

Landscape potential of the native plant *Helicteres isora* L.

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Abstract

The landscape industry is continuously in need of novel and exciting materials to maintain the viability. As a result, exotic plants are being introduced at an accelerated rate. Although attractive, these plants require high maintenance cost and some become invasive. To address the above problems, the present study is an attempt to elucidate the landscape potential of a native plant, *Helicteres isora* for the landscape industry. The potential landscape applications, propagation, traditional uses, natural distribution, morphological and genetic variation of natural populations of *H. isora* were studied to expose the potential landscape uses and to provide information for biodiversity conservation.

Helicteres isora is naturally occurring in all the three major agro-ecological zones in the country. Therefore, it can be planted in any of the zones. It tolerates drought, wind, fire, coppicing, soil erosion and full sun to partial shade. This plant requires low inputs and therefore, is ideal for low maintenance landscapes and can be planted in sites exposed to stresses. In landscaping, *H. isora* can be incorporated to informal designs such as in mixed borders, informal hedges, mass planting and as a specimen plant. Flowers and fruits are ornamental and attracts wildlife. It can be used to cut down dust, noise, wind and as a screen plant. Apart from traditional informal planting styles, it can be incorporated into ecological planting designs as a multipurpose landscape plant. Some of the traditional uses of *H. isora* can be reintroduced as an ecofriendly alternative to certain current day uses. Semi hardwood cuttings grown in sand media can be used as a propagule in the vegetative propagation at commercial scale as it showed 94% rooting.

The occurrence of a new variety, *H. isora* var. *tomentosa* was recorded in Sri Lanka and a significant genetic variation was observed among individuals within populations (61%), among populations within regions (20%) and among regions (19%). Therefore, this information could be effectively incorporated in further plant improvement programmes and the biodiversity conservation and management of *H. isora*.

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