

# New species of mountain triton discovered

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A team of scientists has just discovered a new species of mountain triton in the Montseny Nature Reserve. The species has been given the scientific name *Calotriton arnoldi*. It is the only endemic vertebrate species currently known to exist in Catalonia and a report of the discovery has been published in the December edition of the prestigious *Zoological Journal* of the Linnean Society.

The authors are Salvador Carranza, ‘Ramon y Cajal’ researcher from the Department of Animal Biology at the University of Barcelona, and Fèlix Amat, who works with the Herpetology Department of the Science Museum in Granollers (Catalonia). The research which led to the discovery began over three years ago and forms part of the plan designed to monitor ecological parameters in the above-mentioned nature reserve.

The Montseny triton presents a set of genetic, morphological and osteological features that make it unique and distinguish it from its closest relative, the Pyrenean triton. *C. arnoldi*, named in recognition of the British herpetologist E. N. Arnold of the Natural History Museum in London, has smoother, brownish skin, which is translucent in the ventral area, and both sexes are smaller. It also shows differences in the morphology of the vertebra at the base of the tail. Mitochondrial DNA analyses reveal that the Montseny triton separated from the Pyrenean triton around 1.5 million years ago, during the first Pleistocene glaciations.

Despite their age, however, the first Montseny tritons were not observed until 1979, probably due to their scarcity, their discreet behaviour, and

the fact that they were only to be found in a small number of cold water streams in the Montseny. To be precise, the new species *C. arnoldi* has been located in five streams of the Montseny massif (between 600 and 1200 m), and appears to prefer the beech forest (*Fagus sylvatica*). Preliminary studies indicate that it could be the amphibian with the smallest distribution area in Europe, and is one of the most endangered.

Source: Universidad de Barcelona

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