Making a forsythe pot for rooting houseplant cuttings is an easy, educational, and not-too-expensive project; one that can be enjoyed by people of all ages. Although many cuttings will root in water, better results can be obtained by starting cuttings in moist vermiculite. Plants that are somewhat difficult to root also have a better chance in a forsythe pot. They are less likely to rot and once rooted, will make the transition to potting soil in better condition. For best results, be sure to start this project with fresh, new vermiculite and clean, new pots. Reused pots can be a source of disease contamination unless they have been soaked in chlorine bleach and water solution, scrubbed thoroughly, and rinsed carefully to remove all traces of bleach.
Now let’s begin. Here are the materials you need for making a forsythe pot: a 6 or 7-inch diameter plastic pot with drain holes, a 2 ½-inch clay pot, vermiculite, paper towels, and a small cork. You will also need a sharp pocket knife or paring knife.
Vermiculite is a natural product—expanded mica. The mica is mined and then heated to a very high temperature. This causes moisture that is trapped in the layers of mica to expand, and it puffs out like popcorn. It is then graded as to size and sold for different purposes. Larger chunks are used for insulation. The smaller sizes are used in greenhouses as soil amendment.
Line the bottom of the plastic pot with some paper toweling. This simply prevents vermiculite from dropping through the drain holes.
Then pour in the vermiculite, almost to the top of the pot.
Next, plug the bottom of the clay pot very tightly. If you can’t find a small cork, green florist’s clay will work also.
Screw the plug clay pot into the center of the vermiculite so that the pot sticks up just a bit above the vermiculite.
Now water the vermiculite thoroughly. Excess moisture will drip through the drain holes. (This might be a little messy.)
Fill the clay pot with water, too. After this first time, all you’ll need to water is center well. Because clay is porous, it will allow water to seep through from the center pot to the vermiculite. As the vermiculite loses moisture, it is instantly replaced, provided you remember to keep that center filled with water. The moist vermiculite is an excellent rooting medium.
Here’s the finished forsythe pot, ready for cuttings.
Most houseplants grow in a branching pattern with leaves angling off of main stems. Find a growing point where there are young, new leaves being formed, and make your cutting 3 or 4 inches back from that tip.
Cut about one-half inch below a node, the area where the petiole (leaf stem) or leaf blade joins the main stem. The node is an area of actively dividing cells.
The cutting should be pushed into the moist vermiculite so the node is just below the surface. New roots will form at this point. On the grape ivy pictured, three *leaflets* make up one *leaf*; the stem that holds all three is the petiole. The node is where this petiole joins the larger, main stem.
Sometimes you have to remove the lower leaves in order to put the node into vermiculite. The pocket knife points to a node on pilea, where pair of leaves was taken off. Leaves will rot if they’re buried in vermiculite.
The forsythe pot now has three cuttings from plants with typical branching patterns—grape ivy, pilea, and silver-nerved fittonia.
African violets don’t branch. Instead they have a thick central stalk with leaves arranged in a whorled or circular pattern around it.
For plants with this habit of growth, you can simply remove a single, medium-sized leave and petiole. Trim the petiole so it is only an inch long.
Then poke the petiole into the vermiculite so there is contact between the underside of the leaf blade and the moist vermiculite. New plantlets will form at the base of the leaf blade.
Several peperomias also grow thick central stalks with long petioled leaves around them. This one is a watermelon peperomia.
We can take a cutting exactly like the African violet, or we can remove the petiole altogether. Make a slit in the vermiculite with your knife and insert the leaf blade so the base is in the rooting medium.
The snake plant is another example of a nonbranching plant. You can take several cuttings from one of these long leaves. Each should be about 3 or 4 inches long.
Be sure you get the bottom of each cutting into the vermiculite. If they’re turned inside down, they won’t root. Incidentally, the new plantlet that forms at the base of your cutting will not have the yellow striped edge. It will be mottled green, like the center of the cutting, throughout. Put your forsythe pot near a window where it will get an hour or two of direct sunlight each day. After several weeks, pull gently at the cuttings. If you feel resistance, you’ll know they are rooted. Scoop them out of the vermiculite gently and transplant them into small containers of potting soil. It is not necessary to get much of the vermiculite off the roots. Don’t let the rooted cuttings stay very long in the forsythe pot, since the vermiculite offers almost no nourishment for continued growth.
Here’s another easy way to root cuttings. Make a pillow pack using a plastic bag from bagels or English muffins. Fill the bag first with vermiculite, then with water. Tilt the bag to allow excess water to flow out, leaving only the moist vermiculite.
Use a twist-tie to seal the bag, then make four or five slices in the plastic with your knife.
Take 3 or 4-inch cuttings from the growing tips, as I am doing with this impatiens. Remove the lower leaves, if necessary, to expose a node to be put into the vermiculite. Then take off any flowers or flower buds, since they would use energy that could go into rooting.
Be sure your cuttings are uniform in size and are all from the same type of plant. That way they’ll be most likely to root at the same time. Put the pillow pack in an east exposure, right on the windowsill (unless it’s too cold). You may have to open the end and add some water from time to time. When the cuttings are rooted, break open the bag and transplant each to potting soil.
Credits

Deborah L. Brown, Extension Horticulturist
University of Minnesota
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