TWO MODELS OF EVOLUTION IN CANARIAN LIZARDS BASED ON THE USE OF SPATIAL RESOURCES

Lopez-Jurado, L.F.a, Mateo, J.A.b

a  Departamento de Biología, Universidad de Las Palmas de Gran Canaria, Apartado Postal 550, 35080 Las Palmas, Canary Islands, Spain.

b  Estación Biológica Doñana (CSIC), Pabellon Peru, Ave. Maria Luisa s/n, 41013 Sevilla, Spain.

Abstract

The morphological and genetic differences between populations of Canarian lizards on four islands were analysed in relation to two ecological systems: the laurisilva forest and the young volcanic ecosystems or 'malpaíses'. The two ecosystems induce two different evolutionary responses by lizard populations; morphological and genetic modifications are intense in the case of a very old ecosystem like laurisilva whereas in the young volcanic ecosystems, morphological modifications are much more pronounced although the temporary nature of the ecosystem is limiting from point of view of speciation.