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Report of albinism in a western iberian endemic newt

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RESUMEN: El albinismo se ha citado como anomalía genética para diversas especies de anfibios de la península ibérica, siendo extraños los casos dada la baja supervivencia de individuos con estas características en la naturaleza. En esta nota, mostramos un macho adulto de tritón ibérico (*Lissotriton boscai*) encontrado en una balsa artificial en la Sierra de Quilamas, en Salamanca, y que mostraba albinismo completo.

Amphibian skin coloration is determined by a combination of cells called chromatophores that carry different pigments. Sometimes, alterations in chromatophore composition or functions result in strange coloration patterns (Pough *et al.*, 2016). In this way, leucism and albinism are rare traits that are found in many amphibian lineages. They consist of lack of melanin because of genetic causes. Nevertheless, albinism and leucism are normally uncommon in nature because of the low survival rates of the individuals that present them. The reason may be that they are more detectable and, as a consequence, more susceptible to predation (McCardle, 2012). This makes even stranger to find an albino or leucistic adult specimen in the wild.

Among the Iberian Salamandridae, other cases of leucism and albinism have been reported. For example, *Chioglossa lusitanica* Bocage, 1864 (e.g. Teixeira *et al.*, 1999), *Triturus marmoratus* Latreille, 1860 (e.g. Diego-Rasilla *et al.*, 2007), *Pleurodeles waltl*, Michaëlls,

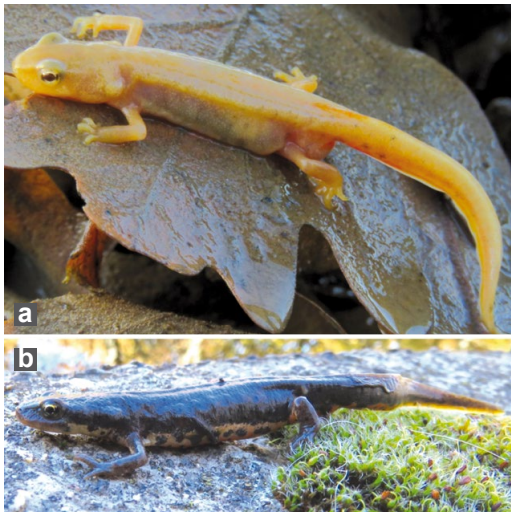


Figure 1: Comparative images between a) albino and b) normal Iberian newt from the same area.

Figura 1: Comparación entre tritones ibéricos a) albino y b) con coloración normal, procedentes de la misma área.

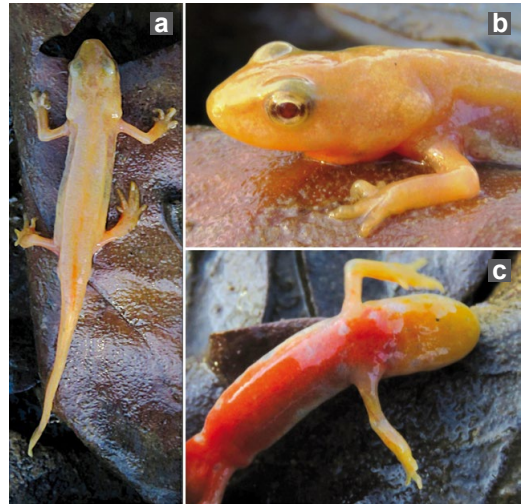


Figure 2: Adult male of *Lissotriton boscai* showing a) pale dorsal coloration, b) red eyes, typical of albinism, and c) lack of melanin in ventral dots.

Figura 2: Macho adulto de *Lissotriton boscai* mostrando a) coloración dorsal blanquecina, b) ojos rojos típicos del albinismo y c) pérdida de melanina en los puntos ventrales.

1830 (e.g. Caballero-Díaz *et al.*, 2019) and *Lissotriton boscai* Lataste & Tourneville, 1879 (e.g. Galán, 2010).

In this case, we report the observation of an albino adult male of the Western Iberian Peninsula endemic *Lissotriton boscai*, on 27th of December 2019 in Sierra de Quilamas, Salamanca (UTM 10 x 10 km: TK49; ~1006 masl) during a walk. The individual was found in an artificial pond and it showed active reproductive signals (thickened cloaca). Dorsal coloration was pale-yellowish (Figure 1), while ventral was orange. Characteristic lateral and ventral black dots were white instead. Apart from this, the animal was diagnosed as albino because of its red iris (Figure 2).

The area where the specimen was found is dominated by *Quercus pyrenaica* Willd. forests, and constitutes a good area for the species. There exist many temporary and artificial ponds, springs and fountains where they usually breed (J. S-C. personal ob-

servation) and thrive nearly the whole year. Apart from this, larvae have been found in 2018 and 2019 springs in same place where the specimen was found (J. S-C. personal observation), suggesting that it is a habitual point of reproduction for the species.

Moreover, the fact that this male presented signs of sexual activity at the moment it was found, could maybe lead to a successful reproduction this season, so we must pay attention to this population in order to search for similar cases.

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Un caso de albinismo de *Lissotriton boscai* en Galicia

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Las variaciones de color, en concreto leucismo o albinismo, están bien documentadas en las especies ibéricas de urodelos, con citas para *Salamandra salamandra* (Cabirta, 2019), *Chioglossa lusitanica* (Teixeira *et al.*, 1999), *Pleurodeles waltl* (Caballero-Díaz *et al.*, 2019), *Calotri-*

ton asper (Thiesmeier & Hornberg, 1988), *Triturus marmoratus* (Diego-Rasilla *et al.*, 2007), *Triturus pygmaeus* (Romero & Real, 2007) y *Lissotriton boscai* (Galán, 2010).

El 5 de mayo de 2017 se encontró en Domaio (Moaña, Pontevedra, UTM

Figura 1: Ejemplar albino de *Lissotriton boscai*.

