

### **Vegetative propagation of *Woodfordia fruticosa* (Malitta) by stem cuttings**

Napagoda N.A.D.R.<sup>1</sup>, Yakandawala K.<sup>1\*</sup>

*Woodfordia fruticosa* is a medicinal plant and all the parts have valuable medicinal properties. There is a high demand for flowers. Dried flowers are imported to Sri Lanka and used in the preparation of many decoctions. Currently, seeds are used as propagules. However, seeds are tiny and difficult to handle and availability is seasonal. Therefore, a study was conducted with the objective of identifying a suitable vegetative propagule and a media to propagate *W. fruticosa* for rapid multiplication. A propagation experiment was conducted using three different maturity stages of stem cuttings viz. softwood, semi-hardwood and hardwood planted in two different media viz. sand, sand+coir dust (1:1). Therefore, altogether six treatment combinations were used in Randomized Complete Block Design (RCBD) with three replications. Fourteen weeks after planting, highest rooting percentage was recorded in softwood cuttings (84%). There was no interaction between different maturity stages of cuttings and potting media on root dry weight or number of roots. However, significantly high root dry weight (0.473 g) was recorded in softwood cuttings and in the sand medium (0.2686 g). All three cutting types were significantly different from each other with respect to the number of roots, and softwood cuttings recorded the significantly higher number of roots. Therefore, softwood cuttings grown in sand media can be recommended to propagate *W. fruticosa*.

**Key words:** Medicinal plant, Vegetative propagation, Stem cuttings, *Woodfordia fruticosa*

1. Department of Horticulture and Landscape Gardening, Faculty of Agriculture and Plantations Management, Wayamba University of Sri Lanka, Makandura, Gonawila (NWP), Sri Lanka.