

CANDIDATE PLUS TREE (CPTS) SELECTION: A PATHWAY TO SUSTAINABLE FORESTRY

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ABSTRACT

The selection of Candidate Plus Trees (CPTs) in the forest plantation sector plays a crucial role in improving wood quality for use in the timber industry. This study aims to identify and select 500 CPTs of various high-demand forest plantation species within two years (2024–2025). The selection criteria for CPTs include height and diameter at breast height (DBH). Stem straightness, roundness, and branching are also phenotypically evaluated on a scale from 1 to 6, with 1 representing poor criteria and 6 indicating good criteria. Trees showing signs of disease or defects will be excluded from consideration. The study has identified 263 CPTs in major areas of Sabah: Sandakan, Beluran, Telupid, Kinabatangan, and Tawau. Among the selected CPTs, the species distribution includes *Octomeles sumatrana* (30), *Neolamarckia cadamba* (105), *Eucalyptus pellita* (54), *Falcataria moluccana* (29), *Terminalia copelandii* (36), *Acacia mangium* (1), and *Swietenia macrophylla* (8). Using CPTs for seed production in forestry can help ensure that future generations of trees inherit these desirable traits, leading to more robust and productive timber yields from forest plantations used in the timber industry. The selection process continues to work towards achieving the designated number of CPTs, focusing on improving genetic quality and promoting sustainable forestry practices.

Keywords: Candidate Plus Tree (CPT), Tree Selection, Sustainable.