

A Survey on Usage and Emerged Issues of *Kaya senegalensis* Timber Species in Kurunegala District in Sri Lanka.

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Abstract

Kaya senegalensis (African Mahogany) has introduced to Sri Lanka instead of the incremental issues which rise from Elephant damage to the Teak plantations. Due to having drought resistance, botany wildfires and the higher growth rates under the dry and intermediate climate factors, *Kaya senegalensis* has been planted about 2,187 acres in several dry and intermediate zones in Sri Lanka. As commercial plantations and the substitute product for teak 374 acres of *Kaya senegalensis* plantations were planted in Kurunegala District. Due to having medium strength properties it is used majorly for light constructions and manufacturing furniture. This study was conducted to determine the awareness and usage of *Kaya* and the issues which were perceived by users in Kurunegala district, when using in cutting, felling, sawmilling and furniture manufacturing and find the solutions and recommendations throughout this study in future. The survey was based on the questionnaire which included several related questions on awareness, usage and emerged issues. Results showed that 71% of participants were aware on *Kaya senegalensis* timber species. Although they knew about *Kaya* timber species, 46.67% used timber for several purposes. 53.33% did not use their low preference to the timber and some issues on the workability of timber. Highest percentage of 82.15% used *Kaya* timber for roofing in Kurunegala District. Fibrillated and roughness was identified as the major issue of cutting, felling (57.69%) as well as sawmilling in percentage of 45.45%. In sawmilling 43.18% perceived the issue of curving and twisting while 9.09% perceived cracking and 2.27% perceived shrinking. Furniture manufacturing is the major task in timber industry. Due to the low trend of using *Kaya senegalensis* for furniture manufacturing, it was identified most of used participants perceived the issue of curving (50%) and twisting (45.45%) while 16.66% and 2.27% perceived craking and concaving respectively. Therefore it has clearly shown that curving and twisting is the major issue for manufacturing furniture while fibrillating and roughness effect for the cutting, felling and sawmilling.

Keywords: *Kaya senegalensis*, Survey, Awareness, Usage, Kurunegala