

(090) Cutting Propagation of *Melastoma dodecandrum* Lour.

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Diren (*Melastoma dodecandrum* Lour.) is a creeping evergreen subshrub from Melastomaceae. It is a great ground cover plant for arid soil conditions. Under the full sun, the plant completely colonizes some bare land and blooms beautifully from June to October. To produce this plant for landscape uses, stem cuttings were collected in October, treated with liquid and powder rooting hormones, and then placed under plastic tunnels with automatic mist systems. Stem cuttings could be rooted in 2 months and rooting percentages were higher as hormone concentrations increased. Cuttings with 8,000 mg·L⁻¹ IBA powder reached 100% rooting. Number of roots per cutting significantly increased with rooting hormone treatments. The highest number was 18.4 with application of 8,000 mg·L⁻¹ IBA powder, which was 6 times higher than the control. As the liquid hormone concentrations reduced from 2500 mg·L⁻¹ NAA to 500 mg·L⁻¹ NAA, number of root per cutting decreased from 13.8 to 5.7. Total root length per cutting was also significantly increased with aid of rooting hormones. Cuttings treated with 8000 mg·L⁻¹ IBA powder produced 122.4 cm of roots, which was about 8 times higher than that of the control. Diren could be produced commercially with stem cuttings. Under the treatment of 8,000 mg·L⁻¹ IBA powder, we could root and produce high-quality plants for USDA Zone 7–10 landscapes.

Note: Donglin Zhang is also a guest professor at Central South University of Forestry and Technology, Changsha, Hunan, China.