SPECIES LIMITS AND PHYLOGENETICS OF THE ENDEMIC GENUS *STEMONOPORUS* THW. (DIPTEROCARPACEAE)

A PROJECT REPORT PRESENTED BY

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To the Board of Study in Plant Sciences of the
POSTGRADUATE ISNSTITUTE OF SCIENCE

in partial fulfillment of the requirement
for the award of the degree of

MASTER OF PHILOSOPHY

of the

UNIVERSITY OF PERADENIYA
SRI LANKA

2007

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Stemonoporus Thw. is the most species rich endemic dipterocarp genus in Sri Lanka. All its members are categorized as highly threatened or threatened category in the IUCN red data book. Species limits within this important taxon had been ill defined, with some authors recognizing only a few variable species, and others recognizing a number of separate morphologically circumscribed species. These controversial ideas regarding the species limits of *Stemonoporus* Thw. stand as a barrier for implementing conservation and management measures on this taxon. The main aim of the present study was to re-evaluate the species limits of the endemic genus *Stemonoporus* using morphological and phytochemical characters and to determine the phylogenetic relationships within the genus.

Phenetic and phylogenetic analyses were performed based on morphological and phytochemical data taken from specimens collected from different geographical locations and herbarium specimens. The data sets were analyzed independently and in combination.

Cluster analysis and Cladistic analysis divided the genus into 27 different clusters, corresponding to 26 recognized species and a new morphologically different taxon. New characters were found that strongly supported the recognition of vaguely defined taxa. Phylogenetic analysis resulted in a monophyletic *Stemonoporus* Thw. with poor support. But leaving *S. wightii* the rest of the genus received good support as a monophyletic group. Phylogenetic relationships between the taxa were resolved based on morphological data.