

Detection of the forester moth *Adscita capitalis* (STAUDINGER, 1879) (Lepidoptera: Zygaenidae, Procridinae) in Greek Macedonia

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Abstract: The main range of the forester moth *Adscita* (*Adscita*) *capitalis* (STAUDINGER, 1879) comprises Anatolia (Turkey), furthermore the Greek island of Samos in the east Aegean Sea and two localities in the Republic of Macedonia (former Yugoslav Republic of Macedonia) were reported to harbour *A. capitalis*. In the present paper the occurrence of this forester moth on the mainland of Greece is communicated for the first time. The habitat lies in the vicinity of Kozani, the capital of Greek West Macedonia. The biotope is a flower-rich tall grassland loosely intermingled with bushes at an altitude of 700–800 m. The hitherto known populations of *A. capitalis* live at far higher altitudes.

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Zusammenfassung: Das Hauptverbreitungsgebiet der Grünzygäne *Adscita* (*Adscita*) *capitalis* (STAUDINGER, 1879) liegt in Anatolien (Türkei). Außerdem existieren Nachweise von der unmittelbar vor der türkischen Küste liegenden griechischen Insel Samos sowie in der Republik Mazedonien (früher zu Jugoslawien gehörig) vor. Hier wird erstmalig über ein Vorkommen von *A. capitalis* auf dem griechischen Festland berichtet. Das Habitat liegt in der Nähe der westmazedonischen Hauptstadt Kozani in 700–800 m Höhe und besteht aus einer locker mit Büschen besetzten blütenreichen Hochgrasflur. Der aktuelle Fundort liegt weit niedriger als die bisher bekannten Vorkommen, die bis in den Bereich subalpiner Matten reichen.

Introduction

Adscita capitalis is unique among the species of *Adscita* in having strongly clubbed antennae not only in ♂♂ (Fig. 1) but, although less distinct, also in ♀♀. Therefore, it is possible to determine this forester moth without genital preparations (Fig. 2). Its main range comprises Anatolia (Turkey). MOLLET (1995) detected *A. capitalis* on the island of Samos which belongs to Greece but is immediately adjacent to Anatolia. DRENOWSKI (1921, 1930) reported the occurrence of *A. capitalis* in Macedonia (former Yugoslav Republic of Macedonia: Galicica Planina, Ohrid, 1000–1700 m, and Bigla Planina, Delcevo, 1000–1700 m). DE FREINA & WITT (2001: 110) mention these findings in their monograph on the Zygaenidae but consider them as “doubtful”. They do not yield any explanation for this assessment, however. Recently, EFETOV et al. (2010) were looking for DRENOWSKI’s material in different museum collections of Europe. Only one specimen collected by DRENOWSKI was detected in the Bulgarian Natural History Museum, Sofia. Presumably, most of the material came to the Macedonian Natural

History Museum at Skopje and has been destroyed during the heavy earthquake in 1963 (EFETOV et al. 2010). To our knowledge, there are no reports on the occurrence of *Adscita capitalis* in the mainland of Greece so far.

Observations and discussion

In the first half of June 2011 we made an excursion to Thessaly and Macedonia (Greece) and, to our surprise, detected this forester moth in West Macedonia. The habitat is about 2 km eastwards of Drepano which is a village adjacent to the capital of West Macedonia, Kozani. It consists of a flower-rich (*Scabiosa* spp., *Helianthemum* spp. – the latter probably being the larval foodplant of *Adscita capitalis*: EFETOV et al. 2010), rather tall grassland intermingled with bushes of oaks, pines and junipers at an altitude between 700 and 800 m (assessed by means of Google Earth) (Fig. 3). There were no clues that the biotope is used as pasture or agriculturally otherwise.

At noon of 5. vi. 2011 6 *Adscita capitalis* ♂♂ that were fast flying in the vegetation were collected. Specimens sitting on plants were not observed. As we were only about an hour at this site, we suppose that there exists a rather strong population of this species. Accompanying Zygaenidae were *Zygaena purpuralis*, *Zygaena punctum*, *Zygaena loti* and *Jordanita subsolana*.

It is remarkable that the habitat found near Drepano is situated at a much lower altitude than the previously reported localities where *A. capitalis* was detected: Samos, 1150 m (MOLLET 1995); Bolkar Dagları, Anatolia, 1500–2500 m and higher (compiled by MOLLET 1995); Galicica Planina, Ohrid, 1000–1700 m, and Bigla Planina, Delcevo, 1000–1700 m; the latter two sites are in Macedonia (former Yugoslavia) (EFETOV et al. 2010).

EFETOV et al. (2010) studied the biology of *A. capitalis* in material collected in the Bolkar Dağları near Niğde, Turkey, at an altitude of 2500–2600 m and gave two habitat pictures. They show a rocky subalpine low grassland with spiny, high-mountain cushion vegetation. This results in the conclusion that the hitherto reported habitats of *A. capitalis* were quite different from the present one and suggest an ecologically broader behaviour of the species.

Fig. 4 shows the updated distribution map of this forester moth.

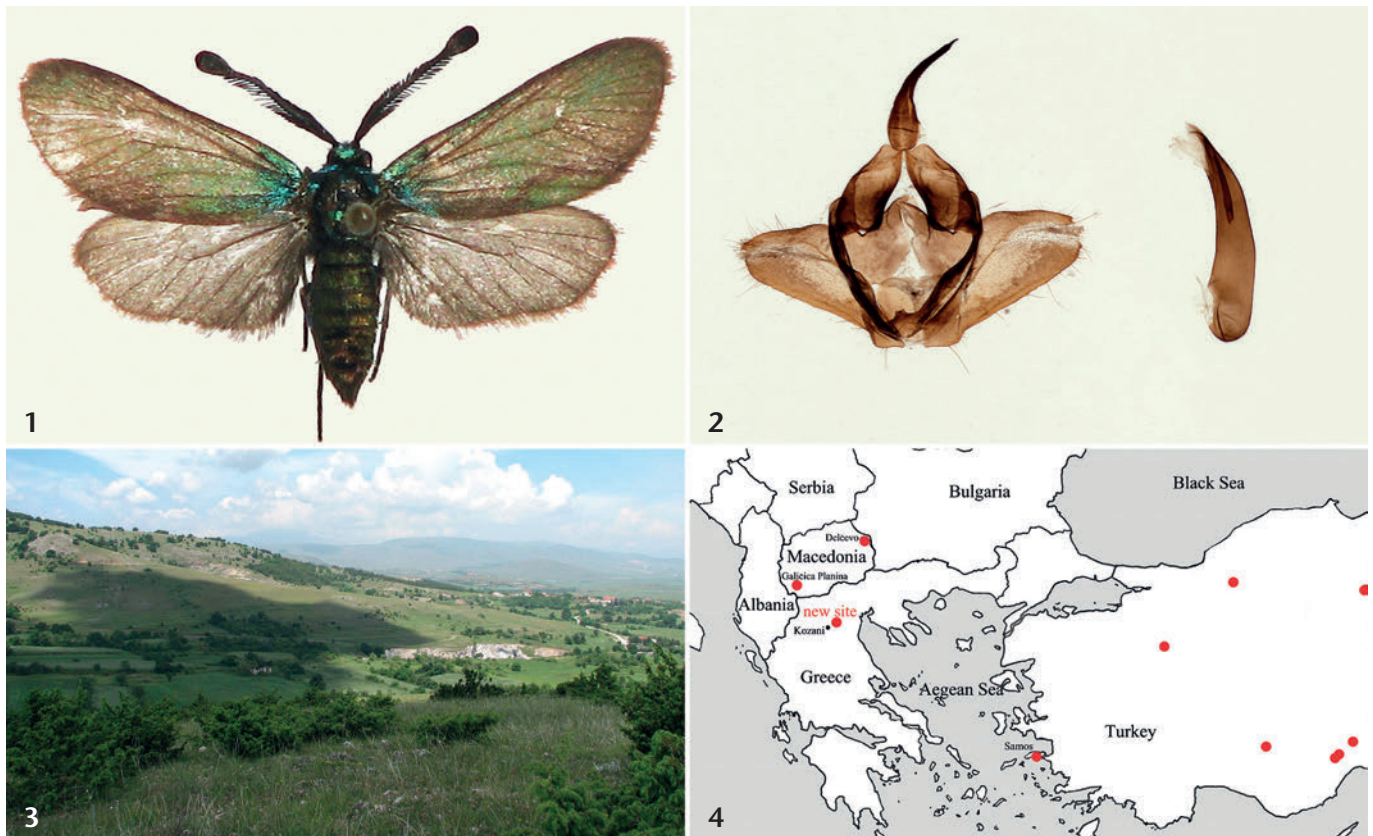


Fig. 1: *Adscita capitalis*, Drepano (West Macedonia, 5. vi. 2011), ♂. **Fig. 2:** Genitalia of a ♂ from Drepano. **Fig. 3:** Habitat in West Macedonia, near Drepano. **Fig. 4:** Distribution map of *Adscita capitalis* after MOLLET (1995) and EFETOV et al. (2010), modified and supplemented with the actual observation.

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References

- DE FREINA, J. J., & WITT, T. J. (2001): Die Bombyces und Sphinges der Westpalaearktis (Insecta, Lepidoptera), Band 3, Zygaenidae. Ein umfassendes, reich illustriertes Bestimmungsbuch europäischer, nordafrikanischer und kleinasiatischer Zygaenen unter Berücksichtigung angrenzender Gebiete. – München (Edition Forschung und Wissenschaft), 575 S.
- DRENOWSKI [= DRENOWSKI], A. K. (1921): Zur Lepidopterenfauna Mazedoniens. – Zeitschrift für wissenschaftliche Insektenbiologie, Berlin, **16**: 164–166.

DRENOWSKI [= DRENOWSKI], A. K. (1930): Beitrag zur Lepidopterenfauna SW-Mazedoniens. – Spisanie na Balgarskata akademiya na naukite/Sammelwerk der bulgarischen Akademie der Wissenschaften, Sofia, **42**: 129–177.

EFETOV, K. A., MOLLET, B., & TARMANN, G. M. (2010): The biology and early stages of *Adscita* (*Adscita*) *capitalis* (STAUDINGER, 1879) (Lepidoptera: Zygaenidae, Procridinae). – Nachrichten des Entomologischen Vereins Apollo, Frankfurt am Main, N.F. **31** (3): 119–125.

MOLLET, B. (1995): Contribution à la connaissance des Procridinae de Turquie et des îles grecques de l'est de la mer Egée (Lepidoptera: Zygaenidae). – Linneana Belgica, Vilvoorde, **15**: 127–136.

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