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Fruits and seeds of *Thalassia hemprichii* (Hydrocharitaceae) from Queensland, Australia

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ABSTRACT

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Fruits of *Thalassia hemprichii* (Ehrenb.) Aschers. have a dome-shaped capsule and form on a short peduncle. Mature fruits slit open from the upper part of the fruit and split into six to nine valves to release generally three, but occasionally one or two, pyriform seeds. The seed has an enlarged hypocotyl, and a laterally inserted embryo with leaf and root primordia protected by a cotyledon. A well-developed provascular bundle extends from the base of the embryo to the centre of the hypocotyl, where it branches and travels along the hypocotyl axis. The basal two-thirds of the hypocotyl store a large amount of starch with little protein, which is regarded as nutrient storage. A seed coat is absent. There are numerous tannin cells present in the hypocotoyl tissues and the remains of the soft pericarp. Seeds of *Thalassia* have no dormancy period and they probably begin to germinate before they are released. Nutrient storage is utilised initially from the apical end of the hypocotyl and around the provascular tissues.

INTRODUCTION

The seagrass genus *Thalassia* consists of two morphologically similar, but geographically disjunct, species in tropical waters. *Thalassia testudinum* Banks ex König exists in the Caribbean, whereas *Thalassia hemprichii* (Ehrenb.) Aschers. occurs from the western Pacific to the West Indian Ocean (East Africa). These two species have been considered as twin species (den Hartog, 1970).

There are few studies on the fruits and seeds of *T. testudinum* (Rydberg, 1909; Orpurt and Boral, 1964) and of *T. hemprichii* (Maiden and Betche, 1909; Pascasio and Santos, 1930). Maiden and Betche present accurate ob-

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