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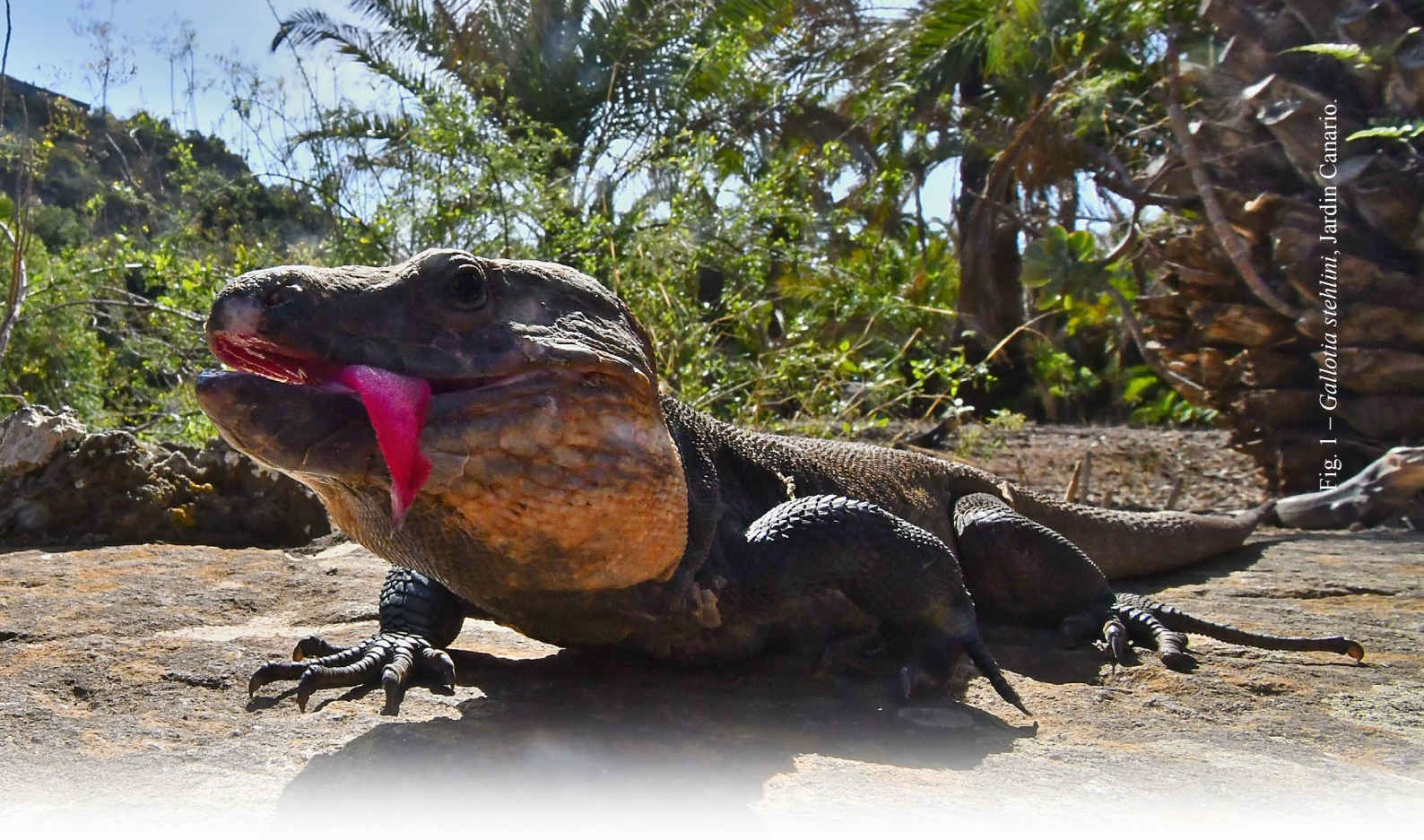

Fig. 1 – *Gallotia stehlini*, Jardin Canario.

Evidence of active hunting on a common mouse, *Mus musculus*, by *Gallotia stehlini*

Alexandre Mamin & Alexandre Le Bail, 2021

Abstract

Gallotia stehlini is an endemic lizard of Lacertidae from Gran Canaria in the Canary Islands. This lizard is omnivorous with a large range of food. As omnivorous lizards, it is commonly admitted that *G. stehlini* is more herbivorous than carnivorous, with very few data about active hunting on other animals than lizards and arthropods. Here we share what we think is the first record of active hunting on an adult rodent (*Mus musculus*) by *Gallotia stehlini* in the wild.

Zusammenfassung

Gallotia stehlini ist eine endemische Eidechse (Lacertidae) von der Insel Gran Canaria. Diese Eidechse ist ein Allesfresser mit großem Nahrungsspektrum. Von *G. stehlini* wird allgemein angenommen, dass sie sich überwiegend vegetarisch ernährt, wobei nur sehr wenige Daten über die aktive Jagd auf andere Tiere wie z. B. Eidechsen und Arthropoden vorliegen. Nachfolgend wird über die vermutlich erste Aufzeichnung einer aktiven Jagd von *Gallotia stehlini* auf eine erwachsene Hausmaus (*Mus musculus*) in freier Wildbahn berichtet.

Introduction

Gallotia is a genus of lacertid lizard which are endemic from Canary Islands. Among Lacertidae family, *Gallotia stehlini* is its biggest extant representant with specimens reaching more than 900 mm. Various studies and observations converge towards an omnivorous diet of *Gallotia stehlini* with a major part made of various plant matter.

Observation

On 1st July 2020, Alexandre Le Bail observed and recorded a video in which an adult *G. stehlini* feeding on an adult mouse, *Mus musculus*, in San Nicolás on Gran Canaria.

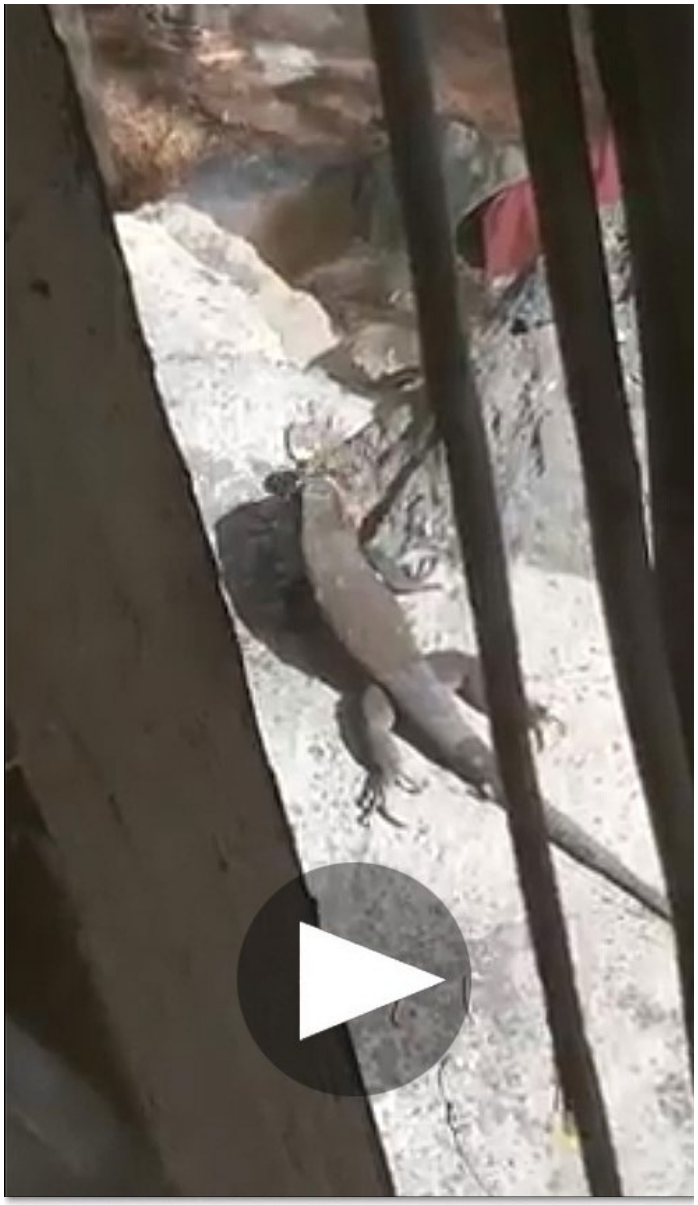

Fig. 2 – *Gallotia stehlini* with *Mus musculus* in its mouth.

Le Bail was at home when he heard a noise outside his house and looked from his window what was happening, thinking he was going to observe a fight between two rodents. When he looked outside, he saw an adult *G. stehlini* with a freshly hunted mouse in its mouth.

At the beginning of the observed scene, the mouse was strongly struggling in the mouth of the lizard. Quickly, Le Bail decided to turn on his camera to record the scene. In the meantime, the rodent began to move slower and showed signs of imminent death. Unfortunately, the lizard noticed the observer and ran away with its prey. Thus, the ingestion of the mouse by the lizard has not been recorded.

Discussion

This observation has been made one year after the record of an adult *Gallotia stehlini* trying to feed on a young African blue tit, *Cyanistes teneriffae*, on Gran Canaria. (Ayllón et al. 2020). These observations ask the question of the role of the canine-like teeth in *G. stehlini*. It was assessed that these teeth have a role in piercing chitinous arthropods. (Mateo et López-Jurado 1992)

If this hypothesis is correct, it is also probable that these teeth have a role in catching bigger prey than arthropods. Although *Gallotia stehlini* shows a dentition tending towards herbivory, there is evidence this species still has a meat part in its diet.

Conclusion

This observation of active hunting on micromammals is interesting as it allows to understand that the diet of lizards from the genus *Gallotia* is more complex than we think. It is known that *Gallotia* sp. can feed on mice, but this behaviour had been observed only in captivity until now as it is common to feed G*allotia simonyi* with new-born laboratory mice (Rodríguez-Domínguez et al. 1998).

The fact they can feed on mice in the wild and moreover on adult specimens seems to be new to science. It also demonstrates the high adaptability of the feeding behaviour of *Gallotia stehlini*.

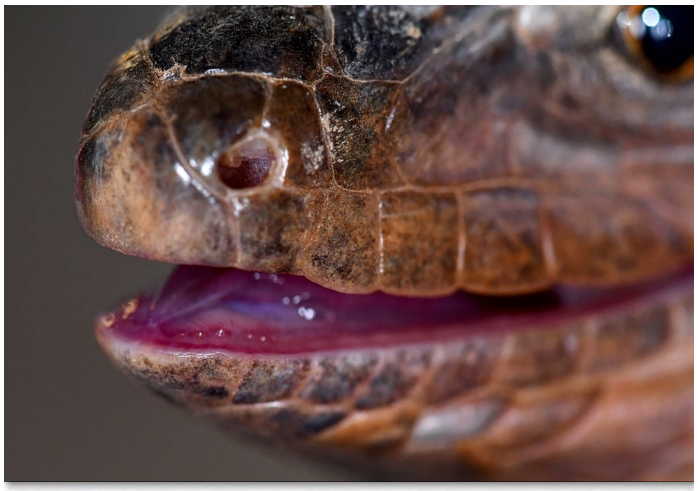

Fig. 3 – *Gallotia stehlini*, details of the teeth.

Fig. 4 – *Gallotia stehlini*, skull.

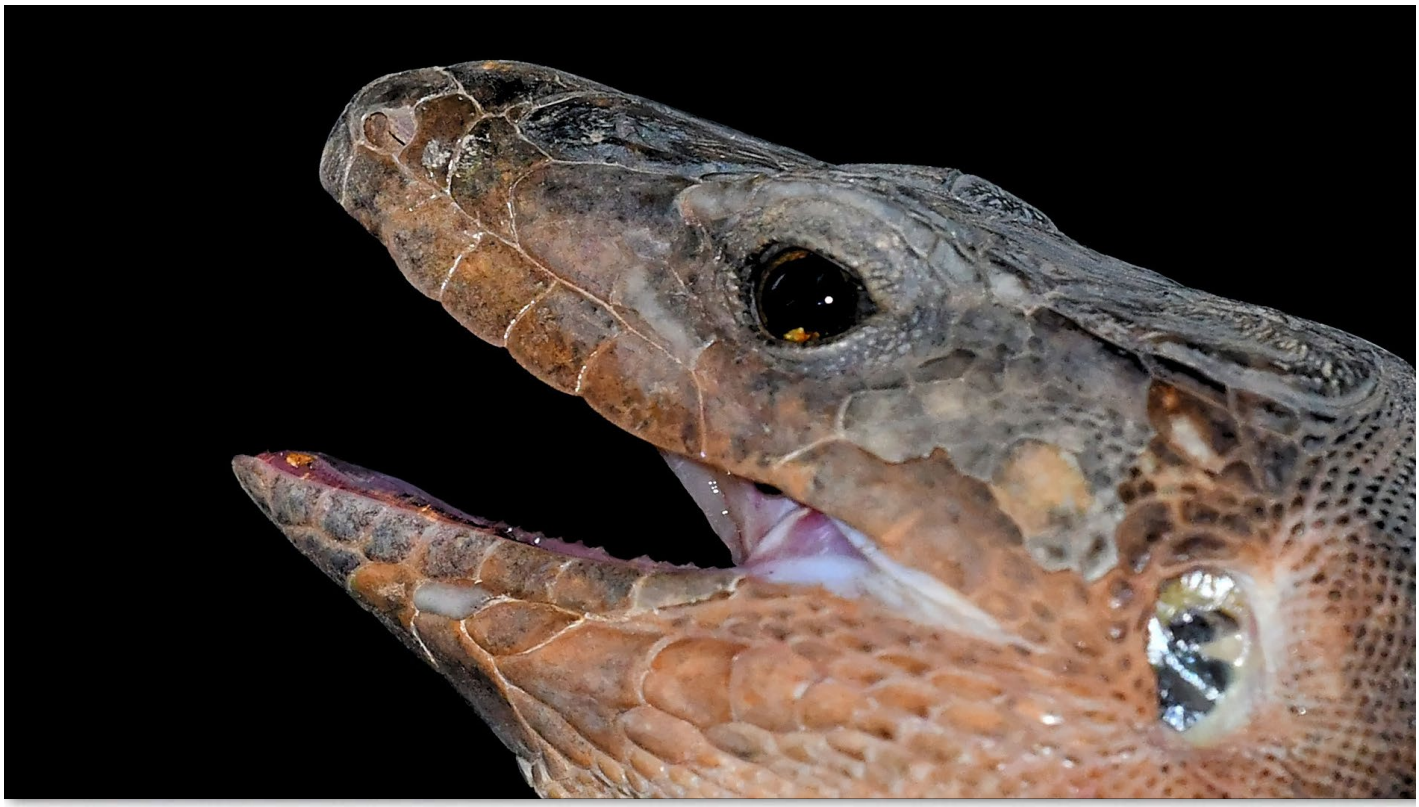

Fig. 5 – *Gallotia stehlini*, details of the teeth.

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