

## ROOTING RESPONSE OF DRACAENA SPP.

The results of a preliminary study showed that species of *Dracaena* differs in their ease of rooting. Four-inch terminal cuttings of 7 selected species of *Dracaena* were placed under 4 different misting regimes. Cuttings were placed in flats containing vermiculite and rooting was evaluated after 10 weeks.

Mist levels had very little effect on rooting percentage. However, the 12 second misting resulted in significantly heavier rooting than either 6 or 24 seconds. This would indicate that this level of mist (12 seconds every 6 minutes) was best for most of the *Dracaena* species tested during the cooler winter months at the Manoa Campus.

All cuttings of most species tested showed some rooting after 10 weeks. The poorest rooting was found on *D. X maneffiana* with almost 30 percent of the cuttings still unrooted and those that had rooted were in the low to medium rooted class. Best rooting was noted on

Table 1. The effect of mist levels on rooting of cuttings of *Dracaena* spp. after 10 weeks.

Species	Mist (sec./6 min.)				Species Mean
	6	12	18	24	
<i>Rooting percentage</i>					
<i>D. deremensis</i>					
'Compacta'	100	100	100	100	100 a <sup>1</sup>
<i>D. deremensis</i>					
'Warneckei'	100	100	100	100	100 a
<i>D. marginata</i>	100	100	100	100	100 a
<i>D. concinna</i>					
'Tricolor'	100	100	100	100	100 a
<i>D. fragrans</i>					
'Massangeana'	92	100	92	92	94 ab
<i>D. fragrans</i>	71	100	86	100	89 b
<i>D. X maneffiana</i>	60	70	90	70	72 c
Mean	89.0 a	95.7 a	95.4 a	94.6 a	
<i>Rooting Index</i>					
<i>D. deremensis</i>					
'Compacta'	100	97	94	91	95.5 a
<i>D. deremensis</i>					
'Warneckei'	82	94	92	90	89.5 a
<i>D. marginata</i>	73	77	82	77	77.2 b
<i>D. concinna</i>					
'Tricolor'	71	70	72	70	70.8 bc
<i>D. fragrans</i>					
massangeana	62	77	68	67	68.5 c
<i>D. fragrans</i>	63	89	74	69	73.8 bc
<i>D. X maneffiana</i>	52	54	58	54	54.5 d
Mean	71.9 c	79.7 a	77.1 ab	74.0 bc	

<sup>1</sup>Treatment means with different letters indicate significance at the 5% level.

*D.* 'Compacta' with most cuttings rating heavily rooted. *D.* 'Warneckei' was close behind.

There appeared to be a correlation between the size of the cutting and the degree of rooting. Those cuttings with a larger diameter stem seemed to produce heavier rooting than those with smaller diameters. The only species where any problem was noted was *D. fragrans* when rooting occurred on younger leaves in the center rosette. However, only 5 percent of the cuttings rotted entirely with the remainder showing production of new leaves.

While this is only a preliminary trial, it does provide a good basis for further research with *Dracaena* species.

Fred D. Rauch  
Associate Specialist in Horticulture