

Ananas comosus

Pineapple

Pineapples are one of the world's most unique and exotic tropical fruits, yet it is possible to grow it in a temperate zone under controlled conditions. Although you may not be able to grow as large a plant as is grown on a plantation in Hawaii, the following information should permit you to grow a healthy, attractive pineapple for your home.

Planting a pineapple

You have purchased a pre-potted pineapple start, but you can also start a pineapple from a crown, with the pineapple you buy at the grocery store:

Preparing a crown

Remove the crown from your pineapple by twisting or cutting it off. Any adhering flesh should be trimmed off its base, or it might rot after planting. After trimming, cut the bottom of the crown (its stem) until you see [root buds](#), which are small round structures visible around the perimeter of the stem base. Remove as little tissue as possible to avoid cutting into young stem tissue. To make planting easier, you can also strip off some of the lower leaves, exposing up to about three-fourths of an inch of the base of the crown. The small brown-colored bumps below the leaf scars are root primordia (the beginnings of roots) and there may even be a few short roots at the base if the crown.

After trimming and stripping, place the crown upside down in a dry, shaded place for about a week (5 to 7 days) before planting. This will permit the cut end and the leaf scars to heal and prevent rot.

Planting & Potting Mix

The easiest way to grow a pineapple is in soil. Use a good light garden soil, mixing in up to 30 per cent well-composted organic matter. A commercial potting soil will also work well and will assure a disease-free potting medium.

Start your pineapple in an 8-inch porous red clay pot. Later, when it outgrows this, transplant it to a 12-inch pot, the largest size you will need. Plastic posts can also be used, but extra care needs to be taken to be sure adequate drainage is provided and plants are not over-watered.

Be sure there is good drainage since pineapples do not like "wet feet." Provide drainage by placing a curved piece of broken pot over the hole in the bottom of the pot. Over this, add about a half an inch (1 centimeter) of coarse gravel. Then add your soil.

Tamp the soil firmly around the base of the crown at planting. Avoid getting soil into the central leaves of the crown. It is possible to start, and even grow your pineapple in water, but nutrients -- which can be purchased at a gardening store -- must be added. Ask for a hydroponic fertilizer, a soluble mix that contains all of the essential plant nutrients, and follow directions for shrubs.

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Feeding

Fertilize at planting and every two or three months thereafter with a good household plant food. If using a solid plant food, scatter it on the surface of the soil and wash it in by watering.

A liquid (foliar spray) fertilizer can also be used. Pour the solution into the base of the leaves and on the surface of the soil. Take special care not to pour the solution into the center of the plant as the young leaves may be injured. Follow directions under "small shrubs" given on the label of the products you use.

Watering

The pineapple plant is miserly with water, requiring only about 20 inches of natural rainfall per year, if well distributed. You need only wet the soil once a week, and when plants are indoors, it is best to apply all the water to the soil.

Light and temperature

Pineapple is a tropical plant and frost or freezing temperatures will kill it. If you live in a temperate climate, your pineapple must divide its time between your house and your porch or garden.

During summer, set your plant on a sunny porch or bury the pot in your garden. Do not take your plant out of the house until all danger of frost is past. When you first remove your plant from your house, keep it in a semi-shaded spot for several days to prevent sunburn.

During cold months, keep your plant in the house. Bring it in early in the fall. Place it near a window or sliding-glass door for maximum sunlight. At night, move it away from the window to prevent freezing. If the room is warm enough for you to be comfortable, the pineapple will be at the right temperature.

You can also grow your plant indoors, for example in a basement, by using "Plant-Gro" fluorescent light tubes. This light can also be helpful if your windows do not let enough sunshine into the room where you are keeping your plant. You should keep the light on for between 12 and 14 hours per day. When the plant gets large enough to bear a fruit (see Flowering and Fruiting below), you should reduce the daylength to 10 to 11 hours until the inflorescence appears in the center of the plant. You can then return to longer days.

Pests and diseases

As house plants, your pineapple will be subject to a minimum of pests and diseases if given proper care. The pests most likely to attack your plant are mealybugs, scale and mites. All can be removed by washing the leaves with soapy water, rinsing after with clear water. Or, spray with an insecticide. Be sure to follow the directions on the label when using insecticides.

The only disease you will likely encounter will be heart rot caused by fungi. In heart rot, the central leaves turn black and are easily pulled out of the plant. When heart rot occurs, the plant can sometimes be saved by pouring a fungicide into the heart (center) of the plant. If this stops the infection, a side shoot will start growing. This shoot will then become your plant and will eventually flower and form a fruit. Or you can remove it and begin a new plant (see "Other planting material").

For good insecticides and fungicides, talk to your nurseryman or visit your local garden store.

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Flowering and fruiting

Although the pineapple plant is attractive in itself, most growers want their plants to flower and fruit. In Hawaii, a crown takes about 20 months to produce a ripe fruit. It may take your plant that long, or longer.

When your plant is at least 24 inches (60 to 70 centimeters) tall and 12 to 14 months old, an inflorescence bud will begin to form in the center of the leaves. You will not be able to see the developing fruit until about two months later when a bright red cone emerges. Flower development in Hawaii typically occurs in late December or January when the days are short (about 10.5 hours) and the nights are cool (55 to 65 F; about 13 to 18 C).

Later, [flowers](#) -- light blue in color -open row by row over a period of about two weeks, starting from the bottom. When the petals of the last flower have dried, the fruit begins to develop. If your pineapple plant is at least 24 inches tall and has not flowered by the time it is 20 to 24 months old, you can "force" it with an inexpensive chemical.

Forcing your plant

To force your plant, place a small lump of calcium carbide about the size of your little fingernail in the center of your plant and pour a quarter cup of water over it. This will release acetylene gas which will force your plant to flower. To improve your chances of success, it is best to treat your plant in the evening after the sun goes down and temperatures are cooler. (Calcium carbide may be obtainable at a welding shop, garden store, pharmacy or toy store.)

You can also 'force' a plant by enclosing it completely in a polyethylene bag together with two ripe apples for one week. The ethylene gas released from the ripe apples will do the trick.

Harvesting your pineapple

When your fruit is about six months old, about four months after flowering has occurred, changes begin to occur. The color of the [shell](#) changes from green to rich gold. The color change of the shell occurs first at the bottom of the fruit and moves upwards. During this change, the fruit becomes sweeter and the [color](#) of the flesh changes from white to yellow. The fruit will weigh from two to four pounds.

When the fruit is golden half way up it can be picked and eaten. You can wait longer if you wish.

Producing a second or ratoon fruit

Either during or after the fruit on the mother plant has ripened, one or more shoots, they are called suckers by pineapple growers, will grow from the mother-plant stem. If you want your original plant to produce another fruit, leave one or at most two of the shoots on the plant to produce a second or ratoon fruit. Excess shoots can be cut off and potted (See Other planting material). Continue to feed and water your plant as you did when it was first planted. In Hawaii, it takes about one additional year to produce a first ratoon fruit. If the plant remains healthy, it may even be possible to produce a third crop, called a second ratoon.

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Other planting material

After the fruit is picked, branches on the main stem of the plant -- called [shoots](#) -- and sometimes on the stem just below the fruit -- called [slips](#) -- can be removed and used for planting material. After these branches are about 12 inches long, you can cut or break them off close to the stem. Many of the varieties now being grown produce few or no slips, so do not be concerned if your plant doesn't produce slips.

Prepare and grow your slips and shoots in the same manner you did your crown. In the case of slips, there may be a small knob at their base. This should be cut off. Because they are larger, slips and shoots will produce a fruit in less time than it takes for a crown. It is best to use plant size as a guide in determining the best time to force flowering. Slips and shoots grow most rapidly while attached to the mother plant, so it is best to let them grow for several months after the fruit is removed.