The interesting weevil fauna from Los Monegros (Coleoptera: Curculionoidea)

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The study of the fauna of Curculionoidea from Los Monegros have shown interesting and uncommon features (Velázquez de Castro & Blasco-Zumeta, 1994). First of all, it consists in a rich fauna, with 105 species collected until now, that is a high number of species for a single ecosystem, and all of them have been collected in Retuerta de Pina. One of the families studied, Urodonidae, is particularly well represented, eight species have been collected, while a total of nine have been recorded from the Iberian Peninsula. And, if we consider not only the number of species, but the quality of this biocenosis, we will find the following facts:

1. The restricted distribution of many species

They can be divided in four groups:

a) Many of them are rare species, some of them with only two known populations in Spain. The species of this group belong to the genera *Hypophyes, Aspidiotes, Trachyphloeus, Cathormiocerus, Metadonus, Sibinia, Mogulones, Ceutorhynchus, Theodorinus, Paroxyonyx* and *Barioxyonyx*. (Borovec, 1996; Velázquez de Castro & Martín, 1992; Colonnelli, 1995; Sánchez-Ruiz & Alonso-Zarazaga, 1994).

b) Some species do not live in another part of Spain, of the genera *Chionostagon, Baris, Sitona* (Alonso-Zarazaga, 1988; Dieckmann, 1978).

c) Another species lives in Los Monegros but not in other sites of Europe (of one genus of *Lixinae*, unpublished data).

d) Finally, two species of *Strophosoma* live in Los Monegros but not in other part of the world (Pelletier, 1996 and unpublished data).

2. The special zoographical affinities of the species, with species of distant arid sites

a) Some of the species have one populations in Los Monegros and other in xerothermic sites in east Europe or/and Asia, but any population between these distant places. They belong to the genera *Sitona* and *Barioxyonyx*.

b) Some species have their closest relatives in east Europe or Asia. They belong to the genus *Theodorinus* and *Sibinia* (Caldara, 1985; Colonnelli, 1995).

The analysis of the weevil fauna from Los Monegros shows that it constitutes a very particular isolate and relict biocenois, which is a result of millions of years of evolution in arid steppes, (Ribera & Blasco-Zumeta, 1998). Los Monegros hold this fauna due to the particular climatic, soil and vegetation conditions, that remained for geological ages. These natural conditions of Los Monegros must be preserved in order to mantein one of the last and most important relict biocenosis of Europe.

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