An assessment on Rath handun (*Pterocarpus santalinus Linn.f.*) population in some areas in the Matara district

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Rath handun (*Pterocarpus santalinus* Linn.f.) of family *Fabaceae* is a highly valued medicinal plant, endemic to India. The natural habitats of Rath handun in India are extensively exploited to the point of near extinction and now the species is considered globally endangered, with illegal harvest being a key threat. It is believed that a handful of plants are available in Sri Lanka, where the local demand is met partly by Indian suppliers while some substitute with similar medicinal properties are also been used. Since the shortage of skills on ethnobotany and lack of authentic information, have hindered effective conservation strategies of this threatened species, the recent study was carried out to assess the Rath handun population in the Matara district, Southern Sri Lanka.

An extensive survey was carried out in five selected areas (i.e. Kamburupitiya, Devinuwara, Hakmana, Akkuressa and Deniyaya) in the Matara district. After authenticity was confirmed by the Royal Botanical Gardens, observations were made on each individual plant concerning their morphology and other characteristics. Results show that the total number of Rath handun plants in the area of investigation is 28, of which the highest number (13) in Kamburupitiya, followed by Devinuwara (5), Hakmana (4), Akuressa (4) and Deniyaya (2). Results further reveal that 82 % of the total plants are more than 40 years old and most of them are profusely bearing amounting to thousands of seeds in a season. However, a young generation of Rath handun in the area is hard to find indicating a possible practical difficulty either in seed germination or in early seedling growth. According to the growth measurements, 13 plants (46 %) are less than 10 m in height while 20 plants (71 %) are of GBH (girth at breast height) less than 100 cm indicating a very tardy growth.

It could be concluded that much emphasis needs to be drawn to conserve such exsisting trees of Rath handun and the human interventions are needed to facilitate and catalyze the regeneration by which the conservation of this valuable species would be ensured.