***The genus Ramalina in Macaronesia: An exceptional adaptive radiation?***

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Oceanic islands are exceptional natural laboratories that have inspired evolutionary research for decades. Adaptive radiation, the exceptional diversification coupled with the appearance of new ecological roles, is a paradigmatic evolutionary phenomenon in oceanic islands and well-studied in groups of organisms such as animals or plants. However, little is known about the role of adaptive radiation in the diversification of lichen-forming fungi. The genus *Ramalina*, with c. 200 species known worldwide, is one of the most diverse genera of lichen-forming fungi. The genus shows an exceptional level of diversity and endemicity in the Macaronesian archipelagoes, with c. 40 known species, more than 50% of them are endemic. We studied the origin of this endemic diversity using a newly generated time-calibrated phylogeny for *Ramalina* based on eight genomic markers and more than 120 species. We inferred diversification rates for Macaronesian lineages in comparison with species distributed in other regions and assessed diversity-dependent diversification. Results pointed to a limited number of independent colonization events and the existence of an exceptional radiation in Macaronesia as the origin of most endemic taxa, including some Mediterranean species not currently known in the archipelagos. Further, we analyzed six functional traits related to hydration and dehydration behavior in c. 80 species of the genus. Analyses of the multivariate functional space revealed a great disparity in the Macaronesian radiation, including the fill of novel areas of the functional landscape.

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