

## Effect of a misting system and rooting media of *Labisia pumila* cuttings

### ABSTRACT

*Labisia pumila* is one of the most popular and potent ingredients used in Malay traditional herbal. However, logging activities and forest encroachment reduced the productivity of *L. pumila* in natural stands. In addition, the species is slow growth and its scarcity of wildings in natural forests. Due to the problems, a study on *L. pumila* cuttings to examine the possibility of raising planting stocks was studied. The experiment was done at FRIM's nursery with a Split-Split Plot (SSPD) in a Randomized Complete Block Design (RCBD) involving two propagation systems (misting and nonmisting), three rooting media (river sand, sawdust and 1:1 mixture of river sand and sawdust) and three plant parts (stem, petiole and leaf). Results indicated significant differences ( $p \leq 0.05$ ) in all treatments with regards to their root and shoot development. Cuttings propagated in misting system produced better rooting ability (84%) than the non-mist system (72%). However, cuttings propagated in non-mist system showed better shoot growth (29%) than the ones raised in the misting system (20%). Cuttings grown in river sand produced higher root and shoot abilities (87% and 26%) than those raised on river sand and sawdust mix (1:1) (76% and 24%) and in sawdust (72% and 23%). Stem cuttings performed best compared to leaf and petiole cuttings. In conclusion, *L. pumila* var. *alata* stem cuttings could be possibly propagated vegetatively through rooting of cuttings with favorable treatments such those raised on river sand medium under the misting propagation system.

**Keyword:** *Labisia pumila* var *alata*; Misting system; Rooting media; Cutting