MULTIPLICATIVE RESEARCH OF *Duabanga grandisflora* ROXB.EX DC SPECIES BY CUTTING METHODS

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**Summary**

Agamous multiplication of *Duabanga grandisflora* Roxb.ex DC will contribute to solve the seeds for large timber planting. The results showed that: Using AIA, AIB concentration 300 ppm, 450 ppm, 600 ppm, 750 ppm, 900 ppm also stimulate the cuttings of this species and the rate and quality of roots are higher than without using medicine. Both kinds of AIA, AIB at 750 ppm concentration for rooting percentage and high roots quality, but with AIB showed the rate and quality of roots (95.56%, 338.25) and cuttings of *Duabanga grandisflora* Roxb.ex DC are higher than AIA (86.67%, 126.4). Stimulated rooting medicine AIB after treatments has increased the rooting rate of *Duabanga grandisflora* Roxb.ex DC’s cuttings from 3.45 to 7.82 times (42.22% - 95.56%); AIA has encouraged for rootings from 2.73 to 7.1 times (33.33% - 86.67%) compared without using stimulated rooting medicines (12.22%). Both kinds of AIA, AIB have mostly formulas with the rooting rates >60%, enough the criteria for cutting production. **Frame for cuttings of Duabanga grandisflora Roxb.ex DC:** The rooting quality rates of cuttings on the soil frames (88.89%; 106.01%) and on the sand frames reached (91.11%, 123.99%), cuttings on the soil frames has rooting index higher than sand frames are 0.17 times. **Kind of cuttings:** The top cuttings showed the highest rate of rooting (81.11%), higher than 2.36 times stem cutting (34.44%), 14.6 times with root cuttings (5.56%). Root quality of top cuttings (72.82) higher than 2.33 times with stem cutting (21.88) and 11.38 times with root cuttings (6.4). **Aged mother trees for cuttings:** Cuttings from mother trees with age of 1 year showed the rooting rates of 94.44%, higher than 1.02 times of mother trees at aged 3 and 1.43 times of aged 6 (23.33%). The quality of root cuttings from mother trees at aged 1 is the highest (65.06), higher than 10.84 times of cutting from mother trees aged 3 (5.5) and 15.55 times of cuttings from aged 6 (4.19). **Length of cuttings:** Cuttings from 6 cm to 8 cm showed the rooting rates (94.44%), higher than 0.35 times of cutting from >4 cm – 6 cm (25.56) and 1.63 times of cuttings 4 cm (21.21%). The roots quality of cuttings >6 cm – 8 cm are highest (17.32), higher than 1.17 times of cuttings which are >4 cm – 6 cm (7.97) and 4.65 times of cuttings with 4 cm (3.72). The length of cuttings has effected to the quality of root cuttings of *Duabanga grandisflora* Roxb.ex DC.

**Key words:** *Duabanga grandisflora* Roxb.ex DC, cuttings, Agamous multiplication.