## First record of *Algyroides nigropunctatus* (Duméril & Bibron, 1839) from the Peloponnese peninsula, Greece

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Algyroides is a small genus of lacertids native to Europe that includes four species (Sillero et al., 2014). All Algyroides species show a preference for shaded, cool, and humid habitats, and are mostly associated with woodlands (Harris et al., 1999). Two species are native to Greece, namely A. moreoticus Bibron & Bory, 1833, and A. nigropunctatus (Duméril & Bibron, 1839). A. moreoticus is endemic to the Peloponnese peninsula and the Ionian islands of Kefalonia, Ithaca, Zakynthos, and surrounding islets (Bischoff, 1981). A. nigropunctatus has a much wider distribution across the Western Balkans, spanning the Adriatic and Ionian coastal regions from north-eastern Italy to Greece, including most of the Ionian Islands (Sillero et al., 2014, Strachinis et al., 2021). Since A. nigropunctatus is best adapted to humid habitats, in Greece it is more common in the regions west of the Pindos mountain range, where precipitation is relatively high (Carneiro et al., 2017), although it has also naturally spread to the regions east of the Pindos (Pafilis and Andriopoulos, 2016). The two species occur in sympatry on Kefalonia and Ithaca, where they share the same micro-habitats (Strachinis and Artavanis, 2017). An introduced population of A. nigropunctatus was discovered to occur in the city of Athens (Deimezis-Tsikoutas et al., 2020). Here, we report on the observation of A. nigropunctatus on the Peloponnese peninsula where, to our best knowledge, the species has not been confirmed until now. Our record raises the number of known reptile and amphibian species of the Peloponnese to exactly fifty (see Valakos et al., 2008).

In the early afternoon of 18 March 2024, we visited a neglected garden in Krathi village, at the northern shore of the Peloponnese peninsula, Greece (38.1522°N, 22.3504°E; elevation 3 m). The garden was adjacent to the estuary of a small stream. We observed five individuals (Fig. 1) (three males and two females) of A. nigropunctatus basking on the trunks of mulberry trees (Morus sp.) and on metal boards. In line with the known behaviour of this species, they were seen on ground level as well as climbing in trees up to three meters high. A second visit in the wider area was conducted to investigate nearby sites. On 21 April 2024 we also found an adult male approximately 400 meters from the first site (38.1489°N, 22.3500°E; elevation 10 m). Both of these sites were situated along the same small stream. However, in this case, the encountered lizard was seen to occupy a densely vegetated area composed of Oriental Plane trees (Platanus orientalis). The lizards were identified based on morphological traits that distinguish them from congeneric A. moreoticus, native to the Peloponnese: a significantly larger size, bigger scales on the dorsum than on the flanks, a reddish colouration of the ventral side, and a bluish colouration of the head in males. None of the animals were captured or otherwise disturbed. While no juvenile individuals were observed, the presence of multiple adult males and gravid females suggests the existence of an established population. Within a few meters from the trees occupied by A. nigropunctatus we also observed several individuals of A. moreoticus. The two species were not found in exact syntopy but occupied adjacent terrains.

Our record adds to the increasing number of known lizard populations in Greece as a result of human introductions. Insome cases, this includes non-indigenous species (not members of the Greek herpetofauna) while, in others, this concerns native lizard species founding populations outside of their known range in Greece. The first group includes *Hemidactylus turcicus* (Carranza and Arnold, 2006; Rato et al., 2011), *Chamaeleo africanus* (Dimaki et al., 2008), *Chalcides ocellatus* (Kornilios et al., 2010), *Laudakia stellio* (Karameta et al., 2022),

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Figure 1. Photographic evidence of introduced *Algyroides nigropunctatus* as found on the northern shore of the Peloponnese peninsula, Greece. (A) Mature male. (B) Mature female. (C) Mature male. Photos by Philippos Katsiyiannis.

Tarentola mauritanica (Strachinis et al., 2023), and the recently introduced Podarcis siculus (Adamopoulou, 2015), and Podarcis vaucheri (Spilani et al., 2018). The second group, in addition to the abovementioned population of A. nigropunctatus from Athens and our new record, includes Chamaeleo chamaeleon (Dimaki et al., 2015), Podarcis muralis (Karameta and Pafilis, 2017), Podarcis peloponnesiacus (Hedman et al., 2017), and Anatololacerta pelasgiana (Christopoulos et al., 2022). It should be noted that while major urban centres are often the most likely sites of lizard introduction events, this is not always the case as illustrated by the reported A. nigropunctatus observations. It is important to monitor the dynamics of introduced lizard species to better understand the mechanisms of invasion and adaptation to new environments, as well as to detect any potential detrimental effect of the introduced species on native herpetofauna.

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## References

Adamopoulou, C. (2015): First record of *Podarcis siculus* (Rafinesque-Schmaltz, 1810) from Greece. Herpetozoa 27: 187–188.

Bischoff, W. (1981): Algyroides moreoticus – Ionische Kieleidechse.
In: Handbuch der Reptilien und Amphibien Europas. Band 1.
Echte Eidechsen I, p. 410–417. Böhme, W., Ed., Aula-Verlag, Wiesbaden.

Carneiro, D., García-Muñoz, E., Žagar, A., Pafilis, P., Carretero, M.A. (2017): Is ecophysiology congruent with the present-day relictual distribution of a lizard group? Evidence from preferred temperatures and water loss rates. Herpetological Journal 27: 47–56.

Carranza, S., Arnold, E.N. (2006): Systematics, biogeography, and evolution of *Hemidactylus* geckos (Reptilia: Gekkonidae) elucidated using mitochondrial DNA sequences. Molecular phylogenetics and evolution. 38: 531–545.

Christopoulos, A., Pantagaki, C.F., Poulakakis, N., Pafilis, P. (2022): First record of *Anatololacerta pelasgiana* (Mertens, 1959) in mainland Greece: another new species in Athens. Herpetozoa 35: 239–244.

Deimezis-Tsikoutas, A., Kapsalas, G., Antonopoulos, A., Strachinis, I., Pafilis, P. (2020): Algyroides nigropunctatus (Squamata: Lacertidae) in the City of Athens: An Unexpected Finding.

- Russian Journal of Herpetology 27: 172-174.
- Dimaki, M., Chondropoulos, B., Legakis, A., Valakos, E., Vergetopoulos, M. (2015): New data on the distribution and population density of the African Chameleon, *Chamaeleo africanus* and the Common Chameleon, *Chamaeleo chamaeleon* in Greece. Hyla 2015: 36–43.
- Dimaki, M., Hundsdoerfer, A., Fritz, U. (2008): Eastern Mediterranean chameleons (*Chamaeleo chamaeleon*, *Ch. africanus*) are distinct. Amphibia-Reptilia 29: 535–540.
- Harris, D.J., Arnold, E.N., Thomas, R.H. (1999): A phylogeny of the European lizard genus *Algyroides* (Reptilia: Lacertidae) based on DNA sequences, with comments on the evolution of the group. Journal of Zoology 249: 49–60.
- Hedman, H., Kapsalas, G., Karameta, E., Psonis, N., Poulakakis, N., Foufopoulos, J., Pafilis, P. (2017): First record of *Podarcis peloponnesiacus* (Bibron and Bory, 1833) from outside the Peloponnese. Herpetozoa 29: 190–193.
- Karameta, E., Lymberakis, P., Grillitsch, H., Ilgaz, Ç., Avci, A., Kumlutaş, Y., et al. (2022): The story of a rock-star: multilocus phylogeny and species delimitation in the starred or roughtail rock agama, *Laudakia stellio* (Reptilia: Agamidae). Zoological Journal of the Linnean Society 195: 195–219.
- Karameta, E., Pafilis, P. (2017): First record of *Podarcis muralis* (Laurenti, 1768), from Athens, Greece. Herpetozoa 30: 87–88.
- Kornilios, P., Kyriazi, P., Poulakakis, N., Kumlutaş, Y., Ilgaz, Ç., Mylonas, M., et al. (2010): Phylogeography of the ocellated skinks *Chalcides ocellatus* (Squamata, Scincidae), with the use of the mtDNA sequences: a hitch-hiker's guide to the Mediterranean. Molecular Phylogenetics and Evolution 54: 445–456.
- Pafilis, P., Andriopoulos, P. (2016): First record of Algyroides nigropunctatus (Dumeril and Bibron, 1839), east of the Pindos mountain chain, Greece. Herpetozoa 29: 83–84.
- Rato, C., Carranza, S., Harris, D. (2011): When selection deceives phylogeographic interpretation: The case of the Mediterranean house gecko, *Hemidactylus turcicus* (Linnaeus, 1758). Molecular Phylogenetics and Evolution 58: 365–373.
- Sillero, N., Campos, J., Bonardi, A., Corti, C., Creemers, R., Crochet, P.A., et al. (2014): Updated distribution and biogeography of amphibians and reptiles of Europe. Amphibia– Reptilia 35: 1–31.
- Spilani, L., Strachinis, I., Lampropoulos, A., Tsigas, P., Poulakakis, N., Pafilis, P. (2018): *Podarcis vaucheri* (Sauria: Lacertidae) far away from home: a new invasive species in Greece. Amphibia– Reptilia 39: 363–368.
- Strachinis, I., Artavanis, D. (2017): Additions to the known herpetofauna of the Island of Ithaki, Ionian Sea, Greece. Herpetozoa 30: 64–66.
- Strachinis, I., Lymberakis, P., Tzoras, E. (2023): Tarentola mauritanica (Squamata: Phyllodactylidae) in Greece: an update on the species' distribution, including new records. Ecologia Balkanica 15: 8–26.
- Strachinis, I., Poulakakis, N., Karaiskou, N., Patronidis, P., Patramanis, I., Poursanidis, D., et al. (2021): Phylogeography and systematics of *Algyroides* (Sauria: Lacertidae) of the Balkan Peninsula. Zoologica Scripta 50: 282–299.

Valakos, E.D, Pafilis, P., Sotiropoulos, P., Lymberakis, P., Maragou, P., Foufopoulos, J. (2008): The Amphibians and Reptiles of Greece. Chimaira Editions, Frankfurt am Main.