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SHORT COMMUNICATION

# First record of the scale insect *Stotzia ephedrae* in Greece

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**Summary** The scale insect *Stotzia ephedrae* (Newstead) (Hemiptera: Coccomorpha: Coccidae) was recorded for the first time in Greece on 20 April 2021. It was found on *Ephedra foeminea* Forssk. (Ephedraceae: Gnetales) in Athens. From preliminary studies it was found that *S. ephedrae* is an oviparous, biparental species completing one generation per year.

*Additional keywords*: *Ephedra foeminea,* Greece, *Stotzia ephedrae*

*Stotzia ephedrae* (Newstead) (Hemiptera: Coccomorpha: Coccidae) was recorded for the first time in Greece on *Ephedra foeminea* Forssk (Ephedraceae: Gnetales) at Lecabettus Hill (37º58´ N, 23º44´ E, altitude: 270m) in Athens, on 20 April 2021. It was found to be settled on *E. foeminea* shoots as ovipositing female adult with a waxy ovisac (Figs. 1, 2). The confirmation of the species *S. ephedrae* was made by Professor Giuseppina Pellizzari, Dipartimento di Agronomia, Animali, Alimenti, University of Padua, Italy. Vouchers of permanent slides of the scale insect (two slides with one preoviposting female adult on each slide, collected on 26-3-2022, and one slide with two preoviposting female adults, collected on 3-4-2022) are kept in the Laboratory of Agricultural Entomology and Zoology, Department of Agriculture, School of Agriculture and Food, University of the Peloponnese.

The genus *Stotzia* Marchal 1906 (Hemiptera: Coccomorpha: Coccidae) includes the species *S. chrysophyllae, S. ephedrae, S. fuscata* and *S. maxima* (García Morales *et al*., 2016). *Stotzia ephedrae* has been recorded in Algeria (MacGillivray, 1921), Azerbaijan (Ben-Dov, 1993), Egypt (García Morales *et al.,* 2016), France (Foldi and Germain, 2018), Georgia (García Morales *et al.,* 2016),



**Figure 1.** *Ephedra foeminea* infested by *Stotzia ephedrae.*



**Figure 2.** *Stotzia ephedrae* ovipositing female with ovisac.

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Iran (Kozár *et al.,* 1996; Fallahzadeh and Japoshvili, 2017), Israel (Bodenheimer, 1935), Italy (Pellizzari, 2003), Morocco (García Morales *et al.,* 2016), Sardinia (Pellizzari, 2003) and Spain (Ben-Dov, 1993).

The host plants of *S. ephedrae*, belong to six plant genera and five Families: *Bupleurum* (Apiaceae), *Asparagus* (Asparagaceae), *Ephedra* (Ephedraceae), *Coronila* (Fabaceae), *Genista* (Fabaceae) and *Tamarix* (Tamaricaceae).

World-wide, 25 scale insect species from four Families have been recorded on *Ephedra* species: four species of Coccidae, 15 of Diaspididae, five of Eriococcidae and one of Pseudococcidae (García Morales *et al.,* 2016). The records in Greece are mainly made by Koroneos (1934): *Leucaspis riccae* Targioni Tozztti (Diaspididae) on *E. (vulgaris) distachya* in Athens and on *E. (campylopoda) foeminea* in Lecabettus Hill - Athens and in Ano Lechonia - Magnessia; *Dynaspidiotus (Aspidiotus) ephedrarum* (Lindinger) on *E. (campylopoda) foeminea* in Lecabettus Hill - Athens. The latter species was recorded later on *Ephedra distachya* in Kato Sounio, near Athens (Szita*et al.,* 2017).

Preliminary studies on biology and ecology of *S. ephedrae,* after its first record in Athens, show that the scale is an oviparous biparental species (Fig. 3) completing one generation per year. Also, natural enemies of the scale are recorded, including coccinellid predators and hymenopteran endoparasites (personal communication).

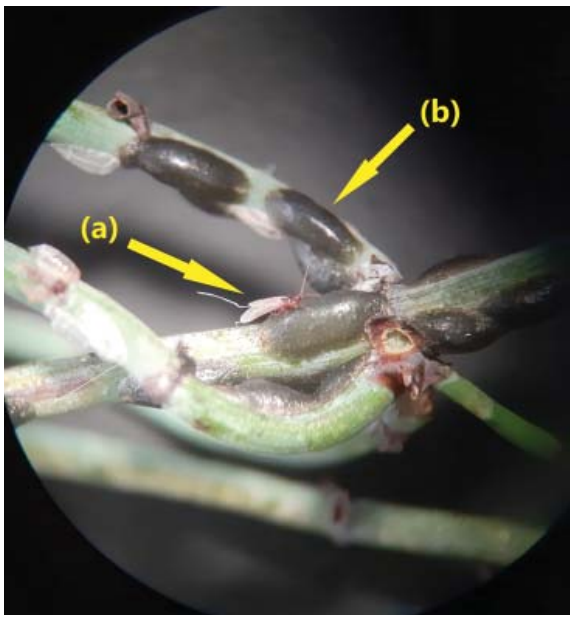



**Figure 3.** *Stotzia ephedrae* adulds: (a): male, (b): preovipositing female.

*The senior author expresses his gratitude to Professor Giuseppina Pellizzari (Dipartimento di Agronomia, Animali, Alimenti), University of Padua, Italy, for the confirmation of Stotzia ephedrae.*

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ΣΥΝΤΟΜΗ ΑΝΑΚΟΙΝΩΣΗ

# Πρώτη καταγραφή του κοκκοειδούς *Stotzia ephedrae* στην Ελλάδα

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**Περίληψη** Η εργασία αποτελεί την πρώτη καταγραφή στην Ελλάδα του κοκκοειδούς εντόμου *Stotzia ephedrae* (Newstead) (Hemiptera: Coccomorpha: Coccidae). Το έντομο βρέθηκε στις 20 Απριλίου 2022 επί του φυτού *Ephedra foeminea* Forssk. (Ephedraceae: Gnetales) στο λόφο του Λυκαβηττού στην Αθήνα. Από τρέχουσες προκαταρκτικές μελέτες διαπιστώθηκε ότι το είδος *S. ephedrae* είναι ωοτόκο, αμφιγονικό και συμπληρώνει μία γενεά το έτος.

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