

Indoor Applications

PERLITE

Water, Air and Light

PLANT GUIDE

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INDOOR GARDENING WITH PERLITE

The green revolution has led to the introduction of hundreds of unheard-of plants and has resulted in new life for old favorites. One reason why people grow plants indoors is their ease of culture. In days past, plant lovers would go into the garden and scoop up some soil which they would mix with rotted manure or other compost and use it to pot their plants. Fortunately they can now rely on modern growing mixes containing perlite, sphagnum peatmoss and other components. These mixes are readily available at garden centers, some hardware and department stores.

Perlite is a volcanic material that, when heated to 1600 deg.F (850 deg.C) makes an excellent ingredient for house plant growing mixes. Perlite particles create tiny air tunnels, which allow moisture and oxygen to flow freely to roots. This is important since 98% of all oxygen a plant gets is absorbed through its roots. Poorly drained growing mixes shut out oxygen; root "pumps" shut down and the plant dies from suffocation.

Over-watering is the cause of perhaps one half the cases of plant failure. Perlite in a growing mix serves as a "life guard", not only promoting good drainage but allowing precious oxygen to flow to roots.

Perlite makes moisture, oxygen and nutrients readily available to plants. Because of the unique shape of each particle, plus its permanency, moisture and nutrients can cling to the crevices until the plant needs them, while the granular quality provides quick drainage of excess moisture and allows space for oxygen - vital for healthy plant growth.

Commercial growers as well as home gardeners can buy perlite mixes or make their own. Equal parts of perlite and sphagnum peatmoss and sand (or rotted compost or loam) makes a fine growing mix

while equal parts of sphagnum peatmoss and perlite make an excellent seed starter.

"COMMERCIAL GROWERS AND HOME GARDENERS HAVE FOUND THAT PERLITE IS THE IDEAL ROOTING MEDIUM..."

Perlite for Increasing Humidity Around Plants

Since the average home is extremely dry when the heating system is operating, plant foliage often takes on a scorched look on tips and edges. One way to overcome this is to set trays of water in the plant area and add perlite. Set the plants on the perlite which should be kept moist. Water is slowly released into the atmosphere, benefiting the plants.

Perlite Reflects Light

Cloudy winter days often result in poor houseplant or seedling growth. Light coming in a window can be greatly increased by placing perlite in the bottom of plant trays and on the surface of the growing mix where light rays will be reflected back up to plants. This can make the difference between spindly plants and good stocky growth. The same applies if plants are being grown under fluorescent lights. Just be sure perlite is kept moist so you can take advantage of the extra humidity.

Watering Plants

Frequency of watering depends on the type of plant and size. Most plants prefer the growing media to be "just moist" at all times. Some plants, like Jade plant and large-leaved Ficus like the growing media to become almost dry before water is applied. Care should be taken however, to see that the growing media does not become so dry as to cause dropping of leaves or shrinking of the soil ball to the point at which a space forms between it and the pot. When this happens, water rushes down the inside of the pot rather than wetting the root zone. If this happens, or if leaves drop because of lack of water, set the pot in a large pan of tepid water until the whole root ball is moistened. The plant will respond, usually within half an hour. Plastic pots hold moisture longer than unglazed pots, which have pores for air to pass through. Since the soilless mixes contain much lightweight material, you can usually tell by lifting the pot whether or not the mix has dried out completely. With large pots, you can push a wooden dowel probe (like a pencil) into the pot. If it comes out moist you know there is still some moisture left.

Perlite for Starting Seeds

Fine perlite can be used alone as a seed-starting medium or it can be mixed half and half with shredded sphagnum moss or shredded peatmoss. Many seeds have limited "pushing-up" power. Perlite alone or perlite mixes are ideal for seed starting because they are light in weight. Moisten the medium thoroughly, then sow the seeds on top. Very fine seeds can be atomized and left to settle

into crevices. Be sure the medium does not dry out. This can be prevented by keeping the seed box subirrigated at all times, until seeds sprout. A plastic cover over the box helps maintain humidity. Other seeds can be covered with a light dusting of perlite and sphagnum peatmoss.

Another requirement for good seed germination is a constant temperature (for most seeds) of 72 deg. F (22 deg.C).

Water for sub-irrigation can be put directly in the planting tray or a plastic liner can be shaped to hold water. Place the seed boxes in this liner and keep water in it.

"PERLITE ALONE OR PERLITE MIXES ARE IDEAL FOR SEED STARTING..."

Another use for perlite in seed starting is to give better distribution of fine seeds. Take a clean salt shaker and place about 1/4 inch (6mm) of very fine perlite (perlite may be poured into a sieve and the fine particles shaken out) in the salt shaker. Pour the packet of seeds on top, replace the cap and shake to mix in the seeds with the perlite. Sprinkle the mixture evenly over the perlite/peatmoss seedbed.

Perlite for Rooting Cuttings

Both commercial growers and home gardeners have found that perlite is the ideal rooting medium for cuttings from ordinary houseplants or from woody shrubs, evergreens or vines. It is important to keep the perlite moist at all times and to keep cuttings out of direct sun. If temperatures are cool, rooting is hastened by applying bottom heat. Misting on warm days helps the cuttings retain moisture and hastens rooting. Home gardeners can use a terrarium as a rooting chamber, whereas commercial growers would use a greenhouse, coldframe or hotbed.