

Encontros Scientia

Molecular phylogenetic analyses of the Macaronesian endemic moss genera Echinodium and Andoa

Soraia Martins

PhD student (Group Plant Diversity and Conservation)

Abstract

Pleurocarpous mosses comprise more than 4,000 species and form the most diverse group of mosses (Bryophyta). Hypnales, the largest lineage of pleurocarpous mosses, probably underwent a rapid diversification after divergence from its sister group, the Hookeriales. In Macaronesia, both endemic and non-endemic species of Hypnales are characteristic components especially of forest ecosystems such as the laurel forest (Laurisilva), which is considered a relic of the sub-tropical Tertiary vegetation. The diverse bryoflora of the Macaronesian laurel forest includes striking pleurocarpous mosses such as Echinodium, the single genus of the only European endemic moss Echinodiaceae, and the Macaronesian endemic Andoa berthelotiana (Hypnaceae). Molecular data have already provided new insights into phylogenetic relationships of a number of Macaronesian endemic bryophyte species, among them pleurocarpous mosses, whereas studies focusing on phylogeographic patterns of bryophytes within Macaronesia are still scarce. Based on DNA sequences and fingerprinting data, we aim to clarify species circumscriptions and phylogeographic patterns of Echinodium and Andoa species, to better understand the evolution of pleurocarpous mosses in Macaronesia.

> 4^a feira, 30 de Abril de 2014 FCUL (Edif. C2) - 12:00-13:00h - Sala 2.2.14