Some Morphological Characteristics of Eucalyptus camaldulensis Dehn. Clone A5 and Clone D1 at the Clonal Plantation in Eastern Thailand / Umarat Sirijaroonwong, Somboon Kiratiprayoon, Sapit Diloksumpun, Prachak Ruenrit

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Abstrak

The genetic improvement of Eucalyptus species in Thailand has been developed at clone or variety levels. Eucalyptus camaldulensis Dehn. Clone A5 and Clone D1 are two of the most planted varieties at Sa Kaeo province in the eastern region of Thailand. Thus, the selection of clones which emphasize economic traits is not sufficient anymore. Wood density and leaf functional traits should be emphasized also because these characteristics directly affect yields of plantation. The studied area was a six-year-old clone A5 and D1 plantation with spacing of
3 m. x 3 m. in the village of Sa Kaeo Province, in eastern Thailand.

The basic wood density (WD) of A5 and D1 was 0.7364 and 0.6345 g/cm3, respectively. Stem volume was 0.0512 and 0.0577 m3/tree and the stem dry mass was 28.10 and 26.50 kg/tree, respectively. Although the stem volume of A5 was less than Dl, their WD had significant statistical differences ($p < 0.05$) because the WD of A5 was higher than Dl. Furthermore, the A5 provided more stem dry mass than Dl, equal to 30.95 and 28.40 ton per hectare, respectively. For the leaves slenderness, A5 and Dl were 1.18and 1.19 respectively, which had insignificant difference ($p > 0.05$) and the specific leaf weight was 0.0135 and 0.0120 g/cm2 .respectively, which had a significant statistical difference ($p < 0.05$). These results indicated that the leaf thickness of A5 was more than Dl. It was affected positively by photosynthesis The results suggest that wood density of stem and thickness of leaves in this study could be used further to improve the genetic Eucalyptus.