Response of elite cinnamon (*Cinnamomum verum* Presl.) lines for vegetative propagation.

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Cinnamon is commonly propagated through seeds. The viability of seed is lost when sowing is delayed and maximum germination could be obtained when seeds are sown immediately after harvest. Cinnamon being a cross-pollinated plant, vegetative propagation is necessary to maintain uniformly of the high yielding superior genetic material. Therefore selected ten elite lines of cinnamon superior in yield and quality were studied for shooting and rooting capacity of their cuttings. The experiment was conducted at the Cinnamon Research Station, Palolpitiya, Matara during the first four months of 2003.

Ten elite cinnamon lines namely CRS *351, CRS 166, CRS 156, CRS 23, CRS 201, CRS 83, CRS 317, CRS 184, CRS 318, and CRS 40* were evaluated in this study. Experiment design was randomized complete block with three replicates and 50 cuttings were used for each treatment. Semi hard wood, green in colour and length of 4 cm single nodal cutting with a leaf was planted to a depth of 2.5 cm in a mixture of 1:1:1:1 coirdust, sand, soil and cow dung media filled in 22.0 x 12.5 cm polythene bags. After watering one percent Cu based fungicide was applied and bags were covered with polythene to prevent moisture loss and kept under shade during the experiment period. Cuttings were evaluated for shooting and rooting characteristics after 45 days of planting.

Results showed high variability among the tested lines for their shooting ability. Maximum success was obtained in *CRS 184* (77.0%) followed by *CRS 166* (73.2%) and *CRS 40* (71.2%). However, *CRS 23* was the poorest (40.6%). On the other hand, mortality rate was high in *CRS 318* (48.0%) followed by *CRS 23* (40.6 %) during the 45 day period. Lines *CRS 184* (4.3) and *CRS 40* (3.3) produced more number of primary roots. From the overall results of this study, *CRS 184* and *CRS 40* were found to be the best for shooting percentage and development of primary roots.

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