

PANAX PROPAGATION

Panax, *Polyscias spp.*, is an attractive ornamental shrub grown in Hawaii primarily as a hedge plant. With the increased demand in recent years for tropical foliage plants for indoor container plantings interest has developed in the plant for possible export to the mainland United States.

A study was initiated to gain some information concerning the rooting of four panax cultivars: *P. guilfoylei* 'Crispa,' *P. guilfoylei* 'Variegata,' *P. balfouriana* 'Marginata,' and *P. fruticosa* 'Elegans.' A comparison was made between 2 locally available materials, black cinder and volcanite, and 2 standard materials, vermiculite and perlite as a rooting medium for panax.

Four to six-inch terminal and hardwood cane pieces were stuck in metal flats containing the sterilized rooting media and placed under intermittent mist. The cinder and volcanite were sifted through 1/16 inch mesh screen to remove smaller particles. Rooting percentage and root-

Table 1. The effect of type of cutting on rooting of panax cultivars after 10 weeks.

Cultivar	Rooting Percent		Rooting Index	
	Terminal	Cane	Terminal	Cane
<i>P. guilfoylei</i> 'Variegata'	100	98.2	80.2	69.0
<i>P. guilfoylei</i> 'Crispa'	100	96.2	90.0	72.2
<i>P. balfouriana</i> 'Marginata'	100	84.2	89.0	78.8
<i>P. fruticosa</i> 'Elegans'	100	100.0	91.0	69.5
Mean	100	94.6	87.6	72.4

ing index values were determined after 10 weeks.

The type of cutting had a strong effect on the rooting of all panax cultivars tested (Table 1). This was especially evident in the rooting index values, which gives an indication of the amount of roots produced per cutting, with the terminal cuttings giving much better rooting than the older wood.

The different cultivars responded similarly except for *P. guilfoylei* 'Variegata' which appeared slightly more difficult to root than the others.

Table 2. The effect of media on rooting index of panax cultivars

Cultivar	Medium			
	Volcanite	Vermiculite	Perlite	Black cinder
<i>P. guilfoylei</i> 'Variegata'	71.5	73.5	89.5	64.0
<i>P. guilfoylei</i> 'Crispa'	90.0	77.0	74.5	83.0
<i>P. balfouriana</i> 'Marginata'	86.5	78.5	93.0	77.5
<i>P. fruticosa</i> 'Elegans'	74.0	82.5	86.5	78.0
Mean	80.5	77.9	85.9	75.6

The overall performance of the cultivars tested was best when perlite was used as the rooting medium (Table 2). Comparing the individual cultivars shows that all except *P. guilfoylei* 'Crispa' rooted best in perlite. Crispa seemed to root best in the cinder products, volcanite or black cinder. Generally black cinders and vermiculite gave the poorest results.

Based on these results it appears that terminal cuttings of panax in perlite will give the best results. However, there appears to be some difference in response due to media with the various panax cultivars. This aspect will require further testing.

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