

## Shoot and root formation on corms and rhizomes of *Curculigo latifolia* Dryand

### ABSTRACT

The vegetative propagation for *Curculigo latifolia* Dryand (lemba) using rhizomes and corms is reported here for the first time. This is done to overcome difficulties in using seed because lemba seeds have low and slow germination rate. The objectives of this study were to obtain suitable planting material for *C. latifolia* cultivation, to induce shoot and root development on rhizomes and corms using Indole-Butyric Acid (IBA), and to describe shoot and root formation on rhizomes. Rhizome and corm samples of lemba were collected and then treated with 100 mg l<sup>-1</sup>, 75 mg l<sup>-1</sup>, 50 mg l<sup>-1</sup>, 25 mg l<sup>-1</sup> and 0 mg l<sup>-1</sup> (control) IBA. The vegetative organs were then sown in germination media with composition of top soil, sand and peat at 3:2:1 ratio and maintained under 70% shade. It was found that that 25 mg l<sup>-1</sup> of IBA was the most suitable concentration for shoot and root induction from rhizomes and corms of lemba, and rhizomes was found to be the best propagules for vegetative propagation of lemba. Two types of vascular bundles were observed in the nodal regions, which were the collateral and amphivasal types are typical of the monocots. The shoot primordia arose from the meristematic region underneath the epidermis of the cortex region, while the adventitious root primordia developed from the pericycle cells underneath the endodermis layer.

**Keyword:** Anatomy; Corm; *Curculigo*; Lemba; Rhizome