CUTTING PROPAGATION OF ELITE FAMILIES OF
Acacia mangium and Acacia crassicarpa FOR CLONAL FAMILY
FORESTS
Phi Hong Hai, Bui Tien Hung, Mai Trung Kien

Summary
Research on cutting propagation of elite families Acacia mangium and Acacia crassicarpa that approved as new advanced genetically germplams by Ministry of Agricultural and Rural Development was successfully. A hedge orchard was cultivated in wood beds with size 18 m x 0.8 m x 0.4 m, the bottom of the beds covered by white nylon. Beds were filled by coarse river sand mixed 5 kg/m$^3$ fused magnesium phosphate. Two drip irrigation system set up along both sides of beds to watering and liquid micronutrients with boron, lime, high phosphate and low nitrogen. The research results showed the effects of the formula fertilizing and harvesting time to diameter of shoots and average quantity of cuttings were very clearly. The largest diameter of shoots was obtained by fertilizing PRS 96. The stout shoots were harvested in September; the highest rooting rate of cutting was propagated in the summer months, from July to September, and ranged from 66% to 97%. Propagating time influenced on rooting rate more than effect of the nutrition fertilization. Quantity of cuttings harvested weekly exceeded the cuttings obtained from monthly harvestings, reached up 2.2 hom cuttings/plant or 572 cuttings/m$^2$ in the hedge orchard of 14 months old. Age of the hedge affected the possibility of shoot supply and proportion of shoots that can become cuttings, from 1.37 cuttings/plant at age of 3 months to 7.4 cuttings/plant at age of 14 months. From 16 to 18 months of age, the rooting rate of cuttings were quickly degraded, from 20.3% to 60.1%. The number of roots per cutting also suffered significantly, with only 1-2 roots/cutting. So the hedge orchards of Acacia mangium and Acacia crassicarpa should only maintain to 14 months of age.

Keywords: Cutting propagation, elite family, Acacia mangium, Acacia crassicarpa.