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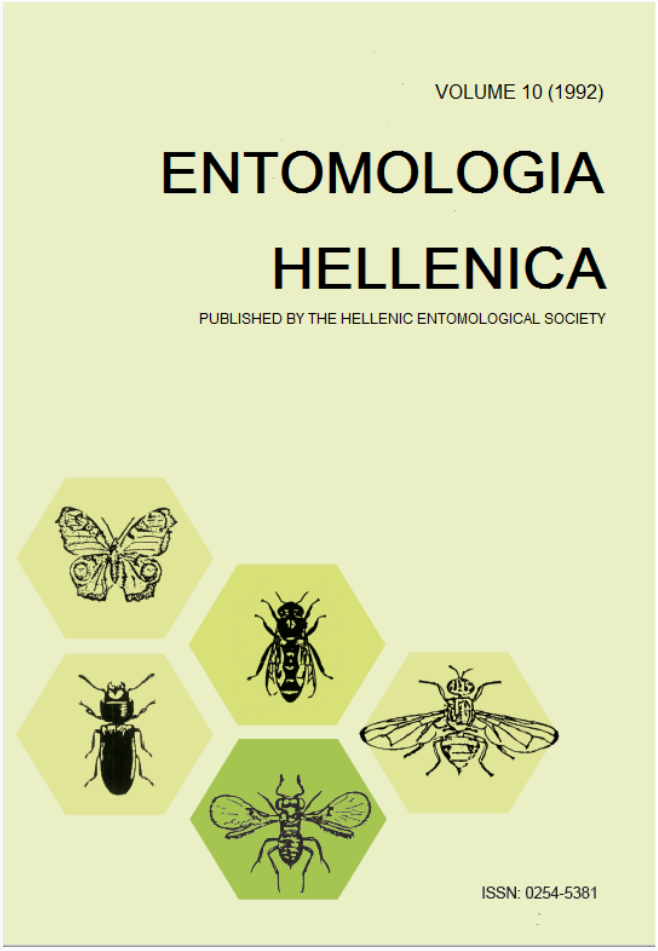

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New Records of Aphid Species Caught in Water Yellow Traps in Greece[1]

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ABSTRACT

A number of yellow Moericke water traps were placed in cotton, tomato, tobacco, potato, squash and maize fields in Boiotia, Thessalia, Macedonia and Aitoloakarnania from June to the end of 1992. From a limited number of trap captures examined, fifty nine aphid species were identified of which twenty species are new records for Greece.

Introduction

A relatively few aphid species has been recorded in Greece when it is compared with records from neighbouring countries. In Turkey 219 species have been recorded, while the corresponding numbers for Bulgaria, Romania, France are 364, 490 and 550 (Rémaudiere 1982). He predicted the number of aphid species in Greece should be 500 to 600. This large number is based on the variety of the vegetation and the geographic diversity of the country.

A comprehensive check-list of the Greek aphid fauna was provided by Rémaudiere (1982) and updated by Lykouressis and Tsitsipis (1987). Furthermore, three more species have been reported by Panayotou and Katis (1986), Katsoyannos et. al. (1989) and Lykouressis and Polatsidis (1990). To date, a total of 136 aphid species have been recorded.

In the present study new records of aphid species, caught in Moericke traps in Greece, are presented. This work is part of an extended study of the Greek aphid fauna.

Materials and Methods

Yellow, Moericke type, water traps (Moericke 1951) were used to capture alate aphids. They were square steel trays ($60 \times 60 \times 10$ cm) similar to those used by Robert and Rouze-Jouan (1978) and painted yellow (reflectance 580 nm). The traps were set up at the end of June 1992 and remained until the end of the year. Three traps were placed in each crop. Several areas and crops were monitored as follows: a) The Thiva region (Boiotia) in cotton and tomato crops, b) Agrinio (Aitoloakarnania) in a tobacco crop, c) Velestino, Glafki, Makrychori, in the region of Thessalia, in cotton, tomato and maise crops respectively, and d) Vassilika (Macedonia) in a squash crop.

A few drops of detergent was added to each trap to facilitate drowning of aphids. Traps were inspected twice weekly and all insects collected. Aphids were separated from other insects and stored in

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TABLE 1. New records of aphid species caught in Moericke traps in Greece in 1992.

Species	Boiotia	Thessalia	Macedonia	Aitoloakarnania
Anoecia corni (F.)	+		+	
Aphis (Protaphis) anuraphoides Nevsky	+	+	+	+
Aphis avicularis (H.R.L.)			+	+
Aphis nasturtii Kaltenbach		+		
Aspidaphis adjuvans Walker			+	
Brachycaudus populi (del Guercio)				+
Brachyunguis harmalae Das		+	+	
Capitophorus carduinus (Walker)				+
Chaitophorus salicti Schrank				+
Lipaphis erysimi (Kaltenbach)	+		+	+
Longicaudus trirhodus (Walker)			+	
Myzus varians Davidson	+			
Sipha (Rungsia) elegans del Guercio			+	
Tetraneura nigriabdominalis (Sasaki)	+		+	
Tetraneura ulmi (Linnaeus)		+	+	
Thelaxes dryophila (Schrank)	+		+	
Therioaphis luteola (Börner)			+	
Thuleaphis rumexicolens (Patch)	+		+	
Thuleaphis sedi Jacob				+
Tuberolachnus salignus (Gmelin)	+			

plastic vials in lactic alcohol (2 volumes of ethyl alcohol 90-95%, 1 volume lactic acid 75% W/W: Eastop and van Emden 1972). Aphids were examined with the aid of a binocular stereoscopic microscope (× 80 magnification) and sorted into species using available keys for alate forms (Jacky and Bouchery 1980, Taylor 1984, Brown 1989).

Results and Discussion

The present study deals only with the examination of a few samples of the trap captures. In those samples examined, fifty nine aphid species were identified of which twenty are new records (Table 1). The number of new records represent an increase by approximately 15.5% of the known aphid species of Greece and it demonstrates the limited knowledge of Greek aphids.

Some of the recorded species are known as vectors of important plant viruses occurring in Greece and the present study makes a contribution to the understanding of the epidemiology of those viruses. Further study is needed for the better knowledge of the Greek aphidofauna.

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KEY WORDS: Aphids, New records, Greece, Aphid fauna

Νέες Καταγραφές για την Ελλάδα Ειδών Αφίδων που Συνελήφθησαν σε Κίτρινες Παγίδες

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ΠΕΡΙΛΗΨΗ

Από τον Ιούνιο του 1992 έως το τέλος του ιδίου έτους, κίτρινες παγίδες τύπου Moericke τοποθετήθηκαν σε διάφορες περιοχές της Ελλάδας, όπως Βοιωτία, Θεσσαλία, Μακεδονία και Αιτωλοακαρνανία και σε διάφορες καλλιέργειες, όπως βαμβάκι, τομάτα, καλαμπόκι, κολοκύθι και καπνό. Από τα είδη τα οποία συνελήφθησαν στις παγίδες αυτές και που κατέστη δυνατός ο προσδιορισμός τους, είκοσι αναφέρονται για πρώτη φορά στη χώρα μας.