BIODIVERSITY OF HORTONIA (MONIMIACEAE)

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The irreversible loss of biodiversity remains as one of the most pressing global issues. As a consequence, greater attention is now being directed towards the systematic cataloguing of species diversity, and elucidating their taxonomic and evolutionary relationships before unrecognised species become extinct.

Hortonia is a genus endemic to Sri Lanka, belonging to the family Monimiaceae, where the species limits are point of debate. The family Monimiaceae is represented in Sri Lanka by the single genus Hortonia. The taxonomic history of Hortonia has been a point of a debate where the circumscription of the taxa among different treatments differs. The latest revision in the Flora of Ceylon recognizes the originally described three species of Hortonia: H. floribunda, H. angustifolia and H. ovalifolia. A recent chemical study once again questions the species limits by claiming the presence of identical biologically active chemical compounds in the three species. Therefore the present study was carried out to evaluate the species limits of the genus with the aim of its biodiversity conservation and management.

All presently recognized taxa from different geographical locations were studied. Five individuals per recognized taxon were coded. Different character states of more than fifty characters were obtained and coded into a data matrix. The data were analyzed using clustering methods. The results clearly identify three clusters each representing separate taxa.

The results of the present study identify three species of *Hortonia*: *H. floribunda*, *H. angustifolia* and *H. ovalifolia* in Sri Lanka. This corroborates the recent revision of the genus.

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