

Evolution in insular Mediterranean *Lotus*. What we know and what should be known

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The Mediterranean basin is one of the hot-spots of diversification of *Lotus*. Recent studies using nuclear ribosomal markers have clarified generic delimitations and phylogenetic relationships with the related *Tetragonolobus* and *Dorycnium*. However, documented patterns of intraspecific variation concerning karyological and molecular markers are scanty. In this talk we provide molecular evidence documenting patterns of reticulate hybridization in sympatric populations of *Lotus* from the Balearic Islands (*Lotus dorycnium* and *Lotus fulgurans*). Nuclear markers from ribosomal ITS sequences suggest asymmetric gene flow between widespread, non-endangered species and endemic species. Contrary to expectations, asymmetric pollen flow is from the rare species to the widespread one. Patterns of chloroplast and nuclear variation at pseudogenized loci suggest the presence of a clear phylogeographic scenario in these continental islands.