

COMPARISON AMONG PARASITE COMPONENT
COMMUNITIES OF *PODARCIS PITYUSENSIS* (SAURIA: LACERTIDAE) FROM
ISOLATED AND NON-ISOLATED HOST POPULATIONS

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Component community of parasites in a host is the ensemble of populations of all parasite species exploiting a host population at one point in time. The various parasite component communities of the different populations of one host species are all subsets of the entire set of parasite species exploiting that host species across its entire geographical range. This larger collection of parasite species is referred to as the parasite fauna.

Hypothesis about evolution of faunas and component communities of parasites (see Poulin, 1998) predict that frequent contacts and exchanges of parasites between host populations of the same species should lead to highly homogeneous component communities all saturated with species (in relation to host parasite fauna). In contrast, if different host populations are isolated from one another, we may expect them to develop very different component communities.

Podarcis pityusensis (Sauria: Lacertidae) is a very useful host to test these hypothesis. It is an endemic lizard from Pityusic islands (Balearic Archipelago) which parasite fauna is well known (Roca & Hornero, 1994) as well as the component communities from most of their isolated populations (Hornero, 1991).

Now we analyze the component communities from four host populations of *P. pityusensis*. That of La Savina and the rest of the island of Formentera as non-isolated populations in which contacts and exchanges of parasites among them may have been able and so we may expect homogeneous component communities. And that of the islets of Murada and Tagomago, isolated host populations in which we may expect different and non-saturated component communities.

We discuss our results in terms of species richness and homogeneity or heterogeneity of component communities of parasites. We find poor and very different component communities of parasites in isolated host populations (Murada and Tagomago). The parasite component communities of non-isolated host populations (La Savina and Formentera) are more similar although one of them (La Savina) is poor in species.

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