



The species diversity of the genus *Gallotia* (Sauria: Lacertidae) during the Holocene on La Gomera (Canary Islands) and the Latin names of Gomeran giant lizards

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The importance of appropriate identification of a species prior to the adoption of an effective species conservation plan should not be underestimated. This precondition is not generally problematic. However, erroneous identification leads to unsuitable conservation measures (Daugherty *et al.* 1990) being drawn up. This may be the case of the “critically endangered” gomeran giant lizard (Cox *et al.* 2006).

The unusual tendency to gigantism of some Canary Island lizard species and the apparent size reduction they have undergone since the arrival of human settlers (Pregill 1986; Barahona *et al.* 2000) have generated uncertainty regarding the number of species on some of the islands. In the case of the island of Tenerife, mitochondrial DNA sequencing by Maca-Meyer *et al.* (2003) revealed that three different species coexisted until at least 2500 years ago, when humans settled in the Canary Island archipelago.

According to Hutterer (1985), Nogales *et al.* (2001) and Martín & Rando (2006), the “one island, three species” situation identified in Tenerife would also be applicable to the islands of Hierro, La Palma and La Gomera before the arrival of humans. Bischoff (1998), and Barahona *et al.* (2000) suggest, however, that these three islands were inhabited by only two species. They argue that all the distinguishing features used to differentiate the two supposedly larger species can be explained by growth changes. In other words, they propose that the medium-sized lizards are young individuals of the larger of the two species found there.

Concerning La Gomera, the dispute has also given rise to controversy over taxonomy and nomenclature. In 1985, Hutterer, taking the “one island, three species” hypothesis as fact, described two new and supposedly extinct taxa from subfossil remains. The larger one was named *Gallotia goliath bravoana*, and the medium-sized species *Gallotia simonyi gomerana*. The remains of a small lizard species were assigned to *Gallotia caesaris* (Lehrs), which is still abundant on La Gomera today (Pleguezuelos *et al.* 2002).

Several years later, Bischoff (1998) suggested that the bones of the large and medium-sized lizards found by Hutterer (1985) on La Gomera belonged to a single species. He thus formally synonymised *Gallotia goliath bravoana* and *G. simonyi gomerana*, selected *bravoana* as the valid nomen for the large species from La Gomera and considered it to be conspecific with *Gallotia simonyi*, thus proposing the trinomen *Gallotia simonyi bravoana* to designate the large-bodied taxon from La Gomera.

In 1999, Nogales *et al.* (2001) discovered a relict population of medium-sized lizards (up to 200 mm long body length) on an almost inaccessible cliff on Gomera at La Mérica. The authors found that their morphological features matched those of the smaller taxon described by Hutterer (1985), but thought that they were sufficiently different from *Gallotia simonyi* (Steindachner), still surviving on the island of Hierro, to deserve a specific status. They thus designated the just-rediscovered “giant” lizards from La Gomera as *Gallotia gomerana*.

Since then a series of studies have adopted either *bravoana* (e.g. Bischoff & Bannert 2001; Pleguezuelos *et al.* 2002; Mateo 2007) or *gomerana* (Maca-Meyer *et al.* 2003; Martín & Rando 2006), depending on which hypothesis (two or three species on La Gomera) was regarded as valid.

During systematic exploration of La Gomera to look for populations of giant lizards, numerous lizard skeletal remains were found at over fifty sites (Mateo 2007), including La Vasa, a small ravine in the south-east of the island (28°02'41"N/17°10'06"W). The sheltered sites in this ravine contained remains, waste and other products of human