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STATUS, IMPORTANCE AND FUTURE PERSPECTIVE OF NA TREE (Mesua ferrea L.) IN THE NAGANCHOLAI AREA OF DRY ZONE OF MULLAITIVU DISTRICT IN SRI LANKA

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ABSTRACT

The study was carried out at reserve forest of Nagancholai in the Mullaitivu district to assess the status, importance and future perspective of a forest species namely Mesua ferrea L., which is the national tree of Sri Lanka belongs to Clusiaceae family and commonly called as iron wood or NA tree. The species distribution area comes under Mulliyawali beat of the district and approximately covers the extent of 40 ha. World database on protected areas (WDPA ID) and IUCN category of the area is 27,431 and wilderness area (Lb), respectively. About 30 sampling plots were randomly laid at a size of 20 m × 20m. A total of 447 trees, 2,890 seedlings, 2,221 saplings were recorded for the species in the study areas. Mean number of seedlings, saplings and trees per plot of the species were 96.3±14.23, 74.0±10.94 and 15.0±0.97, respectively, revealed that number of seedlings was greater than saplings followed by trees, indicates that the species had a good regeneration capacity in the study areas. Mean tree height and diameter of the species were 11.8±0.24 (25.9-3.7) m and 20.4±0.58 (66.6-2.8) cm, respectively. Mean number of coppice from the main stem of the species was 1.2±0.07 (6-0). Sociocultural survey in the study area revealed that the population is directly or indirectly responsible for the deforestation and degradation of the species and the timber of the species illegally logged. Hence, regeneration assessment is an important part of evaluation of the forest status and finally, the study focus for monitoring and managing tree species diversity, forests, and carbon stocks on a regional, national and global level, which aims to assess the conservation status of the species and forest management and development programme in the district.

Keywords: Conservation, Dry zone, Mesua ferrea L., Nagancholai, Regeneration, Sri Lanka