. It is a native of China and Japan. Saxifrage Family.

When the plant is through blooming, cut back about half the growth and put it outside in a sunny position, watering plenty during the summer. Bring it in before frost and store in a cool light place with only enough water to keep the wood from shriveling. Started into growth early in January it will bloom again for Easter.



GERANIUM

(Pelargonium hortorum)

Of all pot plants the common Geranium may be considered the universal favorite. The parent species was introduced about 1710 from South Africa, and since then the aim of florists has been to secure sturdiness, fine form, large flower clusters and floriferous habit. Geranium Family.

Geraniums do best in a heavy soil and require a sunny window. It is customary to keep them outdoors during the summer. The same plant can be kept from year to year by vigorously pruning it in September before bringing it into the house. New plants can be raised from cuttings of the old one.



MARTHA WASHINGTON GERANIUM

 $(Pelargonium\ domesticum)$

Pelargoniums are among the most beautiful flowering plants suitable for growing in the home. Their colors are in every shade of scarlet, cherry, pink, purple, to lilac and white, and they may be blotched, marbled, or spotted with velvety black and maroon. Like the allied common or garden Geranium, they are derived from South African ancestors.

They are easy of culture, but require a rich soil to flourish well. During the summer set the plants outside in full sun giving them a good rest. Take them in the house again before danger of frost and repot at that time.



POINSETTIA (Euphorbia pulcherrima)

The popular gift plant for Christmas is the colorful Poinsettia, a tropical Mexican spurge, tipped with brilliant vermilion bracts. Though grown out-of-doors in the south it is tender and should be kept out of draughts. If given a long period of rest after blooming it may be repotted and started into growth again in May. After the new shoots are growing cut off all but one. Keep the plant outdoors during the summer, but take it in again and shift to a larger pot when the temperature drops to 55 degrees. A growing temperature of about 65 degrees with plenty of moisture in the air is required at that time.



BEGONIA (Begonia spp.)

Three groups of Begonias are commonly used as house plants—Begonia semperflorens, varieties and hybrids, valued for their winter blooming habit, Begonia Rex, plants grown for their attractive foliage of many shades, and a third including Begonia coccinea, B. metallica, and B. maculata with a pleasing combination of flowers and leaves. They are natives of Brazil. Begonia Family.

All of them thrive in a compost of loam and leaf mould with a slight portion of sand. They require warmth and plenty of light and air.



FUCHSIA

 $(Fuchsia\ hybrida)$

As a pot plant for summer blooming, the Fuchsia is unsurpassed, being very floriferous with attractive foliage and symmetrical habit. All of our cultivated varieties are hybrids from ancestors introduced from western South America and Mexico. Evening-Primrose Family.

The best place for a Fuchsia in winter is a dry cellar, free from frost, where it should be kept nearly dry. About the first of March prune back all side shoots. Prune in the roots also and repot in as small a pot as will hold the roots. Use a soil consisting of peat, loam, and leaf mould.



ENGLISH IVY (Hedera helix)

Historic associations, ease of culture, rapid growth and the evergreen character of its shining five-angled leaves, all combine to make the European Ivy the favorite vine for hanging basket or trellis. Aralia Family.

It seems to do well in poorly lighted situations and does not require much heat, making it well adapted for use in halls or balconies or rooms not well heated. The soil used should be a rich loam and the richer the soil the more rapid will be the growth. Slips taken off at any leaf joint root readily in soil or in water.



AZALEA (Rhododendron indicum)

Azaleas are native of North America and Asia. They are generally distinguished from Rhododendrons by having deciduous leaves, but this species is an exception. The so-called Indian or Chinese Azalea is of Japanese origin. With evergreen foliage and flowers produced in great profusion, it is admirably adapted for a window plant. Heath Family.

The soil which suits them best may be made by mixing three parts of fibrous peat, one of loam and one half part sand. If the plants are set out of doors in the summer in a shady place until September, they will bloom for years.



CYCLAMEN (Cyclamen persicum)

The Cyclamens are native of Europe and Asia. The cultivated one is a spring-blooming plant with showy flowers ranging in color from white to reddish purple. The deep green leaves are attractively marbled with pale green or silver. Primrose Family.

Usually secured annually from the florist, it may be grown for several years if given a resting period after blooming. The plants are commonly carried through the summer by plunging the pots out of doors in a shady place where they are allowed to run quite dry.



CHINESE PRIMROSE (Primula sinensis)

The primrose is one of the most satisfactory winter flowering plants and for continuous bloom it cannot be surpassed. This Chinese Primrose, as well as *Primula malacoides*, the Fairy Primrose, does not cause primrose poisoning, and they are therefore to be preferred to *P. obconica*, a sturdier plant, often offered for sale under the name Japanese Primrose.

They are objects of easy care, requiring attention only in watering. When in full foliage and bloom they need more water than most plants. These are house plants that are best secured annually from the florist. Primrose Family.



HELIOTROPE

 $(\ Heliotropium\ peruvianum)$

Modest in appearance but always admired for its fragrance, the Heliotrope is an old-time favorite in the window garden. It is a native of Peru, in cultivation since 1737. The ease with which it may be grown either in pots or garden, the color and fragrance of its dainty flowers, and the long period of bloom, have all contributed to make it one of the best known pot plants. By pruning about midsummer it may be kept in good condition for years. Borage Family.



SLIPPERWORT (Calceolaria crenatiflora)

The Calceolarias of western tropical America—the name comes from the Latin word for a slipper—are grown for their beautiful clusters of golden, crimson, maroon or rose-colored, purse-shaped flowers, either plainly tinted or curiously mottled and flecked. Figwort Family.

They are plants that ought to be purchased from a florist and merely carried through the blooming season. They should be kept rather warm in an atmosphere that is not too dry, and be sparingly watered.



GLOXINIA

 $(Sinningia\ speciosa)$

Gloxinia is one of the few midsummer blooming pot plants. It is a native of Brazil. Gesneria Family.

After the Gloxinia has finished blooming water should be gradually withheld until the leaves are lost. The tuber may be stored in a warm, dry place over winter, and started into growth again early in March. The atmosphere should be warm and moist and the growing plant should never suffer for lack of water, although the leaves should not be wet on the upper surface.



AFRICAN VIOLET (Saintpaulia ionantha)

One of the loveliest house plants in cultivation is the so-called African or Usambara Violet. The Hannover botanist Wendland named it for its discoverer, Baron Walter von Saint Paul. Florists have several improved varieties on the market now, one of the best being Blue Boy, with deep blue flowers. The plants may be flowered the entire year or given a period of rest by partly withholding water. A warm temperature and plenty of light are necessary. Gesneria Family.



SHRIMP PLANT (Beloperone guttata)

This tropical American herb, or small shrub, is still comparatively unknown as a house plant but is rapidly growing in favor because of its curious but attractive appearance. The small two-lipped flowers, white spotted with purple, are borne beneath reddish-brown showy bracts, suggesting a flower of the hop plant. Recently introduced from Mexico into cultivation in the United States, this species is one of about thirty of its genus. Acanthus Family.



CINERARIA

 $(Senecio\ cruentus)$

Few greenhouse plants are more attractive and showy than the profusely flowering Cinerarias, and the improvement made in the size and coloring of the flowers, varying from white, blue or pink to an intense red or purple, has led to their great popularity. They are commonly grown as annuals by the florist and should be purchased in Spring already grown and in bloom. The Cineraria is a native of the Canary Islands. Daisy Family.

OTHER POT PLANTS WHICH MAY BE GROWN IN THE HOUSE

Besides the plants illustrated here, many others less common may be grown successfully as house plants. A list of such is appended. Plants of the kind generally known as succulents are not included as they will be treated in a separate leaflet, nor are plants like tulips, the Easter lily, Polyantha rose and others which usually are purchased in full bloom and ordinarily have but a short life in the house.

| Common Name | Scientific Name | Family |
|---------------------|-----------------------------------|-------------|
| Maidenhair Fern | Adiantum cuneatum | Fern |
| Glory Fern | " gloriosum | 44 |
| Manda's Polypody | Polypodium aureum var. | |
| | Mandaianum | 44 |
| Table Fern | Pteris cretica | 44 |
| Holly Fern | Cyrtomium falcatum | 4.6 |
| Mexican Tree Fern | Cibotium Schiedei | Treefern |
| Umbrella Plant | Cyperus alternifolius | Sedge |
| Golden Feather | | |
| Palm | Chrysalidocarpus lutescens | Palm |
| Petropolis Palm | Syagrus Weddelliana | 4.6 |
| Chinese Evergreen | Aglaonema commutatum | Arum |
| | Philodendron cordatum | " |
| Ceriman | Monstera deliciosa | " |
| Calla | $Zante deschia\ aethiopic a$ | " |
| Golden Calla | $\lq\lq$ $Elliottiana$ | " |
| Chlorophytum | Chlorophytum elatum and vars. | Lily |
| Red Dracena | Taetsia (Cordyline) terminalis | " |
| Star of Bethlehem | Ornithogalum thyrsoides | " |
| Lily of the Valley | Convallaria majalis | 44 |
| Snake's Beard | Ophiopogon Jaburan | " |
| Sea-Onion | Urginea Scilla | 44 |
| Kafir Lily | Clivia nobilis | Amaryllis |
| Chinese Sacred Lily | Narcissus Tazetta var. orientalis | " |
| Marica | Marica coerulea | Iris |
| Peperomia | Peperomia spp. | Pepper |
| Baby Tears | Helxine Soleirolii | Buckwheat |
| Ice Plant | $Mesembryanthemum\ crystallinum$ | Carpet-weed |
| Madeira Vine | Boussingaultia baselloides | Basella |
| Houseleek | Sempervivum | Orpine |
| Strawberry | • | |
| Geranium | Saxifraga sarmentosa | Saxifrage |
| Bermuda Buttercup | Oxalis cernua | Wood Sorrel |
| Croton | Codiaeum variegatum | Spurge |
| Sultana | Impatiens Sultani | Balsam |
| | | |

Grape Ivy Flowering Maple Tuberous Begonia Christmas Cactus Myrtle Coral Plant Oleander Periwinkle Wax Plant Cathedral Bells Glory Bower Lantana Lemon Verbena Coleus Jerusalem Cherry Red-Pepper Kenilworth Ivy Cape Primrose Bouvardia Italian Bluebell Chrysanthemum Leopard Plant

German Ivy Velvet Plant Cissus rhombifolia Abutilon hybridum Begonia tuberhybrida Zygocactus truncatus Myrtus communis Ardisia crenulata Nerium Oleander Vinca major var. variegata Hoya carnosa Ceropegia Woodii Clerodendron Thomsonae Lantana Camara Lippia citriodora Coleus Blumei var. Solanum pseudocapsicum Capsicum frutescens Cymbalaria muralis Streptocarpus kewensis Bouvardia Humboldti Campanula isophulla

Chrysanthemum hortorum Ligularia Kaempferi var. aureo-maculata Senecio mikanioides Gunura aurantiaca Grape Mallow Begonia Cactus Myrtle Myrsine Dogbane

Milkweed "Verbena

Mint Nightshade

Figwort Gesneria Madder Bellflower Daisy

"
THE LIBRARY OF THE

APR 2 0 1937

THE ILLUSTRATIONS

UNIVERSITY OF ILLINOIS

Most of the photographs in this leaflet were made for Field Museum by Hermann Lusche and acknowledgement is made of the courtesies and cooperation extended in this connection by Garfield Park Conservatory and by the greenhouses of Frank Oechslin & Co., in Berwyn. The latter also loaned the photograph of Poinsettia, Vaughan's Seed Store those of Hyacinth, Cyclamen and Amaryllis, American Bulb Company that of Cineraria.







UNIVERSITY OF ILLINOIS-URBANA

3 0112 033629392