

SCIENTIFIC NOTE**NEW RECORD AND HOST OF *ENCARSIA BIFASCIAFACIES*
(HYMENOPTERA: APHELINIDAE) ON SUGAR CANE SOFT SCALE,
PULVINARIA TENUIVALVATA (HOMOPTERA: COCCIDAE) ON
SUGAR CANE IN EGYPT****ABD-RABOU, SHAABAN AND SAADIA A. ABD-EL-SAMEA***Plant Protection Research Institute, Agriculture Research Center, Dokki, Giza, Egypt*

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Abstract

Species of *Encarsia* (Hymenoptera: Aphelinidae) have been considered as the most efficacious group of biocontrol agents of whitefly and armored scale pests on a wide broad range of Agricultural crops (Polaszek *et al.*, 1999). Abd-Rabou (1998) elucidated the effective role of the different species of this genus of Egypt.

Encarsia species are mostly primary parasitoids of whiteflies (Aleyrodidae) and armored scale insects (Diaspididae), with four species known from aphids (Hormaphididae) (Evans *et al.*, 1995). Males, however, are very often hyperparasitoids of females (or males) of their own of other species (Viggiani, 1984).

Genus *Encarsia* contains fourteen species, eleven species attacks whiteflies and the rest of the species attack armored scale insects in Egypt (Polaszek *et al.*, 1999). Abd-Rabou (2001) recorded 32 parasitoid species attacking soft scale insects in Egypt.

Hayat (1989) is the only references recorded Genus *Encarsia* as a parasitoid of soft scale insects. In spite of the fact that soft scale are not attacked by *Encarsia* species as well known in Egypt after the works of Polaszek *et al.* 1999 and Abd-Rabou, 1998, 2001.

During September 2004, collected sugar cane leaves heavily infested by sugar cane soft scale, *Pulvinaria tenuivalvata* (Newstead) (Homoptera : Coccidae) in Qena (Nag – Hammadi) 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 started by the keys of Abd-Rabou, 1998 and Polaszek *et al.* 1999 followed by the Keys of Hayat, 1989 and Abd-Rabou and Ghahari, 2004

Results indicated that the parasitoid species collected was *Encarsia bifasciafacies* Hayat (Hymenoptera: Aphelinidae) associated with the sugar cane soft scale, *P. tenuivalvata*. This parasitoid recorded for the first time attacking the new host *P. tenuivalvata* in Egypt. It concluded that *Encarsia* species was found for the first time to attack a soft scale insect which is a new phenomenon in Egypt. Further investigation in detail will be conducted on this parasitoid soon.

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تسجيل طفيل جديد من جنس إنكارسيا على الحشرة القشرية الرخوة على القصب كعائل جديد فى مصر

شعبان عبد ربه ، سعدة عبد البصير عبد السميع

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

تضمن هذا العمل تجميع عينات مصابة بالحشرة القشرية الرخوة و متطفل عليها على القصب فى محافظة قنا خلال شهر سبتمبر ٢٠٠٤ وتم عزل و تحضير عينات الطفيل لتعريفه بأستخدام المفاتيح التصنيفية المتخصصة لتعريف الطفيليات. أتضح من نتائج التعريف أن هذا الطفيل هو *Encarsia bifasciata* Hayat و يعتبر تسجيلا جديدا من جنس إنكارسيا على الحشرة القشرية الرخوة على القصب والذي يعتبر أيضا كعائل جديد فى مصر.