

NEW RECORD OF THE PARASITOID, *COMPERIELLA LEMNISCATA* COMPERE AND ANNECKE (HYMENOPTERA: ENCYRTIDAE) ON *AONIDIELLA AURANTII* (HOMOPTERA: DIASPIDIDAE) ON GUAVA IN EGYPT

SHAABAN ABD-RABOU AND ANGEL R. ATTIA

Plant Protection Research Institute, Agriculture Research Center, Dokki, Giza, Egypt.

(Manuscript received 10 February 2005)

Abstract

During the present work, the samples of guava leaves heavily infested by red scale, *Aonidiella aurantii* (Maskell) (Homoptera: Diaspididae) and associated with the parasitoid species at Giza in December, 2004 were collected. Preservation, isolation and identification of the parasitoid observed, *Comperiella lemniscata* Compere and Annecke is recorded here as a first time in Egypt.

INTRODUCTION

Red scale *Aonidiella aurantii* (Maskell) (Homoptera: Diaspididae) is especially serious pest on fruit and nut trees, on ornamental shade trees, shrubs and on ground covers, on forest trees on indoor plantings (Miller and Kosztarab, 1979). Polyphagous pest species that were introduced to new geographic areas are usually of higher economic importance. The main injury caused by this insect is the ingestion of plant sap. Their damage is manifested in reducing the number of healthy plant. Severely infested plants grow poorly and may drop leaves prematurely and suffer dieback of twigs and branches.

The parasitoids of *A. aurantii* have been attracted many authors, El-Minshawy and Osman, 1974 [(*A. chrysomphali* (Mercet)]; Moursi and Mesbah, 1985 (*Aphytis* sp.); Abd-Rabou, 1997 [*A. chrysomphali*, *A. lingnanensis*, *Encarsia citrine* (Craw), *Encarsia lounsburyi* (Berlese & Paoli)]; Abd-Rabou, 1999a [*A. chrysomphalus*, *A. coheni*, *A. lingnanensis*, *Aphytis mytilaspidis* (Le Baron), *E. citrine*, *E. lounsburyi*, *Marietta leopardina* Motschulsky] and Abd-Rabou, 1999b (*A. chrysomphalus*, *A. coheni*).

Genus *Comperiella* Howard (Hymenoptera: Chalcidoidea: Encyrtidae) contains 9 species of the world (Prinsloo, 1996) and it is recorded as an effective parasitoids of armored scale insects (Noyes and Hayat, 1994 and Garonna & Viggiani, 1993).

MATERIALS AND METHODS

During December 2004, collected guava leaves heavily infested by red scale, *A. aurantii* in Giza were transferred to the laboratory for parasitoids emergence and identification. Identification of the parasitoid followed mounting the specimens through

the method of Noyes (1982). Identification of the parasitoid followed by the key of Prinsloo (1996).

RESULTS AND DISCUSSION

Results indicated that the parasitoid species collected was *Comperiella lemniscata* Compere and Annecke (Hymenoptera: Encyrtidae) associated with *A. aurantii* (Maskell).

***Comperiella lemniscata* Compere and Annecke Figs(1-4)**

Diagnosis: Lateral ocelli one ocellus diameter apart (more than one but decidedly less than two, diameters in some specimens), much closer together than to eye margins, dark band on frontovertex narrow, mesoscutum with the median longitudinal bluish green band not interrupted by cupreous band along the midline , antennal club slightly narrower than F1 and strongly narrowed to apex, tibial spur of middle leg subequal to basitarsus.

Material Examined: 5♀♀ Giza, XII. 2004, ex. *A. aurantii* on guava.(PPRI).

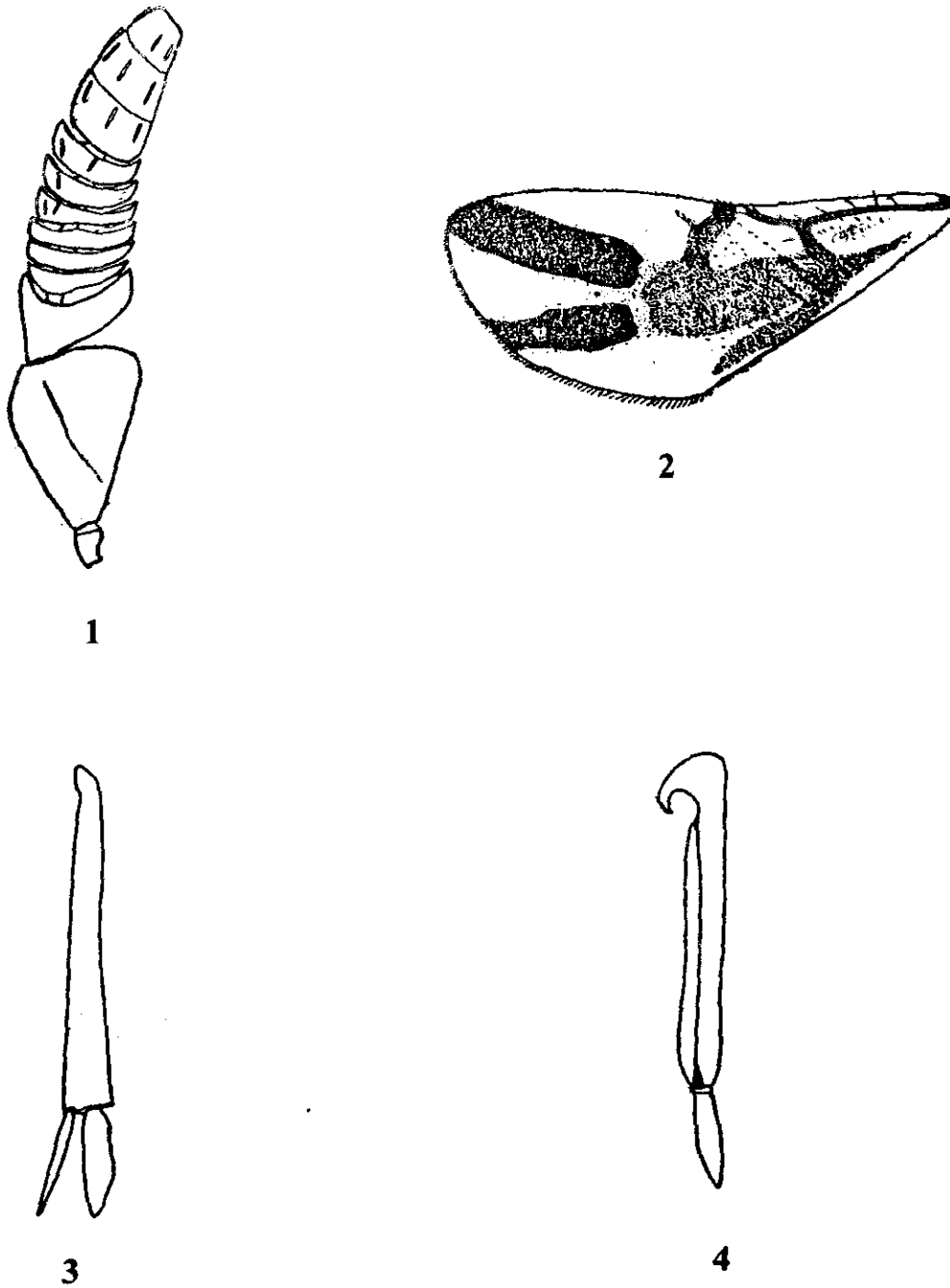
Remarks: This species near to *C. bifasciata* Howard but different in lateral ocelli two ocellar diameters apart and the ocellar space equal to ocellocular space and tibial spur of middle leg distinctly longer than basitarsus

This parasitoid recorded here for the first time in Egypt Abd-Rabou (2001 , 2002 and 2005) studied the genera of Encyrtidae and not collected the genus *Comperiella* from Egypt.

In the near future a revision of the genus *Comperiella* will be published by the first author of this work to observe the present status of this genus in Egypt.

Acknowledgment

The authors are greatly indebted to Dr. Gerg Evans, USA to help in confirm the Identification of the material of the parasitoids



Figs 1-4: *Comperiella lemniscata*, (1) Female antenna, (2) Fore wing, (3) Middle tibia and part of tarsus, (4) Second valvifer and third valvula (after Hayat, 1977).

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تسجيل طفيل جديد من جنس *Comperiella* على
الحشرة القشرية الحمراء على الجوافة في مصر

شعبان عبدربه و أنجيل رشدى عبد السيد عطية

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

تضمن هذا العمل تجميع عينات مصابة بالحشرة القشرية الحمراء و متطفل عليها على الجوافة في محافظة الجيزة خلال شهر ديسمبر ٢٠٠٤ و تم عزل و تحضير عينات الطفيل لتعريفه بأستخدام المفاتيح التصنيفية المتخصصة لتعريف الطفيليات. أتضح من نتائج التعريف أن هذا الطفيل هو *Comperiella lemniscata* Compere and Annecke و يعتبر تسجيلاً جديداً من جنس *Comperiella* على الحشرة القشرية الحمراء على الجوافة في مصر