APHELINUS DESANTISI HAYAT (HYMENOPTERA: APHELINIDAE), A NEW RECORD OF PARASITOIDS ON APHIDS (HOMOPTERA: APHIDIDAE) IN EGYPT

SHAABAN ABD-RABOU AND MONIRA M. EL-FATIH

Plant Protection Research Institute, ARC, Dokki, Giza, Egypt

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Abstract

The present work deals with survey of the species attributed to genus *Aphelinus* on different aphid species on different host plants in Egypt. The results indicated that the parasitoid *Aphelinus desantisi* Hayat (Hymenoptera: Aphelinidae) represents a new record of parasitoids on *Schizaphis cyperi* (Homoptera: Aphididae) on *Cynodon dactylon* in Egypt.

INTRODUCTION

The species of the aphelinid genus *Aphelinus* Dalman (Hymenoptera: Aphelinidae) are parasitoids of aphids (Homoptera: Aphididae) and are considered beneficial for acting as control agents of these pests (Hayat, 1994). The genus currently contains 57 species (Hayat, 1983)) and represents one of the most important parasitic groups used in biological control. Various species are currently being collected as a part of intensive foreign exploration efforts to search for parasites of aphids (Hayat,1998). Only five species of *Aphelinus* namely *A. asychis* Walker, *A. demyaati* Abd-Rabou, *A. flavipes* (Forester), *A. mali* (Haldeman) and *A. paramali* Zehavi & Rosen have been recorded from Egypt (Abd-Rabou, 2005).

MATERIALS AND METHODS

The specimens of genus *Aphelinus* were collected from different infested host plants in different localities. During 2006, samples of *Cynodon dactylon* infested by *Schizaphis cyperi* (Homoptera: Aphididiae) were collected from Giza. Samples were prepared for examination by the method adopted by Noyes (1982). Terminology and synonyms are after Hayat (1972 and 1983).

RESULTS AND DISCUSSION

Results indicated that the collected parasitoid species was *Aphelinus desantisi*Hayat (Hymenoptera: Aphelinidae) associated with *Schizaphis cyperi* (Homoptera:

Aphididae) on *Cynodon dactylon* in Egypt. This parasitoid is recorded here for the first time in Egypt.

Aphelinus desantisi Hayat (Figs 1-6)

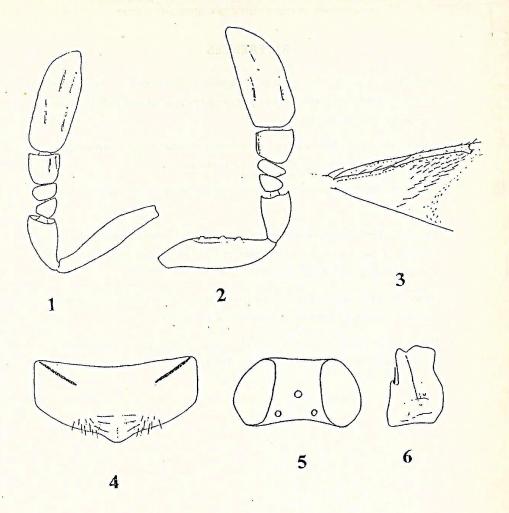
Aphelinus desantisi Hayat, 1972: Entomophaga, 17(1):52-56

Dignosis : Head dark brown,antennae pale dusky, forewing hyaline with faint infuscation below stigmal vein, legs whitish. Speculum mesally bounded by about 40 cilia; femora of all legs whitish, tibial spur of middle leg as long as basitarsus, middle and hind coxae more or less and whole of middle and hind tibiae brown; frontovertex slightly longer than wide .Third funicle segment of male as long as wide.

Material Examined: 10 ♀♀, Giza, V. 2006 ex. *Schizaphis cyperi* on *Cynodon dactylon*.

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Figs (1-6) Aphelinus desantisi: Fig. (1): Antenna of female, Fig. (2): Antenna of male, Fig. (3): Basal part of fore wing, Fig. (4): mandible, Fig. (5): Dorsal view of head, Fig. (6): subgenital plate (After Hayat, 1972).

REFERENCES

- Abd-Rabou, S. 2005. A new species of *Aphelinus* (Hymenoptera : Aphelinidae), with some other new records from Egypt. Acta Phytopathologica et Entomologica Hungerica ,40(3-4): 391-395.
- 2. Hayat, M. 1972. The species of *Aphelinus* Dalman, 1820 (Hymenoptera: Aphelinidae) from India. Entomophaga, 17(1): 49-58.
- 3. Hayat, M. 1983. The genera of Aphelinidae of the world. Systematic Entomology, 8: 63-102.
- Hayat, M. 1994. Taxonomic studies on *Aphelinus* (Hymenoptera: Aphelinidae). VI. Records of two known and descriptions of two new species from the Oriental region. Entomon 19(1,2) pp. 35-39
- 5. Hayat, M. 1998. Aphelinidae of India (Hymenoptera: Chalcidoidea): a taxonomic revision. Memoirs on Entomology International 13: 1 416.
- 6. Noyes, J. S. 1982. Collecting and preserving chalicd wasps (Hymenoptera: Chalcidoidea). Journal Natural History, 16: 315-334.

أفيلينس ديسانتيسى (فصيلة أفيديدى - رتبة غشائية الأجنحة) تسمجيل جديد من الطفيليات على المن في مصر

شعبان عبدربه ، منيرة الفاتح

معهد بحوث وقاية النباتات- مركز البحوث الزراعية - الدقي - جيزة -

البحث تضمن عمل حصر للأنواع التابعة لجنس أفيلينس المتطفلة على أنواع مختلفة من المن على بعض العوائل النباتية في آماكن عديدة في مصر. اظهرت النتائج ان الطفيل أفيلينس ديسانتيسي وجد مصاحبا للمن على النجيل في محافظة الجيزة. ويمثل هذا الطفيل تسجيلا جديدا في مصر.