House plants

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House Plants

By J. B. Wingert

Growing plants indoors serves at least three purposes. It satisfies a common desire to have growing plants the year around. It provides an interesting and challenging hobby for those who attempt to grow an extensive collection of pot plants. House plants also can play a definite part in interior decoration when varieties are carefully chosen, well grown and properly placed. Regardless of purpose, there are relatively few homes that do not include at least one house plant.

House plants vary widely in their ability to thrive under certain house conditions. One objective of this bulletin is to point out the strengths and weaknesses of various indoor plants so that the homemaker may select varieties which are suited to growing conditions in the house. Light, temperature, humidity and frequently the type of fuel used for cooking or heating will influence the degree of success with which potted plants can be grown.

THE FIRST CONSIDERATIONS

LIGHT AND EXPOSURE

One of the most important problems in growing house plants is the provision of sufficient sunlight during winter months. Flowering plants, with few exceptions, need all of the direct sunlight possible during midwinter if they are to bloom freely. On the other hand, some of the choicest foliage plants can be grown successfully without any direct sunlight if they are in a bright room. East and south windows are the most suitable for flowering plants during midwinter. South windows give the greatest amount of sunlight, but during midday, when the sun is brightest, the temperature around the plants frequently is too high for their best growth. Drawing the shade or moving the plants away from the window for an hour or two at noon on bright days will overcome this difficulty.

Records indicate that west windows are not as suitable for many house plants as are east or south windows. Extreme variation in temperatures between day and night probably ac-
counts for this condition. North windows need not be abandoned, as they provide a good location for growing such plants as English ivy, Boston fern, philodendron, peperomia and sansevieria, which do not require direct sunlight.

**TEMPERATURE**

High temperatures are responsible for the failure of many house plants. Daytime temperatures maintained at 70°* and below are better suited for almost all house plants than are temperatures above 70°. If temperatures in the location where plants are being grown must be maintained above 70°, it is advisable to select those plants which are tolerant to heat. At night, in many homes, the temperature drops many degrees. The greatest fluctuation is usually near the windows. Under such circumstances it is helpful to move plants away from the windows for the night or protect them with newspaper. A difference of about 10° between day and night temperatures is not too much.

In the discussion of different plants later in this bulletin, daytime temperatures are listed as high, medium and low. High has been considered as 68-75°, medium as 60-68° and low, 50-60°. In many instances the plants will do as well or better in a lower temperature range than that indicated, the upper range being given merely to show tolerance to heat.

*All temperatures given in this bulletin are Fahrenheit.
Fig. 2. A group of cacti for a warm, sunny room.

Fig. 3. A group of succulents adapted to a warm, dry atmosphere. Left to right: Japanese rubber plant, bryophyllum and aloe.
Fig. 4. A group of large house plants tolerant to warm, dry air and poor light. From left to right, Dracaena (Cordyline sp.), screw pine, cast-iron plant.

HUMIDITY

As daytime temperatures in the home are increased, relative humidity decreases unless adequate provisions are made. There is no doubt that the growth of house plants is greatly hindered by lack of atmospheric moisture. In greenhouses, average relative humidity runs as high as 70 or 80 percent. The same plants that flourish under those conditions struggle for existence in homes which are apt to have a relative humidity of 20 to 25 percent in winter. House humidifying is one way of helping this situation. Syringing the foliage of house plants frequently with water is another means of reducing injury from drying. Grouping pot plants on metal trays that contain moist moss or wet, crushed rock or gravel also helps.
GAS RESISTANCE

Many of our otherwise good house plants are very sensitive to small amounts of escaped gas in the air. Actual burning of a gas flame does not injure the plants, but the small amount of gas that escapes through careless lighting, poor combustion and small leaks does harm them. Care should be taken to avoid this condition.

PROPAGATION

Some house plants propagate readily from slips or cuttings without too much attention to moisture, temperature and other details. Others are much more sensitive to these conditions and unless given exact and regular care are seldom propagated successfully at home.

The best media for rooting slips or cuttings is clean, sharp sand. This should be moistened thoroughly at the time the cuttings are placed and then watered again only when showing signs of becoming dry. To prevent moisture loss from evaporation, the cutting boxes should be covered with a muslin cloth suspended several inches above the cuttings.

STEM CUTTINGS

This is the most widely used method of house plant propagation. The best cuttings are usually obtained from the new

Fig. 5. Stem cuttings rooted in sand. Three or four times as many cuttings could have been placed in this container.
or current growth, partially matured or ripened before the cuttings are made. Use stem lengths with two to four nodes (joints) and make the bottom cut with a sharp knife just under the lowest node. Remove the leaves from all nodes that will be placed below the sand. If the remaining leaf area is excessive, the leaves may be trimmed. Too much leaf area results in rapid evaporation of moisture. Too little leaf area delays the rooting process. Most stem cuttings are placed deep enough in the sand so that only the upper node (with leaves) and an inch or two of stem remain above the sand. After placing the cuttings in the propagating box, make the sand very firm, and water thoroughly.

**LEAF CUTTINGS**

Leaf cuttings are used to propagate some house plants, especially those having thick, fleshy leaves. Two general methods of placing leaf cuttings in the sand are used. With one, the leaves are placed vertically in the sand with the lower one-third of the leaf covered. With the other method, the leaves are placed flat or horizontally on the sand, the main ribs slit in several places and the leaf held in place with matchstick pegs. Proper humidity may be maintained about leaf cuttings by covering them with a glass cover or bell jar.

**SEED PROPAGATION**

A few house plants, chiefly annual flowers, are started from seed. These can be started in shallow boxes or seed flats,
Fig. 7. Propagation by leaf cuttings in sand. Center: vertical leaf cuttings; right: a horizontal leaf cutting. Note how the horizontal leaf cutting is pegged down to the sand with wooden pegs. Many more cuttings could be placed in a box of the size shown above.

using a mixture of about 2 parts of loamy soil, 1 part peat moss or leaf mold and 2 parts sand. This material should be thoroughly mixed and sieved through a ¼-inch mesh sieve. The seeds can be planted in rows at a depth of 3 to 4 times their diameter. Cover the seed flat with several thicknesses of paper to prevent drying, and remove the paper only after germination has taken place and the plants are above ground.

When potting rooted stem cuttings, rooted leaf cuttings or young transplanted seedlings, you should have: (1) A small container for the first potting, (2) more sand in the soil mixture for the first potting than is recommended for the larger plants, in the latter part of this publication.

**PLANT CONTAINERS**

The comparative merits of porous clay flower pots and glazed pots have been the subject of much controversy. Careful investigation indicates that the glazed containers are generally superior under home conditions. This is probably due to the dry atmosphere of homes which causes the soil to dry more quickly in a porous container, necessitating more frequent watering. Porous pots may be painted on the outside to reduce evaporation. Another convenient and satisfactory method is to grow the plant in a porous clay flower pot, placing this pot inside of a larger, glazed jardiniere or pot.
Because of the difficulties in judging the amount of water to use on a pot plant, it is seldom advisable to use any type of container which does not have a drainage hole (or holes) at the bottom to let surplus water drain away. Allow new pots to soak in water for a day or two before potting. Water mats in saucers are now available as special holders for porous pots to prevent drying out.

All flower containers should be cleaned thoroughly before use, not only as a sanitary measure to guard against pest infestations, but also to make easier the subsequent removal of the soil ball for repotting.

**SOILS**

Good garden soils are not necessarily good soils for potted plants. House plants are subjected to conditions of alternate wetting and drying, and there is a tendency for the soil to become packed and hard. The addition of fibre or humus in the form of rotted manure, leaf mold or peat moss helps to keep soil in a friable condition. Unless the garden soil is sandy, some added sand aids drainage. Since phosphorus is frequently a limiting factor in soils of the state, a small amount of bone-meal or 20-percent superphosphate may prove beneficial.

Soil requirements vary for different pot plants, but the three following mixtures are adequate as a source of potting soil for a general list of plants. Each mixture is numbered to correspond with the soil mixture number indicated later in this bulletin under the culture of specific house plants.

**Mixture No. 1**

- 3 parts garden soil (loam)
- 1 part rotted manure, leaf mold or peat moss
- 1 part sand
(Add 4 tablespoonfuls of bonemeal or 20-percent superphosphate to each peck of this mixture.)

**Mixture No. 2**

3 parts garden soil (loam)  
2 parts rotted manure, leaf mold or peat moss  
1 part sand  
(Add 4 tablespoonfuls of bonemeal or 20-percent superphosphate to each peck of this mixture.)

**Mixture No. 3**

1 part garden soil (loam)  
1 part sand  
(Add 4 tablespoonfuls of bonemeal or 20-percent superphosphate to each peck of this mixture.)

**POTTING AND REPOTTING**

When house plants are raised from seeds or cuttings, it is advisable to use small flower pots for the first potting. When cuttings are rooted or seedlings ready to transplant, they should be potted in 2-inch or 2½-inch flower pots (diameter measurement inside of rim at the top). After the plants have developed a good root system in these smaller containers, they can be repotted into the next larger size pot. Never "overpot" house plants by using containers too large for the size of the plant.

![Fig. 9. The plant on the left is pot-bound and ready for repotting. The plant on the right is not pot-bound and not ready for repotting.](image-url)
Fig. 10. When plants require repotting, they may be tapped gently on the corner of the potting bench as illustrated at left. The roots will be removed with the ball and will not be injured.

As stated in the discussion on "Containers," it is safer to use pots with drainage holes in the bottom. In addition, it is recommended that special drainage materials be used inside the flower pot to speed up drainage of surplus water. Pieces of broken pots, rough gravel or pebbles placed in the bottom of the container before filling with soil will help drainage.

The following steps should be considered in the first potting of a seedling or a rooted cutting:

1. Clean flower pot thoroughly.
2. Place drainage materials in bottom of pot.
3. Place a small amount of potting soil in the bottom of the container.
4. Hold seedling or cutting in one hand and carefully work soil in around the roots.
5. Firm the soil by pressing down with thumbs and by tapping bottom of pot on bench. The soil should be firm and without large air spaces but should not be packed until hard.
6. Leave space between the top of soil and rim of the pot for watering.
7. Water enough so that water comes through the drainage hole at the bottom of the pot.

In repotting or shifting to a larger pot, the following steps should be observed:

1. Place drainage materials in the bottom of the larger container.
2. Fill in a small amount of fresh potting soil.
3. Remove the plant and soil ball from original flower pot.
by inverting the pot and tapping the rim on the edge of a bench. (Hold two or three fingers of one hand over the surface of the soil while tapping to prevent the plant and soil ball from dropping from the container.)

4. Crumble off the old soil from the top of the soil ball.

5. By careful squeezing, gradually loosen the soil under the mat of roots along the side and bottom of the soil ball.

6. Place the old soil ball down in the larger pot and work fresh soil around the sides and some over the top.

7. Firm the soil.

8. Water until the water comes through the drainage hole.

After potting or repotting any plant, it is advisable to protect it from direct sunlight for 2 or 3 days. Plants that are newly potted require less frequent watering than those that have been established in a container for some time.

**FERTILIZING HOUSE PLANTS**

An occasional light application of fertilizer given to house plants is often an aid in getting better growth and foliage color. When good soil is use at potting time, this ordinarily is adequate to care for the plants for at least 3 or 4 months. Fertilizers are not cure-alls, and lack of fertility in house plant soils is seldom the chief cause for failure. Gradual slowing of growth or gradual fading of color of the leaves may indicate a need for fertilizer. Unless a person has been and is a close observer of such plant indicators, other troubles might easily be mistaken for soil deficiencies. For that reason, very light applications of fertilizers are suggested, as over-applications may be more harmful than a shortage of plant food.

![Fig. 11. The house plant on the left is correctly potted. The gardener should always allow enough room to hold water. This space will vary with the size of the pot; the larger the container the more space there will be necessary. Plants potted like the one on the right have no room to hold water. Consequently, such a plant is rarely given enough water.](image-url)
The effects of such careful treatment can be observed by the manner in which the plant responds. The so-called complete commercial fertilizers can be used either in dry form or dissolved in water. Never use more of these materials than is recommended in the instructions on the container. In many instances, these recommendations can be reduced one-half to the advantage of the pot plant.

Liquid manure may also be used to fertilize pot plants. To prepare this material, use fresh manure, add water, stir thoroughly and allow to settle. Draw the liquid from the top and dilute further with water until the color is similar to "weak tea." When applying liquid manure or commercial fertilizers dissolved in water, the soil should be fairly moist from the last regular watering.

Much interest has been aroused over the possibility of growing house plants in sand or water cultures. These methods are still in experimental stages and do not appear too promising for home use. Information on this subject is contained in the Iowa State College Extension Mimeograph, FG 310, "The culture of plants in nutrient solution."

**WATERING**

Correct watering of house plants is not learned through books, bulletins or word of mouth but by actual experience. Good judgment in watering house plants is essential to their successful culture. The following principles, however, should be observed:

1. Use enough water so that the moisture penetrates to the bottom of the pot.
2. Never water when the soil is still moist and muddy from the last watering.
3. Except for a few house plants, never let the soil become "crumbly dry."
4. Keep water off the foliage of plants that have downy or hairy foliage. Use a watering can with a long, thin spout.
5. If flower pots are placed on trays or in watertight jardinières, never let water stand in these unless the flower pots are raised sufficiently to keep the bottom of the pot out of water.
6. Well water and tap water sometimes contain materials that accumulate in pot plant soils and eventually prove harmful or toxic. When such conditions exist, soft water should be used if possible.

**SYRINGING**

House plants, with the exception of those having downy foliage and the members of the cacti and succulent groups, benefit from syringing the tops of the plant every few days. This may be done with fine mist attachments on water taps, with a fine mist syringing bulb or with a garden sprayer filled with water. Such a treatment helps to wash off dust, temporarily increases humidity about the foliage and aids in the control of certain house plant pests. Water that approaches room temperature is better than cold water.

**INSECT PESTS**

Anyone growing a collection of house plants will find it advantageous to examine closely any new plant additions and to grow them under observation away from other plants for 2 or 3 weeks. While insect pests may not be a general source of trouble on house plants, some of these pests may cause rapid and complete destruction unless properly controlled.

Spray materials are used to control some pot plant pests indoors, and if high pressure spray equipment is available, satisfactory results may be expected. More often than not, however, dipping the plants in a large container filled with the same spray materials is more effective than spraying. More complete coverage is obtained usually by dipping than by spraying. When dipping or spraying it is a good plan to keep the plant out of direct sunlight for a day after application to reduce the possibility of spray injury. When any of the oil emulsions or materials containing oils are used, rinse off the materials with clear water within 2 hours after application as a precaution against burning.

**APHIDS OR PLANT LICE**—Aphids are common pests on house plants. They are small, green, brown or black insects, occurring in colonies, chiefly on the underside of leaves and on young terminal growth. They measure from 1/16 to 1/8
of an inch long and are easily visible without the aid of a lens. Their damage is inflicted by sucking juices from the plant, causing stunting and disfiguring. The control measures used for aphids are simple and effective. Nicotine and soap are commonly used in the following proportions:

1 teaspoonful of nicotine sulphate, 40-percent solution
1 ounce of laundry soap
1 gallon of water
(Dissolve the soap in warm water and add the nicotine.)

Certain proprietary insecticides containing either pyrethrum or rotenone as active ingredients also are used for aphids. One should follow the directions on the container for mixing.

**MEALY BUG**—The mealy bug is a soft, fuzzy, white insect that is a serious pest on several house plants. These insects are frequently confused with some type of “mold or mildew” because of their appearance and their apparent inactivity. Some of the common host plants of mealy bug are coleus, ageratum, poinsettia, begonia, chrysanthemum and lantana. The control of mealy bug is made difficult because of the white, waxy covering which most insecticides fail to penetrate at their regular strengths. Repeated applications of oil emulsion sprays are fairly effective in keeping this pest in check, but the best method for eradication appears to be that of attacking the mealy bugs individually. This can be done with a small camel’s hair brush or a slender stick with a bit of cotton wrapped around the end. The brush or cotton is dipped into alcohol and then the back of each insect is touched with the alcohol-soaked material. (Spraying with alcohol should not be attempted because of the harmful effect on the plant.)

**SCALES**—The several brown scales found on ivy, oleander, ferns, poinsettia, rubber plants, lemon and orange trees, and usually a number of other plants with woody stems, are very difficult to control. The different species vary somewhat in shape but are generally rounded, flat and smooth, and they adhere closely to the stem or leaves. The sanest recommendation appears to be that of guarding against infestation by examining closely all new additions to the house plant collection and discarding all infested plants. When plants are small it is possible and practical to go over them carefully several
times at weekly intervals and rub off all scales by hand. The oil emulsion sprays are effective in holding infestations in check if regular applications are made, but complete eradication seldom results with this method.

**RED SPIDER**—The red spider is not a true spider but a tiny mite. And they are not always red but usually have a reddish appearance and may be tinged with yellow, orange or green. The mites are very small, fairly active and are generally more abundant on the lower surface of the leaf. A webby, crusty appearance on the underside of the leaf is a typical symptom when they are present, while the upperside of the leaf is a mottled yellow or gray instead of the normal green. Red spider infestations are more prevalent when the atmosphere is hot. With plants that will stand washing or syringing under strong pressure, this pest may be checked by letting the tap water run with considerable force on the foliage, especially the underside. This should be repeated every few days until the infestation is controlled. When this is not practicable, a very fine dusting sulphur may be dusted on the foliage at intervals of a week, until control is obtained.

**WHITE FLY**—This is a small, winged pest, white in color, which occasionally causes severe injury on ferns, geraniums, fuchsias, ageratum, verbena, primroses, coleus and other miscellaneous pot plants. Under home conditions, no satisfactory control measures have been developed, and the fumigation methods used in greenhouses are not safe to use in a home. If the plants can be taken outside and washed forcibly with water every 3 or 4 days, white fly may sometimes be checked.

**ROOT APHIDS**—These small insects feeding on the roots of potted plants may be controlled by watering the soil in the pot with a nicotine solution, using 1 teaspoonful of 40-percent nicotine sulphate to 1 gallon of water. This should be watered into the soil when the latter is still fairly moist from the last regular watering.

**REST PERIOD**

During seasonal growth cycles, a period of less active growth occurs on house plants as well as on the hardy plants growing outdoors. With some house plants, this slackening
of growth may not be apparent, and the cultural practices may continue the same throughout the year. (Example: English ivy.) On other house plants, the rest period is very apparent, and the necessity for a change in cultural practices is obvious. (Example: amaryllis.)

Even though no special rest period treatment is required, less watering is needed than during active growth periods. The rest periods for specific plants are indicated later in this bulletin.

**SUMMER CARE**

During the summer months there is a choice of two locations for house plants—indoors and outdoors. If a place well protected from wind is available, many house plants will thrive outdoors. Some of these plants will require heavy shading, others partial shade and still others full sunshine. If protected spots are not available and unless the plants are to be carefully watered and tended outdoors, then the wiser choice will be to keep the plants indoors where they will receive close attention and care.

![Fig. 12. A satisfactory method of handling house plants during the summer.](http://lib.dr.iastate.edu/bulletinp/vol1/iss14/1)
While many plants will make more thrifty growth outdoors if they are removed from their pots and planted in the soil, this method is seldom advisable because of the difficulties encountered when they are repotted in the fall. When the plants are kept in their pots for outdoor treatment during summer, the following steps should be taken:

1. Select an area large enough to accommodate the pot plants and then remove soil to sufficient depth so that a 2-inch layer of gravel or similar material can be used below the pots.
2. Place the pots on the drainage layer and fill in around them with loose soil so that the soil comes up almost to the rim of the pot.
3. Every 2 or 3 weeks lift the pots, remove the roots that have come through the drainage holes in the bottom of the pot and then reset the pots in their former position.

GLASS GARDENS

The principle which makes glass gardens (terrariums) useful is the retention of atmospheric moisture, plus the fact that they are self-watering. They are used for: Propagation of plants difficult to start under dry air conditions; growing specimen tropical plants that require high humidity; creation of miniature woodland or garden scenes through the use of native or cultivated plants.

Aquariums may be used for glass gardens, either placing them right side up with a glass cover cut to fit or upside down over a rust-proofed metal tray or pan in which the plants are grown. Various large glass jars and bowls with open mouths may be used for the glass garden. Glass lids should be cut to fit the top.

In the bottom of the glass garden or terrarium, place a thin layer of pebbles and charcoal before putting in the soil. For native plants, bring in some of the soil in which they are growing. For the cultivated plants, soil mixture No. 2 (page 403) may be used.

In addition to the plants, other materials such as small pebbles and twigs may be used to create miniature effects to scale. When the plants and accessories are in place, the garden should be sprinkled lightly. If the water collecting on the
inside of the glass appears excessive, raise the lid for several hours. Glass gardens should go at least a month without additional watering. It is advisable, however, to raise the lid every few days for a minute or two to change the air inside of the container.

The following plants are suggested for use in the glass garden:

1. Native juniper seedlings
2. Violets
3. Maiden hair fern
4. Various mosses
5. Only the smallest of native ferns
6. Wild strawberry
7. Blood root
8. Dutchman's breeches
9. Dog-tooth violet
10. Jack-in-the-pulpit
11. Small-leaved English ivies
12. African violets
13. Fancy-leaved caladiums
14. Wandering Jew
15. Everblooming begonias
16. Creeping fig
17. Spider ferns
18. Selaginella
19. Peperomia
20. Philodendron

PLANTING AND CARE OF BULBS

Some bulb plants may be grown similarly to other house plants, while others require special treatment. These special treatments may be grouped into two classes: (1) Growing in fiber or pebbles; (2) forcing in soil after preliminary storage treatment.

Bulbs that may be grown with the fiber or pebble method include: Paper white narcissus, Soleil d'Or narcissus, Chinese sacred lily (narcissus), French Roman hyacinths and lily-of-the-valley. When pebbles are used, the water level should be kept just below the bottom of the bulbs. When fiber is used, the fiber should be kept moist, but water should never stand. The narcissi and hyacinths should be stored in the dark at a cool temperature until the roots are 2 or 3 inches long and then placed in a light room with cool temperature. As soon as the tops are green, move to a sunny window until flowers open.

The lily-of-the-valley bulbs (pips) are planted in fiber and started immediately in sunshine.

The hardy narcissi, hyacinths, tulips, scillas, zephyranthes,
grape hyacinth, spring-blooming crocus and freesias are forced in soil. All except the freesias and zephyranthes should have cold storage treatment before forcing.

For bulbs requiring storage treatment, plant so that the tops of the bulbs are at the top of the soil, and be sure to provide good drainage. Unless a good cold storage cave is available, the best treatment is to place the bulb pots, after planting and watering, in an outdoor trench. Dig a trench 8 to 10 inches deep, put in a 2-inch layer of gravel or other drainage material and place the pots on this layer. Then fill in around the pots with sand or moist peat moss and cover the pots with the same material to a depth of about 1 inch. Then place a thick mulch of straw or coarse hay over this material.

After 10 to 12 weeks of this treatment, the bulbs should be well rooted in the pots and ready to be taken indoors as needed. They should be kept dark and at a cool temperature for 10 days or 2 weeks and then given a place in a light, cool room. When the flower stalks show, place the plants in the sunlight, but keep at a temperature of not more than 60° if possible. With almost all bulb stock, the flowers will last longer if removed from the sunlight as soon as the flowers begin to open.

Freesias and zephyranthes do not require the cold storage treatment and should be started in soil in a cool but light room. Plant the bulbs 1 inch deep, and as soon as the tops are an inch high, place the pots in a cool, light window.

TWENTY IMPORTANT POT PLANTS AND SUGGESTIONS FOR CULTURE

AFRICAN VIOLET

(Saintpaulia in variety)

Blue, lavender and purple flowers with long periods of bloom. From November through March they bloom more freely if given full sun. During the remainder of the year they should be placed away from direct sunlight. Plants can be kept healthier and more attractive if divided when they become crowded. They propagate by division or vertical leaf cuttings. (Soil mixture No. 2.) Keep shaded indoors during summer. No decided rest period. Discard plants if they become infested with mealy bug or mite.
AMARYLLIS

(Hippeastrum hybrids)

The variously colored showy flowers are valued highly for early spring bloom. Obtain bulbs in late fall and pot in soil mixture No. 1. About half of the bulb should be above soil. Use a pot as small as possible to encourage bloom, and keep in cellar for a month to 6 weeks. Then place in a sunny window of medium temperature. After bloom, the plants should be kept watered and growing actively. Pots may be placed outdoors during summer in partial shade. Continue regular watering until foliage starts dying, and then reduce the amount gradually, but do not let dry completely. Place in cellar about the middle of September, and give them only enough water to prevent complete drying. December 1, give thorough watering and when growth starts, bring up to a light window. Water occasionally with liquid manure from the time growth starts until late spring, and keep the bulb in the same pot for several years so that it remains pot-bound.

BEGONIAS

1. Begonia semperflorens (perpetual or everblooming begonia) Small to medium, waxy, green leaves. Continual blooming habit. Full sun during winter months, par-

Fig. 13. Amaryllis (Hippeastrum sp.) growing in soil.

Fig. 14. Everblooming begonia (Begonia semperflorens).
tial shade indoors during summer. Tolerant to warm rooms and low humidity, but quality is better in cool room with high humidity. Gas resistance, medium. Propagation by stem cuttings. Avoid wetting foliage. Soil mixture No. 1.

2. *Begonia socotrana* (winter-flowering or Christmas begonia.) A very prolific plant for several weeks in midwinter. Needs full sun and medium temperatures when in bloom. Plants are sensitive to slightly adverse conditions during pre-bloom period, and consequently it is advisable to purchase plants in bloom, and discard when bloom period is over.

Fig. 15. *Begonia socotrana* is the most floriferous begonia in early winter but cannot be easily propagated under house conditions. See text.

Fig. 16. Foliage begonias—Rex, Angel wing and Beefsteak.
3. *Foliage begonias* (Rex, angel’s wing and beefsteak begonia) Of the numerous begonias grown for beauty of foliage, the three listed above are the most widely used. Beefsteak and rex begonias are propagated by leaf cuttings and the angel’s wing by stem cuttings. Soil mixture No. 2, using leaf mold. Keep shaded indoors during summer and moderate light in winter. Will tolerate warm room temperatures. Do not wet the foliage.

**BOSTON FERN**

(*Nephrolepis exaltata, var. bostoniensis*)

The boston fern is tolerant to warm room temperatures if the humidity is fairly high. Frequent syringing or washing of the foliage with water is beneficial. Provide best drainage and do not overwater. Place in north window or in a light room away from direct sunlight. Gas resistance, medium. Propagation by division. Soil mixture No. 2. Keep indoors in summer unless a shaded, wind-protected place is available outdoors. No special rest period required. When plants become straggly, it is better to divide and start again with small plants rather than to attempt to rejuvenate them.

Fig. 17. A group of ferns. The one on the left is the house holly fern, and the one on the right is the asparagus fern (*Asparagus sprengeri*) (it is not a true fern although commonly called a fern). The fern in the center is the common Boston fern.
Fig. 18. The above three types of Bowstring hemp (*Sansevieria* sp.) are very resistant to dry air and lack of water.

**BOWSTRING HEMP**

*Sansevieria* zeylanica

A very useful foliage plant because of its adaptation to poor light, high temperatures and dry atmosphere. Resistant to gas. Soil mixture No. 1. Propagated by vertical leaf cuttings or division. No special rest period. Keep soil fairly dry.

**CAST-IRON PLANT**

*Aspidistra lurida*

The cast-iron plant, grown for its foliage, is very resistant to adverse house temperatures, gas, low humidity, careless watering and poor light. It may be grown successfully away from direct sunlight, or may be grown in full sun. The foliage is coarse, but may be kept attractive by frequent washing. Propagation by division. Soil mixture No. 1. No special rest period. May be kept indoors or outside during the summer.
CHRISTMAS CACTUS
(Zygocactus truncatus)

Midwinter bloom, usually bright pink but available in orange-red and reddish purple. Should have good fall and winter light but partial shade outdoors in summer. Will tolerate warm room and low humidity. Gas resistance, medium to high. Requires less watering than most house plants but more than other forms of cacti. During early fall before buds are formed, keep dry and then gradually increase moisture as flowers develop, but never water excessively. Soil mixture No. 3. Propagated by placing the flat, fleshy stems in sand, watering once and then withholding water until rooted and ready to pot.

COLEUS
(Coleus blumei)

Variously colored foliage plants, sometimes called “Foliages.” Can be grown in reduced light, but the intensity of color in the leaves is increased in direct sun. Tolerant to warm rooms if the foliage is washed or syringed frequently. Gas resistance, low. Summer care—outdoors in sun. Soil mixture No. 1. Propagation by stem cuttings. Watch closely for mealy bug infestations.

CROWN OF THORNS
(Euphorbia splendens)

Its adaptability to warm room conditions and its continuity of bloom partially offset the disadvantage of treacherous thorns. Soil mixture No. 3. Propagation by stem cuttings of new growth. Give good light both winter and summer and moderate watering the year around. No regular rest period required.

CYCLAMEN
(Cyclamen persicum)

Red, pink and white flowers from late fall until early spring. Seed started in July produces blooming plants 16 to 18 months later for Christmas pot plant trade. Cyclamen are difficult to carry through this period, and it is advisable to purchase blooming plants and keep them through their blooming period.
Fig. 19. Cyclamen, an outstanding winter pot plant prized for both foliage and flowers. Such plants should be kept in a cool room where they will have full sunlight. They need to be watched carefully to prevent complete drying out of the soil and wilting of the foliage. Gas resistance, low. If carefully attended under proper conditions, a good cyclamen will give several months of attractive bloom. Plants are occasionally carried over for second season bloom, by continuing watering as long as the plant holds its leaves, then allowing the soil to dry and repotting in late summer in fresh soil. Soil mixture No. 1.

ENGLISH IVY

(Hedera helix)

A dependable vine under most house conditions. May be grown in partial sunlight but is best adapted to north windows or in light rooms away from windows. Tolerates fairly high temperatures and low humidity. Should be syringed or washed off once or twice a week. Gas resistance, medium to high. No regular rest period required. Place the pot in soil outdoors in shade or keep indoors during the summer. Soil mixture No. 1. Propagated by stem cuttings. Hahn’s self-branching ivy is a small-leaved variety that makes a bushy, compact growth without pinching.

Fig. 20. The variegated English ivy makes a good specimen house plant.
GERANIUMS

1. Bedding Geranium (*Pelargonium hortorum*) These red, pink and white flowers bloom throughout the year. Propagation by stem cuttings at any time. Soil mixture No. 1. Geraniums may be brought into bloom more quickly indoors if they are grown in small pots, the soil kept fairly dry and the plants kept in full sun. Older plants become ragged in appearance, consequently it is advisable to propagate regularly to maintain a supply of younger plants. Gas resistance, low.

2. Martha Washington Geranium (*Pelargonium domesticum*) Red, pink and white blossoms in the spring. Not so adapted to house conditions as the bedding geranium. Requires full sun, cool temperature and moist atmosphere during winter and spring months. Gas resistance, low. The plants should be placed outside in the garden soil in summer in sunshine and rested. In the fall they should be cut back severely, repotted,
taken indoors and grown in a cool, light room. Soil mixture No. 1. Propagated by stem cuttings.

3. **Sweet-scented geraniums** *(various fragrant-leaved geraniums)* Culture same as bedding geraniums.

**GLOXINIA** *(Sinningia speciosa)*

Variously colored large blooms in spring and summer. Requires warm, moist atmosphere during growth and bloom period. Should be in a light room, but not in direct sunlight. The roots should be obtained and potted in early January. Use soil mixture No. 2. Do not wet the foliage, and avoid excessive watering. After flowering period, the plants may be dried off and stored in a cool basement. Bring into warm room in January, and start off new growth by watering. Monthly ap-

Fig. 22. The Gloxinia makes a showy, summer-blooming pot plant.

Fig. 23. Dependable trailing plants: Philodendron, grape ivy and wandering Jew.
Applications of liquid manure during growth and bloom period will supply fertility, and the bulbs need not be repotted more often than every 2 or 3 years. When repotting is necessary, it should be done in the fall before placing in storage.

**GRAPE IVY (Japanese Grape)**

*Cissus rhombifolia*

A good trailing vine for partial shade or full sun. Tolerant of warm temperature and low humidity. Soil mixture No. 1. Propagated by stem cuttings. Frequent syringing and moderately heavy watering are needed for best growth. No special resting period. Summer care—either indoors or outdoors in shaded, protected location.

**JAPANESE RUBBER PLANT**

*Crassula arborescens*

A succulent, grown for foliage effect, and eventually reaching proportions too large for house plant use. It withstands heat and dry atmosphere fairly well and grows in reduced light. Gas resistance, medium to high. Soil mixture No. 1. Requires less watering than most house plants. Place the pot outdoors in partial shade during summer, and water only enough to prevent complete drying out. Propagated by stem or leaf cuttings.

**PEPEROMIA**

*Peperomia obtusifolia*

A waxy-leaved, upright, foliage plant that is very tolerant of high temperature, gas and dry air. During the winter months it gets along on a small amount of direct

Fig. 24. Fiddle-leaf fig (*Ficus pandurata*) on the left; rubber plant (*Ficus elastica*) on the right.
Fig. 25. Pot plant novelties: *Peperomia sandersii*, Norfolk Island Pine and *Peperomia obtusifolia*.

sunlight, and during summer it should be well shaded and preferably kept indoors. No special rest period. Soil mixture No. 1. Propagated by stem cuttings. This plant, because of its adaptability to reduced light and other adverse house conditions, could have much wider usage.

POINSETTIA

(*Euphorbia pulcherrima*)

The most popular florist pot plant at Christmas. The poinsettia is very sensitive to dry atmosphere and temperature changes. When plants are purchased at Christmas time, they should be given a warm, light and humid location. The plants should not be left too close to windows at night, since the drop in temperature is likely to hasten the yellowing and dropping of leaves. Gas resis-

Fig. 26. It is difficult to produce a good blooming poinsettia the second year as shown above, under normal conditions. See text for discussion.
It is recommended that new plants be purchased each year, but occasionally plants are carried over successfully by the following method: After the foliage drops in late winter, place the pot in the cellar and allow the plant to dry, but not shrivel. In June, the plant should be repotted in fresh soil, the tops cut back and growth started by watering thoroughly. The plant can stay outdoors in summer, but it should be brought in early, before the cool fall nights arrive.

**PRIMROSE**

*(Primula species)*

The primroses are of more importance as florist pot plants than as plants for growing at home. Three types are commonly used: The fairy primrose (*P. malacoides*), the Chinese primrose (*P. sinensis*) and the common primrose (*P. obconica*). One of these, the common primrose, has a tendency to produce a skin rash on some people. It is not advisable to attempt to

![Fig. 27. The common primrose (*Primula obconica*) on the left; the fairy primrose (*Primula malacoides*) on the right.](image-url)
carry over primrose plants. Either new plants should be obtained, or new plants should be started from seed in the spring. Soil mixture No. 2. Keep foliage dry at all times. Young plants should be shaded during summer and grown indoors. Give abundant light in winter, keep in a cool room and watch watering very closely. Primroses use considerable water but are subject to rotting if overwatered. Gas resistance, medium to high.

Fig. 28. An Azalea showing poor habit of growth due to lack of pruning. Azaleas should be shaped after the flowering period and before new vegetative buds are formed.

Fig. 29. The Airplane plant (Chlorophytum sp.) on the left, the Shrimp plant (Beloperone sp.) on the right and the Crown of Thorns, center, are three plant oddities.
SCREW PINE

*(Pandanus veitchi)*

The white and green striped screw pine is a striking specimen foliage plant. Tolerant to warm room conditions if atmosphere is kept fairly moist. During the most active growth periods, the plants require large amounts of water. Soil mixture No. 1. Propagated by suckers. No special rest period required, and plants are more easily handled indoors during the summer.

PERIWINKLE (Bigleaf periwinkle)

*(Vinca major)*

A foliage vine available in plain or variegated forms. Fairly tolerant of high temperatures, gas and dry air, but needs at least half a day of sunlight. Propagated by stem cuttings. No special rest period. Can be used outside in window boxes during summer.
<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Flower color</th>
<th>Winter light</th>
<th>Day temperature °F, 396</th>
<th>Humidity</th>
<th>Gas resistance</th>
<th>Soil</th>
<th>Propagation</th>
<th>Watering</th>
<th>Rest period</th>
<th>Summer care</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>African violet</strong>*</td>
<td>foliage</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>1 dividing,</td>
<td>medium to heavy</td>
<td>no special</td>
<td>indoor shaded</td>
<td>Grass-like leaves, variegated</td>
</tr>
<tr>
<td>airplane plant</td>
<td>foliage</td>
<td>partial shade</td>
<td>medium to high</td>
<td>high</td>
<td></td>
<td></td>
<td></td>
<td>root cuttings</td>
<td>medium to heavy</td>
<td>no special</td>
<td>indoor shaded</td>
<td>light and dark green</td>
</tr>
<tr>
<td>(Chlorophytum elatum)</td>
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<tr>
<td>aloe</td>
<td>foliage</td>
<td>full sun</td>
<td>medium to high</td>
<td>low</td>
<td></td>
<td></td>
<td></td>
<td>3 leaf</td>
<td>light</td>
<td>no special</td>
<td>outdoor sunshine</td>
<td>Keep dry except when growth is very active. Cuttings require very little moisture.</td>
</tr>
<tr>
<td>(Aloe, varieties)</td>
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<td></td>
<td></td>
<td>cuttings,</td>
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<tr>
<td>amaryllis*</td>
<td>foliage</td>
<td>partial shade</td>
<td>medium to high</td>
<td>high</td>
<td></td>
<td></td>
<td></td>
<td>1 seed</td>
<td>medium to heavy</td>
<td>no special</td>
<td>indoor shaded</td>
<td>Makes a very tall plant in short time.</td>
</tr>
<tr>
<td>aralia*</td>
<td>foliage</td>
<td>partial shade</td>
<td>medium to high</td>
<td>high</td>
<td></td>
<td></td>
<td></td>
<td>stem</td>
<td>medium to heavy</td>
<td>no special</td>
<td>indoor shaded</td>
<td>small leaves, feathery appearance.</td>
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<tr>
<td>(Aralia japonica)</td>
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<td></td>
<td>cuttings,</td>
<td>medium to heavy</td>
<td>no special</td>
<td>indoor shaded</td>
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</tr>
<tr>
<td>artillery plant</td>
<td>foliage</td>
<td>partial or full sun</td>
<td>medium to low</td>
<td>medium</td>
<td></td>
<td></td>
<td></td>
<td>1 seed or</td>
<td>heavy</td>
<td>no special</td>
<td>indoor shaded</td>
<td>Fertilize frequently with liquid manure. Pinch back to keep plants bushy. Not a true fern.</td>
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<tr>
<td>(Pilea muscosa)</td>
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<td></td>
<td>division</td>
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<tr>
<td>asparagus fern</td>
<td>foliage</td>
<td>partial shade</td>
<td>medium to high</td>
<td>low</td>
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<td>1</td>
<td></td>
<td></td>
<td>indoor shaded</td>
<td>Use acid peat moss in the soil mixture No. 2, and include plenty of sand.</td>
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<tr>
<td>(Asparagus plumosus A. sprengeri)</td>
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<td></td>
<td>seed or</td>
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<tr>
<td>azalea*</td>
<td>flowering</td>
<td>pink, red, white,</td>
<td>partial shade</td>
<td>high</td>
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<td></td>
<td></td>
<td>2 buy</td>
<td>medium</td>
<td>no special</td>
<td>indoor shaded</td>
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<tr>
<td>(Rhododendron, varieties)</td>
<td></td>
<td>orange</td>
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<td>plants</td>
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</tr>
<tr>
<td>begonia*</td>
<td>flowering</td>
<td>blue</td>
<td>full sun</td>
<td>low</td>
<td>medium to high</td>
<td>medium</td>
<td>grown as</td>
<td>outdoor sun</td>
<td></td>
<td>Keep in pot during summer.</td>
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<tr>
<td>Boston fern*</td>
<td>flowering</td>
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<td></td>
<td>in spring or summer</td>
<td>medium</td>
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<tr>
<td>bowstring hemp*</td>
<td>flowering</td>
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<td>summer</td>
<td>medium</td>
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<tr>
<td>browallia</td>
<td>flowering</td>
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<td>in spring or summer</td>
<td>medium</td>
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<tr>
<td>(Browallia, in variety)</td>
<td></td>
<td>blue</td>
<td>full sun</td>
<td>low</td>
<td>medium to high</td>
<td>medium</td>
<td>grown as</td>
<td>outdoor sun</td>
<td></td>
<td>Keep in pot during summer.</td>
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<tr>
<td>bryophyllum</td>
<td>foliage</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td>1 horizontal</td>
<td>light</td>
<td>no special</td>
<td>outdoor sun or shade</td>
<td>A persistent succulent.</td>
</tr>
<tr>
<td>(Bryophyllum pinnatum)</td>
<td></td>
<td>full or partial sun</td>
<td>medium</td>
<td>medium</td>
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<td></td>
<td>leaf cuttings</td>
<td></td>
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<tr>
<td>cactus* (various genera and species)</td>
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<td></td>
<td></td>
<td>3 best to</td>
<td>very</td>
<td>no special</td>
<td>outdoor sun</td>
<td>A group very tolerant to dry, warm house atmosphere. Keep soil dry.</td>
</tr>
<tr>
<td>calla</td>
<td>flowering</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>buy</td>
<td>light</td>
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<tr>
<td>(Zantedeschia, in variety)</td>
<td></td>
<td>white, yellow</td>
<td>full sun</td>
<td>medium to high</td>
<td>medium to low</td>
<td>medium</td>
<td>grown as</td>
<td>indoor shaded</td>
<td></td>
<td>Withdraw water gradually and rest in summer. Repot in fall.</td>
<td></td>
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</tr>
</tbody>
</table>

* See discussion of “Twenty Important Pot Plants and Suggestions for Their Culture” in text.
** See discussion of “Planting and Care of Bulbs” in text.
<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Flower color</th>
<th>Winter light</th>
<th>Day-temperature</th>
<th>Humidity</th>
<th>Gas resistance</th>
<th>Soil</th>
<th>Propagation</th>
<th>Watering</th>
<th>Rest period</th>
<th>Summer care</th>
<th>Miscellaneous</th>
</tr>
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<tbody>
<tr>
<td>cast-iron plant*</td>
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<td>Christmas cactus*</td>
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<tr>
<td>cineraria (Cineraria cruenta)</td>
<td>flower</td>
<td>various</td>
<td>full sun</td>
<td>low medium to high</td>
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<tr>
<td>clivia (Kaffir lily) (Clivia miviana)</td>
<td>flower</td>
<td>red</td>
<td>full sun</td>
<td>medium to high</td>
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<tr>
<td>coleus*</td>
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<td>crocus</td>
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<td>crown of thorns*</td>
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<tr>
<td>cyclamen*</td>
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<tr>
<td>dracaena (Dracaena fragrans)</td>
<td>foliage</td>
<td>sun or partial shade</td>
<td>medium to high</td>
<td>medium fairly tolerant</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>dracaena (Cordyline indivisa)</td>
<td>foliage</td>
<td>sun</td>
<td>medium to high</td>
<td>tolerant</td>
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<tr>
<td>English ivy*</td>
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<tr>
<td>fiddle-leaved fig (see rubber plant)</td>
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<tr>
<td>fig-marigold (Ice plant) (Mesembryanthemum rseeum)</td>
<td>flowering</td>
<td>pink</td>
<td>full sun</td>
<td>medium to high medium to low</td>
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<tr>
<td>flowering maple (Abutilon hybridum)</td>
<td>flowering</td>
<td>various</td>
<td>full sun</td>
<td>medium to low high low</td>
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<tr>
<td>freesia</td>
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</tbody>
</table>

* See discussion of “Twenty Important Pot Plants and Suggestions for Their Culture” in text.
** See discussion of “Planting and Care of Bulbs” in text.

When blooming plants are purchased, watch soil carefully, as the plants collapse quickly when dry.

Keep in same pot 3 or 4 years and feed with liquid manure.

Makes a large plant in a few years.

Provide good drainage and keep fairly dry at all times.

Keep growing but dry during summer; repot in fall.

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### Tabulated List of Miscellaneous House Plants Suitable for General Culture Under Home Conditions

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Flower color</th>
<th>Winter light</th>
<th>Day temperature see p.396</th>
<th>Humidity</th>
<th>Gas resistance</th>
<th>Soil</th>
<th>Propagation</th>
<th>Watering</th>
<th>Rest period</th>
<th>Summer care</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>fuchsia (Fuchsia hybrida)</td>
<td>flowering</td>
<td>various</td>
<td>sun</td>
<td>medium to low</td>
<td>very high</td>
<td>medium</td>
<td>1</td>
<td>stem cutting; buy plant</td>
<td>medium to heavy</td>
<td>summer for winter bloom</td>
<td>outdoor partial shade</td>
<td>Sensitive to dry atmosphere and temperature changes. Syringe frequently and water carefully.</td>
</tr>
<tr>
<td>gasteria (Gasteria verrucosa)</td>
<td>foliage</td>
<td>sun</td>
<td>medium to high</td>
<td>medium to low</td>
<td>3</td>
<td>suckers</td>
<td>light</td>
<td>no special</td>
<td>no special</td>
<td>outdoor sun</td>
<td>A succulent novelty.</td>
<td></td>
</tr>
<tr>
<td>geraniums*</td>
<td>foliage</td>
<td>sun</td>
<td>medium</td>
<td>medium</td>
<td>1</td>
<td>3 suckers</td>
<td>light</td>
<td>no special</td>
<td>no special</td>
<td>outdoor sun</td>
<td>Used some for porch boxes.</td>
<td></td>
</tr>
<tr>
<td>Germany ivy (Senecio mikanoides)</td>
<td>foliage</td>
<td>sun</td>
<td>medium</td>
<td>medium</td>
<td>1</td>
<td>stem cuttings</td>
<td>medium</td>
<td>no special</td>
<td>no special</td>
<td>outdoor sun</td>
<td></td>
<td></td>
</tr>
<tr>
<td>gloxinia*</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>grape hyacinth**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>grape ivy*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hibiscus (rose-mallow) (Hibiscus Rose-sinensis)</td>
<td>flower</td>
<td>red, pink, white</td>
<td>full sun</td>
<td>high</td>
<td>high</td>
<td>1</td>
<td>stem cuttings</td>
<td>heavy</td>
<td>no special</td>
<td>outdoor partial shade</td>
<td>Prune back severely in late summer to keep plant size down.</td>
<td></td>
</tr>
<tr>
<td>holly fern (Cytromium falcatum) (C. rochfordianum)</td>
<td>foliage</td>
<td>partial sun</td>
<td>medium to high</td>
<td>medium to high</td>
<td>2</td>
<td>spores; best to buy plants</td>
<td>medium to heavy</td>
<td>2 spores; best to buy plants</td>
<td>indoor partial shade</td>
<td>Tolerant to house conditions, and attractive if foliage is kept clean.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>hyacinth**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>hydrangea (Hydrangea hortensis)</td>
<td>flowering</td>
<td>pink, red, blue</td>
<td>full sun</td>
<td>low</td>
<td>high</td>
<td>1</td>
<td>stem cuttings</td>
<td>medium to heavy when mature</td>
<td>October, November, December</td>
<td>outdoor partial shade</td>
<td>Cut back after bloom; keep growing during summer; withhold water in fall; place in cellar after light frost and hold dry until January.</td>
<td></td>
</tr>
<tr>
<td>impatiens (Patience) (Impatiens sultana)</td>
<td>flowering</td>
<td>pink, red, white</td>
<td>full sun</td>
<td>low</td>
<td>medium</td>
<td>1</td>
<td>seed, or stem cuttings</td>
<td>medium</td>
<td>no special</td>
<td>indoor partial shade</td>
<td>Propagated year around, much the same as geraniums.</td>
<td></td>
</tr>
<tr>
<td>iresine (Bloodleaf) (Iresine herbata)</td>
<td>foliage</td>
<td>full sun</td>
<td>medium</td>
<td>medium</td>
<td>1</td>
<td>stem cuttings</td>
<td>medium</td>
<td>no special</td>
<td>no special</td>
<td>outdoor sun</td>
<td>Brightly colored foliage plant, commonly used for bedding effect.</td>
<td></td>
</tr>
</tbody>
</table>

* See discussion of “Twenty Important Pot Plants and Suggestions for Their Culture” in text.

** See discussion of “Planting and Care of Bulbs” in text.
## TABULATED LIST OF MISCELLANEOUS HOUSE PLANTS SUITABLE FOR GENERAL CULTURE UNDER HOME CONDITIONS.

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Flower Color</th>
<th>Winter Light</th>
<th>Day Temperature</th>
<th>Humidity</th>
<th>Gas Resistance</th>
<th>Soil Propagation</th>
<th>Watering</th>
<th>Rest Period</th>
<th>Summer Care</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japanese rubber plant*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Very sensitive to warm, dry</td>
</tr>
<tr>
<td>Jerusalem cherry (Solanum pseudocapsicum)</td>
<td>berried red berries</td>
<td>full sun</td>
<td>low</td>
<td>low</td>
<td>1 seed in February, buy plants at Christmas</td>
<td>medium to heavy</td>
<td>treated as an annual</td>
<td>outdoor sun</td>
<td></td>
<td></td>
<td>atmosphere and gas fumes. A</td>
</tr>
<tr>
<td>Kalanechoe (Kalanecho blossfeldiana)</td>
<td>flowering red</td>
<td>full sun</td>
<td>medium to low</td>
<td>1 seed in March or April</td>
<td>light</td>
<td>treated as an annual</td>
<td>outdoor sun</td>
<td></td>
<td></td>
<td>short-time holiday plant.</td>
<td></td>
</tr>
<tr>
<td>Lantana (Lantana camara)</td>
<td>flowering</td>
<td>various</td>
<td>full sun</td>
<td>medium to medium to low</td>
<td>1 stem cuttings</td>
<td>medium fall</td>
<td>outdoor sun</td>
<td></td>
<td></td>
<td>Keep soil dry. Has long period of</td>
<td></td>
</tr>
<tr>
<td>Lemon verbena (Lippia citriodora)</td>
<td>foliage</td>
<td>various</td>
<td>full sun</td>
<td>medium</td>
<td>1 stem cuttings</td>
<td>medium fall</td>
<td>outdoor sun</td>
<td></td>
<td></td>
<td>bloom.</td>
<td></td>
</tr>
<tr>
<td>Leopard plant (Ligularia kempferi var.)</td>
<td>foliage</td>
<td>partial shade</td>
<td>medium</td>
<td>medium</td>
<td>2 division</td>
<td>heavy no special</td>
<td>indoor shaded</td>
<td></td>
<td></td>
<td>Dark green leaves spotted</td>
<td></td>
</tr>
<tr>
<td>Lily-of-the-valley**</td>
<td>flowering</td>
<td>white</td>
<td>full sun</td>
<td>low to medium to high</td>
<td>1 stem cuttings</td>
<td>heavy no special</td>
<td>outdoor sun</td>
<td>The best white daisy for house</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Narcissus**</td>
<td>foliage</td>
<td>partial shade</td>
<td>low</td>
<td>medium to medium to high</td>
<td>1 stem cuttings</td>
<td>medium no special</td>
<td>indoor shaded</td>
<td>A trailing plant well adapted to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Night-blooming cereus (species of Cereus and Phyllocactus)</td>
<td>flowering white</td>
<td>partial shade</td>
<td>low</td>
<td>medium</td>
<td>3 stem cuttings</td>
<td>light</td>
<td>winter</td>
<td>outdoor shaded</td>
<td>Keep dry during winter rest period; blooms during summer; train on trellis and keep in same pot several years.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Norfolk Island pine (Araucaria excelsa)</td>
<td>foliage</td>
<td>partial shade or full sun</td>
<td>low</td>
<td>medium to high</td>
<td>1 stem cuttings</td>
<td>medium no special</td>
<td>indoor partial shade</td>
<td>A formal evergreen specimen tree. Too large for home use after 3 or 4 years.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* See discussion of “Twenty Important Pot Plants and Suggestions for Their Culture” in text.
** See discussion of “Planting and Care of Bulbs” in text.
<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Flower color</th>
<th>Winter light</th>
<th>Day temperature</th>
<th>Humidity</th>
<th>Gas resistance</th>
<th>Soil</th>
<th>Propagation</th>
<th>Watering</th>
<th>Rest period</th>
<th>Summer care</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>oleander (Nerium oleander)</td>
<td>flowering</td>
<td>pink, white</td>
<td>full or part sun</td>
<td>medium to high</td>
<td>medium to high</td>
<td>1</td>
<td>stem cuttings</td>
<td>heavy</td>
<td>winter</td>
<td>outdoor sun</td>
<td>Keep dry during winter rest period. Water heavily after buds are set. Makes large plant 3-4 years.</td>
<td></td>
</tr>
<tr>
<td>orange tree</td>
<td>foliage and flowers</td>
<td></td>
<td>full sun</td>
<td>low</td>
<td>high</td>
<td>1</td>
<td>seeds</td>
<td>medium</td>
<td>fall</td>
<td>outdoor sun</td>
<td>Keep fairly dry during rest period in fall.</td>
<td></td>
</tr>
<tr>
<td>palms (various genera and species)</td>
<td>foliage</td>
<td>shaded</td>
<td>medium to high</td>
<td>medium</td>
<td>medium</td>
<td>1</td>
<td>best buy small plants, seed</td>
<td>medium</td>
<td>no special</td>
<td>indoor shaded</td>
<td>Tolerant to high temperatures and dry atmosphere. Repot small plant every year.</td>
<td></td>
</tr>
<tr>
<td>pansy (Viola tricolor hortensis)</td>
<td>flowering</td>
<td>various</td>
<td>shaded</td>
<td>low</td>
<td>medium</td>
<td>2</td>
<td>seed in July</td>
<td>medium</td>
<td>fall</td>
<td>outdoor shaded</td>
<td>Pot in September and place in cold, light cellar. Bring to cool room, shaded in January, February or March.</td>
<td></td>
</tr>
<tr>
<td>peperomia*</td>
<td>flowering</td>
<td>various</td>
<td>full sun</td>
<td>low</td>
<td>medium to low</td>
<td>1</td>
<td>seed or stem cut. in September</td>
<td>medium</td>
<td>treated as annual</td>
<td>indoor shaded</td>
<td>When plants become straggly, prune back and fertilize with liquid manure.</td>
<td></td>
</tr>
<tr>
<td>petunia (Petunia hybrida)</td>
<td>flowering</td>
<td>various</td>
<td>full sun</td>
<td>low</td>
<td>medium</td>
<td>1</td>
<td>seed or stem cut</td>
<td>medium</td>
<td>treated as annual</td>
<td>outdoor sun</td>
<td>A vine tolerant to house conditions and growing well in soil or water.</td>
<td></td>
</tr>
<tr>
<td>philodendron (Philodendron cordatum)</td>
<td>foliage</td>
<td>shade</td>
<td>medium to high</td>
<td>medium to low</td>
<td>medium to high</td>
<td>1</td>
<td>stem cuttings</td>
<td>medium</td>
<td>no special</td>
<td>indoor shaded</td>
<td>Potted roses do not stand house conditions well. The polyantha roses are most likely to succeed indoors.</td>
<td></td>
</tr>
<tr>
<td>poinsettia*</td>
<td>flowering</td>
<td>various</td>
<td>full sun</td>
<td>medium to high</td>
<td>high</td>
<td>1</td>
<td>stem cuttings</td>
<td>medium</td>
<td>summer</td>
<td>outdoor sun</td>
<td>Tolerant to warm dry air. Large plants in a few years.</td>
<td></td>
</tr>
<tr>
<td>primrose*</td>
<td>flowering</td>
<td>various</td>
<td>full sun</td>
<td>medium to high</td>
<td>high</td>
<td>1</td>
<td>stem cuttings</td>
<td>medium</td>
<td>summer</td>
<td>outdoor sun</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rose (Rosa species)</td>
<td>flowering</td>
<td>various</td>
<td>full sun</td>
<td>medium to high</td>
<td>high</td>
<td>1</td>
<td>stem cuttings</td>
<td>medium</td>
<td>summer</td>
<td>outdoor sun</td>
<td></td>
<td></td>
</tr>
<tr>
<td>rubber plant (Ficus elastica)</td>
<td>foliage</td>
<td>partial shade</td>
<td>medium to high</td>
<td></td>
<td>medium</td>
<td>1</td>
<td>best to buy plants</td>
<td>heavy</td>
<td>no special</td>
<td>outdoor protected from wind and sun</td>
<td></td>
<td></td>
</tr>
<tr>
<td>sanseveria</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>bowstring-hemp*</td>
<td></td>
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</tr>
<tr>
<td>Scilla (Squill)**</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>screw pine*</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
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<th>Propagation</th>
<th>Watering</th>
<th>Rest period</th>
<th>Summer care</th>
<th>Miscellaneous</th>
</tr>
</thead>
<tbody>
<tr>
<td>shrimp plant (Beloperone guttata)</td>
<td>flower bracts</td>
<td>pink and white</td>
<td>partial sun</td>
<td>medium to low</td>
<td>medium</td>
<td>no special</td>
<td>medium to heavy</td>
<td>1 stem cuttings</td>
<td>medium</td>
<td>no special</td>
<td>indoor partial shade</td>
<td>An unusual potted plant, satisfactory if humidity is high and plant is frequently syringed.</td>
</tr>
<tr>
<td>silk oak (Grevillea robusta)</td>
<td>foliage</td>
<td>partial sun</td>
<td>medium to high</td>
<td>low</td>
<td>medium</td>
<td>no special</td>
<td>medium to heavy</td>
<td>1 seed</td>
<td>medium</td>
<td>no special</td>
<td>outdoor partial shade</td>
<td>Repot each fall; makes a large plant in a few years.</td>
</tr>
<tr>
<td>snapdragon (Antirrhinum majus)</td>
<td>flowering</td>
<td>various</td>
<td>full sun</td>
<td>medium to low</td>
<td>medium</td>
<td>no special</td>
<td>medium to low</td>
<td>1 seed in July</td>
<td>light</td>
<td>treated as an annual</td>
<td>discard</td>
<td>Use only the special forcing strains.</td>
</tr>
<tr>
<td>stonecrop (Sedum species)</td>
<td>foliage</td>
<td>full or part sun</td>
<td>medium to low</td>
<td>medium</td>
<td>medium</td>
<td>no special</td>
<td>medium to low</td>
<td>3 division of offsets</td>
<td>light</td>
<td>no special</td>
<td>outdoor sun</td>
<td>Interesting succulents adapted to dry, warm atmosphere.</td>
</tr>
<tr>
<td>strawberry (Fragaria, variety)</td>
<td>flowers</td>
<td>full sun</td>
<td>low</td>
<td>medium</td>
<td>1 best to buy plants</td>
<td>medium</td>
<td>no special</td>
<td>outdoor sun</td>
<td>The variety, Baron solemacker, is everblooming, runnerless and interesting for pot culture.</td>
<td></td>
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</tr>
<tr>
<td>tulip**</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>virea*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>wandering Jew (Tradescantia fluminensis)</td>
<td>foliage</td>
<td>sun or partial shade</td>
<td>medium to high</td>
<td>medium to high</td>
<td>medium</td>
<td>no special</td>
<td>medium to high</td>
<td>1 stem cuttings</td>
<td>medium</td>
<td>no special</td>
<td>outdoor sun or partial shade</td>
<td>Frequently grown in water.</td>
</tr>
<tr>
<td>waxplant (Hoya carnosa)</td>
<td>flowering</td>
<td>flesh colored, deep markings</td>
<td>full sun</td>
<td>low</td>
<td>medium</td>
<td>1 stem cuttings or layers</td>
<td>medium</td>
<td>fall and early winter</td>
<td>indoor partial or full sun</td>
<td>Train as a vine. Keep cool and dry, but in plenty of light during rest period. Blooms in spring and summer.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>zephyranthes**</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
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