

High altitude record of the Pyrenean lizard, *Lacerta bonnali*

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Neuer Höhenrekord der Pyrenäeneidechse, *Lacerta bonnali*

Der höchste bislang bekanntgewordene Fund von *L. bonnali* bezieht sich auf eine Beobachtung auf 2918 m üNN, wobei jedoch keine Belegexemplare gesammelt werden konnten. Uns gelang ein Fund der Art auf dem Gipfel der Grande Fache, auf einer Höhe von 3000 m üNN. Das Exemplar belegt damit den bislang höchstgelegenen Fundort der Art.

Lacerta bonnali is a montane lizard endemic to the central western part of the Pyrenean mountain chain (ARRIBAS & MARTÍNEZ-RICA 1997). Eastwards in the Pyrenees, it is replaced by the allopatric taxa *L. aranica* and *L. aurelioi* (ARRIBAS 1997a, b) which were only recently described. All three taxa are closely related to each other and occur in rather small populations scattered within their distribution area, probably limited by climatic and other habitat restrictions (ARRIBAS & MARTÍNEZ RICA 1997, PALANCA et al. 1997).

The altitudinal range so far published is 1940–2500 m a.s.l. for *L. aranica* and 2200–2940 m a.s.l. for *L. aurelioi* (ARRIBAS 1997a, b). *L. bonnali* is known from 1700 up to 2900 m a.s.l. (ARRIBAS & MARTÍNEZ-RICA 1997). The highest published lizard observation within the distribution area of *L. bonnali* is 2918 m at the Gran Alto de Pondiellos (MARTÍNEZ-RICA 1977), but the corresponding specimen was not captured and its identity thus not confirmed. MARTÍNEZ-RICA (1977) already speculated about the possibility that the species may also occur at still higher altitudes. We here report on the observation of specimens of *L. bonnali* at 3000 m altitude, constituting the highest known altitude record for the species.

On 19.07.1998, M. D. observed one lizard specimen on the summit of the Grande Fache mountain (42°48'N/3°27'E), altitude 3005 m; Aragón region, Spain, the summit constituting the very border with France). The specimen, however, could not be collected or determined. On 23.07.1998, M. V., J. R., C. M. and M. P. observed and collected one adult female specimen (ZFMK 68407; snout-vent length 53 mm; fig. 1) very near to the site of the first observation. The specimen was active at 13:00 h, basking on a small rock within a larger agglomeration of scree and loose rocks. The exact site was situated few meters below the highest point of the summit (3005 m a.s.l.) and its altitude can be rather exactly estimated as 3000 m.

The specimen was determined as *L. bonnali* (compared to *L. aranica* and *L. aurelioi*) by the following set of characters: no light dorsolateral lines; dorsal and lateral colouration uniform, without numerous dark spots typical for *L. aurelioi*; ventral side uni-

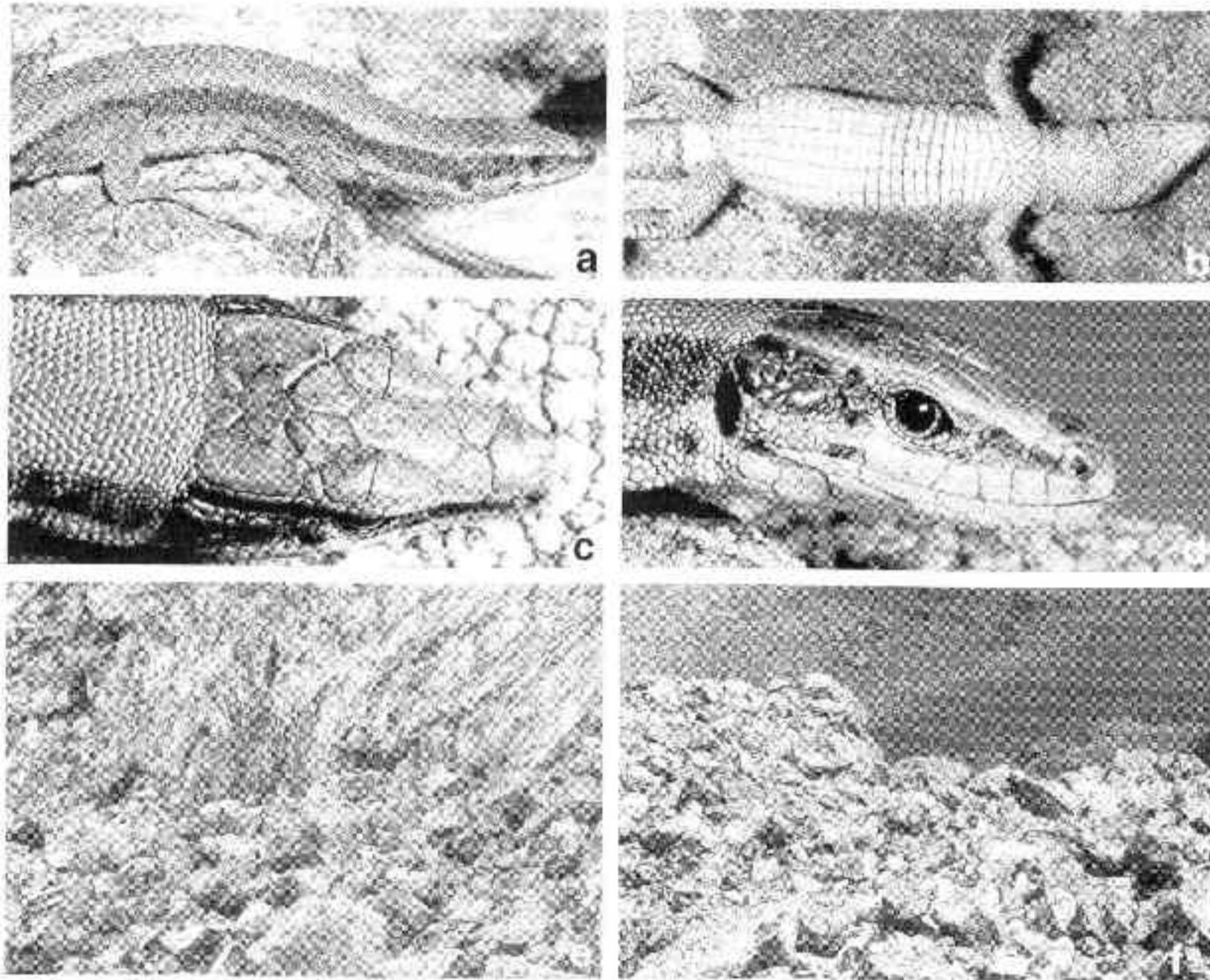


Fig. 1: (a–d) *Lacerta bonnali* (adult female, ZFMK 68407) from the Grande Fache summit (3 000 m a.s.l.); (e) habitat of the collected specimen on the Grande Fache summit; (f) view of the Grande Fache summit showing the large number of sun-exposed rocks and scree which probably constitute suited *L. bonnali* habitat.

(a–d) *Lacerta bonnali* (ad. Weibchen, ZFMK 68407) von der Spitze des Grande Fache (3 000 m üNN); (e) Lebensraum des gesammelten Weibchens auf der Bergspitze; (f) Blick auf die Bergspitze mit sonnenexponierten Felsen und Geröll, mögliche geeignete Lebensräume für *L. bonnali*.

formly whitish without dark spots; temporal region without three large scales arranged in an order typical for *L. aranica*; postocular in contact with parietal (see diagnoses of ARRIBAS 1993, 1994).

The summit of the Grande Fache is a small area (estimated by us as 5 x 30 m) surrounded by very steep slopes. Prospection of the area is very difficult and dangerous. Although we failed to observe simultaneously more than one lizard specimen, we believe that the Fache summit harbours a small population of *Lacerta bonnali*, and that our observations do not refer to single, isolated specimens.

A short survey carried out on 23.07.1998 indicated that there is a rather high density of arthropods probably suited as food for *Lacerta bonnali* available on the Fache summit, especially dipterans and lepidopterans which were presumably displaced by the wind

from lower altitudes as indicated by the bad condition of their wings. Although the area mainly consists of rocks and stones, there is some vegetation scattered at suited plots; near the lizard capture site there were even some isolated *Festuca* grasses. The rocks were mainly metamorphic; they had largely a dark colouration and were quickly heated when exposed to the sun.

No lizards were sighted at the base of the Fache mountains (Collado de la Fache, between Grande Fache and Petite Fache mountains) at 2664 m a.s.l., nor on the way up to the Grande Fache. It is possible that the steep slopes at the Grande Fache summit do not allow for a dense and complete snow layer during the whole winter. This may enable lizards to begin earlier in spring with their activity than in areas (even at lower altitudes) which are covered by a more persistent snow layer. Future surveys should be conducted to gather data on a possible distribution of *L. bonnali* at other mountain peaks in the area which reach up to 3 146 m (Balaitous), 3 298 m (Vignemale) and 3 355 m a.s.l. (Monte Perdido). For this purpose, and due to the difficulty of surveying these high mountain areas, it may be fruitful to start an inquiry among mountaineer groups who are regularly active in the area.

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