



UW-MADISON EXTENSION



Plant Sciences

PROPAGATING AND GROWING INDOOR PLANTS

Member Guide



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Recommended Indoor Plants for Your Project

Common Names

Foliage

Coleus
Devil's Ivy
Dumbcane
Chinese Evergreen
Grape Ivy
English Ivy
Jade Plant
Philodendron
Prayer Plant
Peperomia

Flowering

African Violet
Begonia
Christmas Cactus
Geranium
Gloxinia



Image 1: Large plants can be produced in less time when using cuttings.

Cuttings

Cuttings are pieces of stems, leaves, roots and rhizomes cut from a parent plant. Cuttings, when planted, will produce new roots and shoots. These new plants, in most cases, will be identical to the parent plant. Cuttings are a form of asexual propagation: reproduction of new plants from vegetative (non-flower) parts of a plant. Not all plants are easily reproduced this way so seeds often are used. Seeds are a sexual means of propagation.

Many trees, shrubs, and indoor plants are propagated asexually with cuttings. One advantage is that large plants can be produced in less time when using cuttings, rather than seeds. (See Image 1.)

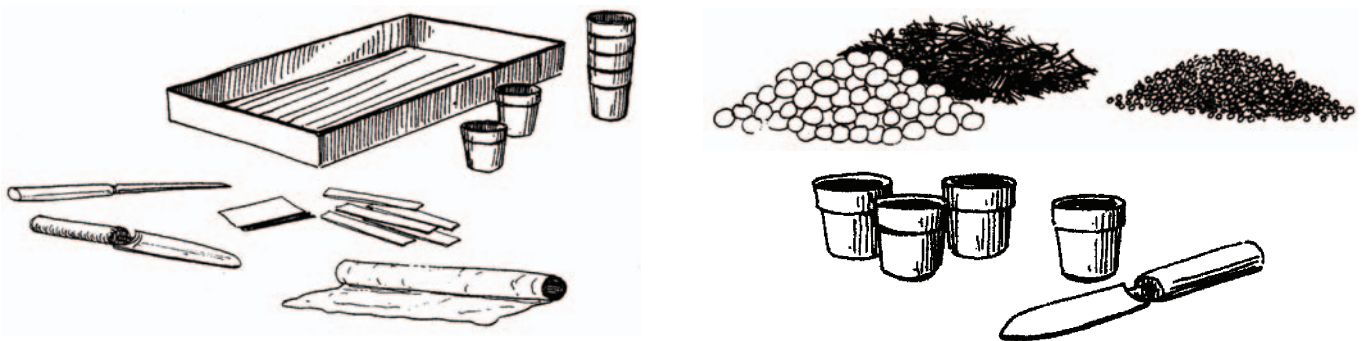
The following instructions will help you take cuttings from indoor plants. You may want to try reproducing several plants by stem, leaf, leaf-bud, root or rhizome cuttings.

Materials (See Image 2.)

- Flats or six-inch pots
- Knife
- Labels
- Clear plastic sheet
- Sphagnum peat moss
- Washed coarse sand
- Perlite

Rooting mixture - a soilless mixture containing equal parts peat moss, coarse sand and perlite. Prepare to plant by filling the flats or pots with the rooting mixture and soaking with water.

Image 2: Materials you'll need include flats or pots, knife, labels, clear plastic sheet, sphagnum peat moss, washed coarse sand and perlite.



Types of Cuttings

Stem cuttings

A stem is made up of one or more nodes and internodes. (See Image 3.) Nodes are at the point of attachment of one or more leaves. One or more buds are often formed at this point. Internodes are spaces between nodes. Geraniums, coleus and chrysanthemums are easily produced from stem cuttings. You may wish to experiment with other indoor plants. Choose your plants and get the pots or flats filled with the rooting mixture.

To make a stem cutting, start at the stem tip and count down three or four internodes. At that point make a clean, straight cut with a knife. That cut section is the stem cutting. Remove the bottom-most leaves on the cutting. For the cutting to root, be sure that you put the cut end (the one closest to old roots) into the moist rooting mixture. Bury to a depth of about one-third the length of the cutting. You may wish to try several cuttings of each type of plant. Do not place cuttings so close that their leaves touch. Label your plants. Cover plants and container with clear plastic, and set near a shaded window. Do not allow the rooting mixture to dry. Check for roots in two to three weeks. (See Image 4.)

Leaf-bud cuttings

A leaf-bud cutting actually is a stem cutting but it has only one node and a short stem piece. Thus, you may get several leaf-bud cuttings from one stem. Philodendron and English Ivy, both popular indoor plants, can be propagated by this method. Try other indoor plants to see if it works with them.

Cut the stem at an internode so that only one leaf or set of leaves is attached. The leaf is attached to the stem by a petiole. At this point on the stem is the bud. Place the cut end (the one closest to the old roots) into the moist rooting mixture so that the bud is buried one-half inch deep. Use several cuttings of each plant. Label and care for as you would stem cuttings. (See Image 5.)

Leaf cuttings

Some plants can be grown from the leaf or from the leaf blade and petiole. African Violet, Rex Begonia and Sansevieria are easily grown from leaf cuttings.

For African Violet, cut the leaf blade and petiole at its point of attachment to the stem. Bury the petiole end of the cutting into moist rooting mixture so that the blade is above the surface. (See Image 6.)

Image 3: A stem is made up of one or more nodes and internodes.

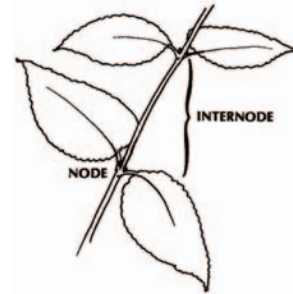


Image 4: Start at the stem tip and count down three or four internodes. Cover plants with clear plastic.



Image 5: Cut the stem at an internode so that only one leaf or set of leaves is attached. Place the cut end into the moist rooting mixture so that the bud is buried one-half inch deep.

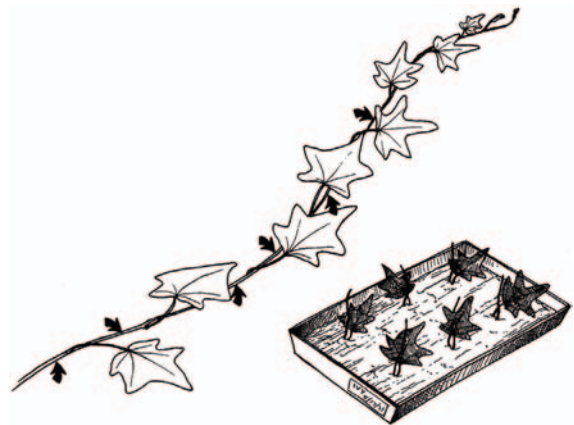


Image 6: For the African Violet, cut the leaf blade and petiole at its point of attachment to the stem. Bury the petiole end of the cutting into moist rooting mixture.



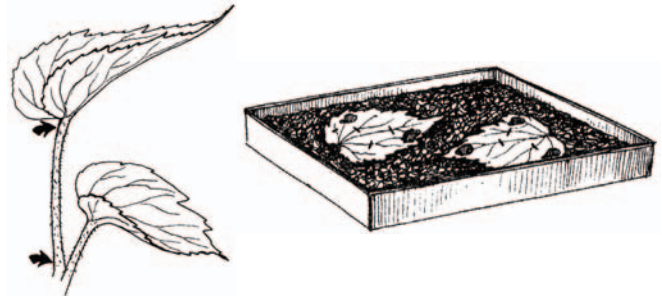
For Sansevieria, cut one long leaf into several sections. Each section should be three-to-four-inches long. The cut end (closest to old roots) goes into the moist rooting mixture. Bury in the rooting mixture so that one-half of the leaf is below the surface. (See Image 7.)

Image 7: For Sansevieria, cut one long leaf into several sections. The cut end goes into the moist rooting mixture.



Growing the Rex Begonia leaf is different. Cut a medium-sized leaf from the parent plant. Cut the petiole free from the leaf blade. Lay the leaf blade “face-up” on the moist rooting mixture. With your knife make several short, penetrating cuts across different veins of the leaf. Place several small stones on the leaf edges to keep the leaf pressed against the rooting mixture. (See Image 8.)

Image 8: For the Rex Begonia, cut a medium-sized leaf from the parent plant. Lay the leaf blade “face-up” on the moist rooting mixture.



To care for planted leaf cuttings, cover with clear plastic and set near a shaded window. Keep the rooting mixture moist. Roots will emerge and new shoots will form. Transplant when new shoots appear.

Root cuttings

Roots do not have true nodes and internodes but some have buds which are called “adventitious” buds. Ginger root is one of these and may be grown into a new plant. Ginger root is often found in the supermarket.

Image 9: Lay the root on its side on the moist rooting mixture and press it down so that it is buried halfway.

Select several pieces which are at least four inches long. Lay the root on its side on the moist rooting mixture and press it down so that it is buried halfway. Cover with a piece of clear plastic and set near a window. (See Image 9.)



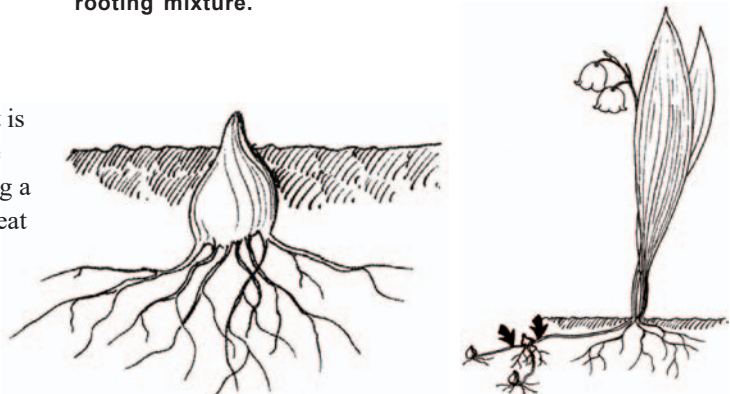
Rhizome cuttings

A rhizome is an underground stem with nodes and internodes. In Lily-of-the-Valley, a large bud forms on the rhizome. This bud is called a pip. The pips can be dug in the fall and replanted in a pot for indoor growing. To make a cutting, dig a rhizome having several pips. Cut pips from the rhizome. Plant pip with roots down and slightly spread. Longer roots may be pruned to three inches. The growing tip of the pip should be at the surface of your rooting mixture. Water and set near a window away from heaters. Watch and wait. (See Image 10.)

Image 10: Plant pip with roots down and slightly spread. The growing tip of the pip should be at the surface of your rooting mixture.

General Care

Check for new roots by gently tugging on the cutting. If it is not easily pulled from the rooting mixture, then roots have formed. Transplant the rooted cutting into a pot containing a soil mixture of two parts garden or potting soil, one part peat moss, and one part perlite. Water soil thoroughly after transplanting is complete.



Runners, Division and Air Layering

Runners, division and air layering are methods of reproducing plants without using seeds. They are ways of increasing the number of new plants from a single stock plant using vegetative (non-flowering) plant parts.

Materials

- Four- or five-inch pots
- Knife
- Clear plastic film
- Hairpins or paper clips
- Sphagnum peat moss
- Coarse sand
- Potting soil or garden loam
- Rubber bands

Soil mixture

- 2 parts potting soil or garden loam
- 1 part washed coarse sand
- 1 part sphagnum peat moss

Runners

Runners are specialized stems which grow along the surface of the soil and form a new plant at one of the nodes (bud). (See Image 11.) Strawberry geranium, Spider plant and Boston fern are three indoor plants commonly produced from runners. Choose several plants that have these well developed runners and you are ready to begin.

Method

- 1) Fill several pots with the soil mixture and water thoroughly.
- 2) Take one of the plants and place several of the runners, which have tiny plants forming on them, into the soil-filled pot. Do not cut the runners.
- 3) Pin runners to the soil mix at each plantlet using a hairpin or paper clip.
- 4) Water lightly.

If you have more than one plant, repeat these four steps.

Set the pots near a window but away from heaters. Keep the soil mixture moist and check in two weeks for roots. When the roots have formed, cut the runners. The propagation now is complete.

Divisions

Some plants grow in such a way that their “crowns” (growing points at soil surface) can be divided as a means of propagation. Many ferns, African Violets and Snake Plants (*Sansevieria*) can be reproduced this way. Plants which have outgrown their pots are often divided and then repotted. Not all plants can be successfully divided, so carefully choose the plants you wish to use. (See Image 12.)

Method

- 1) Check the plant’s crown for possible places to make the division. Some plants, like African Violets, will have noticeable areas where several new plants have formed. In other plants, as with many ferns, the division area is not as noticeable.
- 2) Knock the plant, soil and all, from the pot. Cut or pull the crown apart so that each section has roots. Avoid root injury as much as possible during the division process.
- 3) Transplant these divisions into separate pots using the soil mixture. Do not plant the crown any deeper than it had been in the original pot. Water thoroughly and return the plant to the desired location.

Image 11: Runners are specialized stems which grow along the surface of the soil and form a new plant at one of the nodes.



Image 12: Plants which have outgrown their pots are often divided and then repotted.



Air Layering

Indoor plants, such as Croton, Dieffenbachia and Schefflera, are often propagated by air layering. However, Rubber Plant is probably propagated by air layering more often than any other indoor plant. Air layering or Chinese layering is often used on plants that have become tall and leggy. The advantage is that air layering can cause the lower stalk or stem to branch, as well as produce a whole new plant. Air layering is unusual in that the cutting grows roots while it is still attached to the stock plant. Select plants that can be air layered and are large enough to work with. The basic method is the same from one plant to another.

Method

- 1) Measure down from the growing tip of the plant and determine the point on the stem where you would like the roots to form. In most cases do not measure more than two feet. (See Image 13.)
- 2) With your knife make a downward slice at a 45 degree angle, one-third of the way into the stem. When making a cut into a Rubber Plant, a white sap may “bleed” from the stem. Keep this wiped clean from the stem as much as possible. Slightly spread the “wound” that you have made and insert a small amount of sphagnum peat moss so that the wound will not close up. (See Image 14.)
- 3) Moisten a big handful of sphagnum peat moss. Squeeze out the excess water just as you would squeeze out a sponge. The moss should be damp, not dripping wet. Wrap generous amounts of dampened peat moss around the stem and the wound. The peat moss will contain the roots that will emerge from the wound. Completely cover and seal the peat moss with plastic film (double-duty aluminum foil may be used). Tie the bottom and top of the plastic film with string, cut rubberbands or wrapping tape from bread bags. Plants should be given regular care during the rooting period. (See Image 15.)
- 4) After four or five weeks, roots should be visible near the edges of the peat moss. Once roots have formed, the next step is to separate the rooted cutting from the rest of the plant. Do this by cutting through the stem directly below the newly formed roots. Transplant the new plant to the pre-described soil mixture. The remaining under-portion of the stock plant may send out new leaves. (See Image 16.)

Image 13: Measure down from the growing tip of the plant and determine the point on the stem where you would like the roots to form.



Image 14: Make a downward slice at a 45 degree angle, one-third of the way into the stem. Wrap a generous amount of peat moss around the stem and wound.

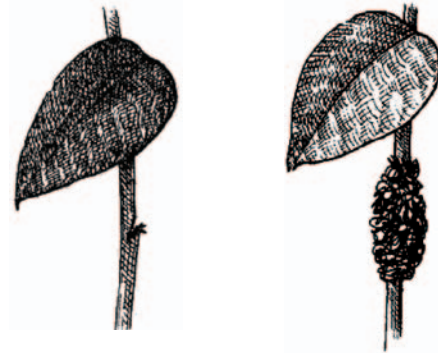


Image 15: Completely cover and seal the peat moss with plastic film. After four or five weeks, roots should become visible near the edges of the peat moss.

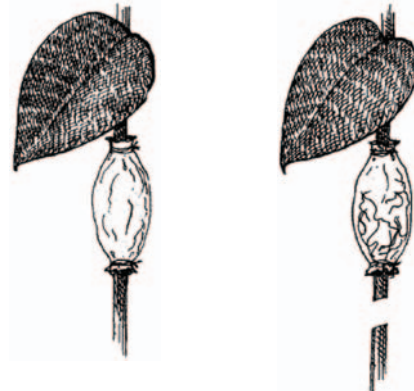
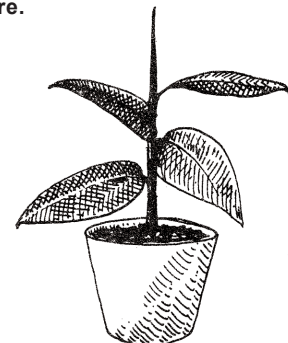


Image 16: After roots have formed, separate the rooted cutting from the rest of the plant. Transplant the new plant to the pre-described soil mixture.



Growing Plants Indoors

Plant Selection and Indoor Conditions

Light

When choosing plants to be grown indoors, light or lack of light is one of the more important factors to consider.

Low light - light intensity some distance away from windows and indoor lighting.

Medium or indirect sunlight - light filtered by frosted glass or light-weight curtains.

High or direct sunlight - light received directly through window.

In general, the windows facing south receive more light than those facing north, unless they are shaded by other buildings or outdoor plants. "Sun-loving" plants, such as cacti, are placed at windows facing south while "shade-loving" plants, such as African Violets, are set at windows facing north. Trial and error will prove which window is best for your plants. (See Image 17.)

Humidity

Another important factor is the amount of moisture or humidity present indoors. In most cases, the humidity indoors is quite low. An indicator of low humidity would be browning of leaf tip and edges. Many plants can survive such conditions but will grow better if the amount of humidity is higher. Several steps can be taken to help increase the moisture in the air.

Fill trays with moist gravel or sand. Set potted plants on the surface. (See Image 18.)

Set plants in groups. The humidity tends to be higher around groups of plants than around a single plant.

It is more practical to choose plants to fit your indoor growing conditions than to change the conditions.

Choose plants which are suggested for your particular indoor conditions.

Containers

Clay and plastic pots are the two basic types of containers often selected for indoor use. Clay pots are porous and allow for air movement through the pot and into the soil. Plastic pots, on the other hand, are nonporous and virtually air-tight. Because clay pots are porous, the soil they contain will dry out much faster and will have to be watered more often than

the soil in plastic pots. As long as this is realized your plants can do well in either type of container. (See Image 19.)

Pot sizes are measured by inches in diameter and height. In standard pots the diameter will equal the height. (See Image 20.)

Image 17: Trial and error will prove which window is best for your plants.

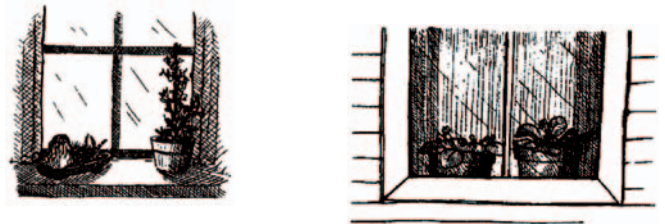


Image 18: Fill trays with moist gravel or sand. Set potted plants on the surface.



Image 19: Clay pots are porous and allow for air movement through the pot and into the soil. Plastic pots are nonporous and virtually air-tight.

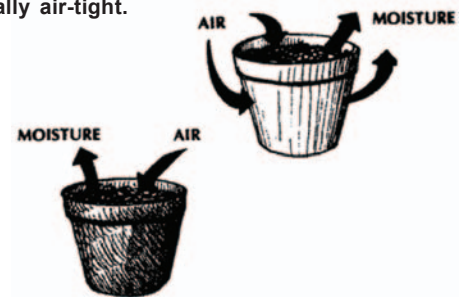


Image 20: Pot sizes are measured by inches in diameter and height.



Soil Mixture

Many indoor gardeners will get the “soil” they use from the backyard or nearby park. This soil may not be suitable for plants. A good soil or soil mixture should meet four basic requirements:

1. It should be porous enough to allow water to drain and air to move freely in and out. This air movement is essential for roots to respire or breathe. (See Image 21.)
2. It should hold enough water for plant use so that it does not quickly dry out.
3. It should provide support for the plant.
4. It should provide a source of nutrients for the plant.

Amendments

To meet the first two requirements it is often necessary to use amendments in the soil.

Washed coarse sand – improves drainage. (See Image 22.)

Perlite – volcanic pumice subjected to high heat causing it to expand. It is more effective than sand in improving drainage. (See Image 23.)

Vermiculite – mica subjected to high heat causing it to expand. Improves drainage and holds water. (See Image 24.)

Sphagnum peat moss – improves drainage and holds water. (See Image 25.)

Use of these amendments in the right amounts will improve properties of a garden soil or store-bought potting soil. Most mixtures (soil + amendments) contain one of the amendments for drainage (sand, gravel, perlite or vermiculite), sphagnum peat moss and soil.

Amounts of each are usually given in ratios: for example, 2:1:1 (2 parts soil: 1 part peat moss: 1 part sand). This particular mix is good for most tropical plants but a 1:1:1 mixture may be substituted for the 2:1:1 when plastic containers are used. (See Image 26.)

A 1:1:2 mix (1 part soil: 1 part peat moss: 2 parts sand) is good for cacti and succulent plants in clay pots.

Transplanting or Repotting

Transplanting is the movement of a plant, roots and all, from one area to another. In indoor gardening the most common transplant is a simple changing of pots and is usually called

repotting. Most indoor plants are repotted to a slightly larger pot once a year, to make room for new root growth. In addition, salts from fertilizer may build up in the old soil mixture causing harm to the plant. However, some plants can go several years without repotting because they may be “slow growers” or because they grow best when they are “root bound” – the latter is a condition where roots have grown tightly against the sides of the pot.

Image 21: A good soil or soil mixture should be porous and provide support for the plant.



Image 22: Washed coarse sand



Image 23: Perlite



Image 24: Vermiculite



Image 25: Sphagnum



Image 26: A 2:1:1 mix is good for most tropical plants, and a 1:1:2 mix is good for cacti and succulent plants in clay pots.



FOR TROPICAL PLANTS



FOR CACTI AND SUCCULENTS



Repotting plants

Prepare the soil mixture. Choose a pot slightly larger than the one presently being used. (See Image 27.)

Cover drainage holes in the bottom of the pot with small stones or pieces of broken clay pots.

Knock the plant from its pot. Do this by lightly tapping the edge of the pot against a hard surface, turning it over, and gently pulling at the base of the plant until the ball of soil and roots comes free from the pot. (See Image 28.)

Set the plant and the attached soil ball into the new pot and check how deeply the plant sets in the pot. Remove the plant and fill the pot with potting mixture to a level that when the plant is placed back in the pot it will set one-half inch to one inch below the top of the pot and will allow for watering space. Also, do not plant the “crown” (where plant base meets soil) any deeper than it had been. (See Image 29.)

Fill soil mixture around sides of the ball and a little on the top. Lightly pack the soil mix so that the new soil mix makes contact with the old soil ball.

Water thoroughly and the transplanting job is complete.

Watering

How much and how often should you water your indoor plants? That’s hard to say. The average building today usually has very little moisture in the air. You can correct this by placing pans of water on radiators so the moisture will evaporate in the air. Potted plants can be placed in shallow metal containers that have pebbles, sand, peat moss or sphagnum moss in the pan to absorb surplus water.

You should water plants in the morning when the temperature is rising and there is a greater need for water. (See Image 30.) It is not a good practice to water your plants or to have the soil wet when the temperature is falling, because diseases may get started this way.

Put on enough water to soak all the soil in the pot. Watering a little bit and often is not a good practice. At least once a week the pot should be put in a sink and left there to soak 5 to 15 minutes. Take it out and let it drain before returning it to its spot on the shelf.

Plants that have been re-potted need careful watering. Too much water will cause rotting and lack of water will cause the plants to wither and die.

In addition to moisture, plant roots need air. That is why the bottom of the pot has a hole for drainage. It prevents waterlogging of the plant roots. Plants in glazed flowerpots with no drainage holes should be watched carefully to prevent water from standing in the bottom. You can set the plant on stones or pebbles in the bottom of the glazed pot.

After your plants have started growing well, you can give them more water without harming them. Plants need more water in the summer than in the winter and more for

Image 27: Prepare the soil mixture and choose a pot slightly larger than the one presently being used.



Image 28: Knock the plant from its pot. Lightly tap the edge of a pot against a hard surface, and gently pull at the base of the plant.

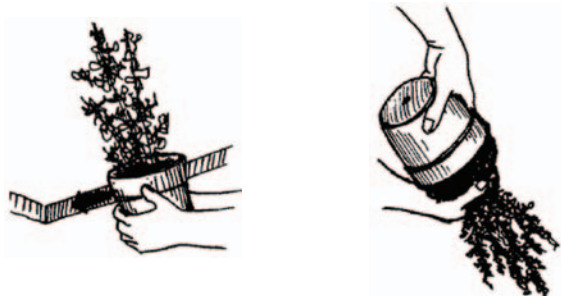
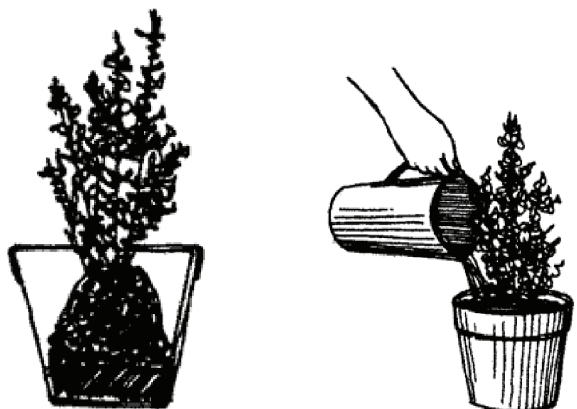


Image 29: Set the plant and the attached soil ball into the new pot and check how deeply the plant sets in the pot. Water thoroughly and the transplanting job is complete.



plants in a sunny window than those in a shaded window. Should your plants be watered from the top or the bottom? Both methods work. Top or surface watering is easier, provided enough room has been left in the pot for water. Pots filled to the top with soil are hard to water by the surface method. Pots sitting in saucers can be easily watered from the bottom.

One way to make sure that the soil is just moist enough is to use wick watering. This is a method that draws water up by a wick from a saucer-full of water. The wick is made of spun glass or burlap. Burlap will rot in a couple of months. Cut the wick long enough to flatten it out on the bottom of the pot and so it reaches the water in the saucer. If you use burlap, cut a piece 5 inches long and tie it in several places. Cut one end down from the top 1 1/2 inches and flare the top. Push the tied end through the hole from the inside of the flowerpot. Flatten the untied end on the inside bottom of the flowerpot. Add soil to the pot. Do not use any “crock” when you use a wick. It is easier to put the wick in when repotting, but plants already potted may be knocked out of the pot carefully and the wick put in place.

The pot should sit on a metal disk that is resting on the saucer. The saucer has water in it all the time. Wick watering works best on plants whose leaves must be kept dry, such as African violets or gloxinias.

Regardless of the method of watering you use, it must be done carefully, depending upon the plant, the weather and whether the plant is in a resting period.

Training

Some plants require special training to make them grow into a nice shape. There are several ways to do this.

Pruning helps plants keep a good shape and makes stronger flowers. This is done by using a sharp knife or pruning shears to cut back the branches. Plants such as geraniums and begonias are pruned at the time of transplanting.

Pinching is done to make the side shoots develop into a branching, bushier plant. The tip of a growing shoot is removed, usually by rolling it out with the fingers. A young geranium plant is pinched to make a bushy plant.

Training plants to grow on a special support by tying them in place is referred to as training. You can make or buy such supports. Philodendron is usually trained to cover a support, such as a piece of bark. Aerial roots of the philodendron plant will attach themselves to any rough material.

Fertilizing

You can fertilize or feed plants after they are rooted in the pots. How much or how often is hard to say. The potting soil usually has enough food to grow the plant for some time. When the pot becomes crowded with root then it may need a fertilizer.

Don't fertilize plants if they look sick and don't fertilize plants that are in a resting period.

There are many kinds of fertilizers – tablet, dry powder and liquid types. Follow the directions on the container and remember that too little fertilizer is better than too much.

Rest Periods

When active growth stops, plants are said to be “resting.” In some plants this is seen easily, others are not so easily seen.

A resting period comes after a period of active growth which may be long or short. Don't water the plant so often at this time and don't give any fertilizer. The drying-off process should be gradual and should stop when the leaves are yellow and limp. After the blooms have died, they should be removed, but the foliage should be kept growing since it is making food for next year's blooms.

Image 30: You should water plants in the morning when the temperature is rising and there is a greater need for water.



Flowering Plants

African Violet - *Saintpaulia ionantha*

Strange as it seems, the African violet is not a violet, but is related to the gloxinia. The blossoms can be white, pink, purple or blue.

African violets will grow anywhere in the home as long as the temperature does not drop below 60°. If they are grown in a south window, a thin curtain should protect them from the hot sunshine.

Keep your African violets constantly moist at the roots. Wick watering works well with them. If you water from the top, and the plants sit in the sunshine, be careful not to splash cold water on the leaves. If you do, the leaves may develop “ring spot,” which doesn’t hurt the plant, but doesn’t look very nice.

In their native land, African violets grow at the foot of waterfalls. They are constantly being sprayed and splashed with water. You should occasionally put the plants in the bathtub and turn the shower on them gently to wash the dust off the leaves.

This is one indoor plant that should not be put outdoors in the summer. It may stop blooming, but does not require a resting period.

To propagate, use leaf cuttings or divide the plant if several are in one pot. It takes about four months for it to bloom from a leaf cutting. Leaf cuttings may be rooted in a pot or a glass of water.



Christmas Cactus - *Zygocactus truncatus*

The Christmas cactus blooms around Christmas and will continue flowering until Easter. The branches are glossy, flat and leaflike. The flowers are about 2 1/2 inches long and range in color from pink to red. The blooms are on the tops of the branches.

Keep the plants in an east or west window. Shade them during the summer from the bright sunshine. During the flowering period, water the plants moderately until the new shoots start growing. Water the plant most after flowering to late summer.

Flower buds may drop and this can be caused by too much or too little water, cold drafts on the plant, gas in the air or poor light. A plant may be kept in the same pot for several years.

To propagate, take a piece of branch 2 or 3 segments long and root in a pot of sand.

Geranium - *Pelargonium zonale*

This is the common geranium. It grows well and flowers with little attention. Plants should be grown in a south window since they need lots of sunshine. The flowers are single or double and range in color from red to white. Plants may become tall and leggy as the lower leaves drop off. If the plants do become too tall, make some stem cuttings. Take a shoot off the parent plant and root it in a pot or a glass of water. Pot it after the roots form.

When 3 or 4 new leaves have formed, pinch out the top. Pinching will make the plant branch and become bushy.

Geraniums can be planted outside in flower beds. If you keep yours outside, take cuttings off the outside plant in September and start new plants for the fall. Your winter plant will be nicer if you do this.

Begonia - *Begonia semperflorens*

There are over a thousand kinds of begonias, but we are interested only in one – the wax begonia or fibrous rooted begonia. The plants have almost round, waxy leaves and fleshy stems. They bloom all the time. The flowers are small and range from cherry red to shades of pink and white.

Begonias grow well under most home conditions, prefer full light in the winter, but need shade from the bright summer sunshine. This plant is used as a bedding plant outdoors in some parks.

To propagate, use stem cuttings or divide the plant when it is too big for the pot.



Non-Flowering Plants

Coleus- *Coleus blumei*

This is one of the easiest indoor plants to grow and a very popular one. It is grown for its brilliant coloring and velvety-looking leaves. Mature plants will bloom, but the flowers are small.

Coleus plants like warmth with lots of light. During the winter the plants may become leggy and unattractive and there's nothing you can do about it. Keep the plants

watered well. Coleus can be grown in water; just feed it occasionally.

To propagate, use stem cuttings and root them in pots or water. After they are rooted, pot them and keep them in the window that has the most sunlight.



Philodendron - *Philodendron cordatum*

There are many types of philodendron, but the heartleaf philodendron is the most popular. It is one of the easiest indoor plants to grow and one that should be grown in a shaded location. The heart-leaf philodendron can be grown as a climbing vine or a trailing vine. The soil

should be kept moist, but not waterlogged. When the shoots get too long, they can be trimmed off and rooted. To propagate, use a stem cutting 4 to 6 inches long and root it in sand or water. Pot the cutting after it roots.

Pick-A-Back Plant - *Tolmiea menziesii*

This plant is grown for its interesting foliage and called pick-a-back because little plants develop at the tip of the leafstalk. These little plants in turn may produce smaller plantlets. The plants may have green flowers that are not particularly pretty. They should be watered freely and shaded from the bright sunshine.

To propagate, pot leaves with small plantlets in small flower pot. The leaves also can be rooted in a glass of water. Mature plants will grow in water or soil.

Snake Plant - *Sansevieria* - *Sansevieria zeylanica*

Common name for this is snake-plant or Bowstring hemp plant. The leaves are stiff, upright and strawlike and may grow 3 feet high. One variety has a yellow band around the edge of the leaves (*Sansevieria laurenti*).

Sansevieria is a very tough plant and sometimes is grown in dark corners of movie lobbies. It requires a cool temperature and may be grown in the same pot for

several years. The plant should be kept on the dry side during the winter; don't overwater it.

To propagate, use leaf cuttings about 3 inches long and insert in sand. Division must be used to propagate the yellow-leaved variety. The yellow-leaved variety will come up green colored if propagated by leaf cuttings.



Common Troubles of Indoor Plants

African Violet

Mealybug

Round, white, soft cottony insect that sucks plant sap. To control, wrap cotton on a toothpick and dip in alcohol. Gently touch each insect. Repeat frequently as needed. Washing insects off leaves may help.

Mites

Leaves in the center become stunted and deformed, caused by Cyclamen mite. To control, use a specific insecticide for mites, such as Kelthane. Discard badly deformed plants.

Spots on leaves

Ring-type spots on leaves caused by cold water splashed on the leaf while the plant is in the sunshine. To control, don't wet the leaves and keep the plant out of the bright sunshine when you water it.

Powdery mildew

White powder growth on leaf surface. To control, use a fungal product such as Funginex or Benlate.



Begonia

Mealybug
See African Violet

Aphids
Small, soft-bodied insects, usually green colored. To control, spray with a recommended insecticide*.

Leaf spot
Bacteria cause a water-soaked spot on leaf. To control, remove the leaf, keep foliage dry.

Leaf drop
Foliage drops if soil is wet, air is hot and dry, or if plant is in a draft. Gas can cause leaf drop.

Powdery mildew
See African Violet

Coleus

Mealybug
See African Violet

Geranium

Whitefly
Small four-winged white insect. To control, spray with a recommended insecticide*. Repeat as needed.

Mealybug
See African Violet

Red spider
Small reddish insect, very hard to see. Usually on the underside of the leaf. To control, wash leaves.

Cactus and Succulents

Mealybug
See African Violet

Philodendron

Drying leaves
Can be root injury, may be over watered, or air may be too dry.

Pick-A-Back Plant

Mealybug
See African Violet

*Check with your University of Wisconsin-Extension County Office for recommended insecticides. For more information on plants, check out the Plant and Soil Science Resources on the Wisconsin 4-H Website 4H.extension.wisc.edu



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