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Speciation of Cataglyphis around the Gibraltar strait: vicariance or dispersal?

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The Strait of Gibraltar is a major geographical barrier separating the Iberian Peninsula from Morocco. After the Messinian salinity crisis and the closure of connection between the Atlantic ocean and the Mediterranean sea (5.9 - 5.3 mya), the strait has remained open, preventing many organisms from crossing. The genus *Cataglyphis* comprises more than 100 species inhabiting hot and desertic areas in Asia, Europe and North Africa. Nine species of *Cataglyphis* have been recorded in the Iberian Peninsula, none of which is known in North Africa. On the other hand, approximately 20 species of *Cataglyphis* are present in Morocco, none of which is present in Spain or Portugal. By means of molecular data (COI and nuclear genes) we examine the phylogenetic relationships between Moroccan and Iberian species in order to test various models of speciation by vicariance or dispersal. Data suggest the existence of cryptic species on both sides of the strait. Moreover, preliminary results suggest Iberian species (with the exception of *C. cursor* which may have dispersed from north-eastern populations) were formed by vicariance and rapid speciation following the closure of the strait.