



governorates (Figure 1), which nine of them are new hosts in Egypt and the world. Additionally it is also associated with three parasitoid species which two of them are new to Egypt, and host-parasitoid

relationship of another is new for the world. As well as it is recorded with eight plant associates, four of them new to Egypt and world (Table I).

**Table I.** Host insects, host plants and distribution of the effective parasitoid, *Microterys nietneri* in Egypt

Host insect	Host plant	Location	Reference
<b>I. Hemiptera Coccidae</b>			
1. <i>Ceroplastes cirripediformis</i> Comstock**	<i>Psidium guajava</i>	Qalyubiya	Present work
2. <i>Ceroplastes floridensis</i> Comstock	<i>Citrus</i> sp.	Gharbiya	Abd-Rabou, 2001a
3. <i>Ceroplastes rusci</i> (Linnaeus)	<i>Psidium guajava</i>	Beni-Suif	Morsi, 1999
4. <i>Coccus capparidis</i> (Green)**	<i>Capparis</i> sp.***	Cairo	Present work
5. <i>Coccus hesperidum</i> L.**	<i>Mangifera indica</i>	Ismailia	Present work
6. <i>Coccus longulus</i> (Douglas)**	<i>Mangifera indica</i>	Sharqyia	Present work
7. <i>Eucalymnatus tessellatus</i> (Signoret)**	<i>Gardenia</i> sp.***	Giza	Present work
8. <i>Kilifa acuminata</i> (Signoret)**	<i>Mangifera indica</i>	Qalyubiya	Present work
9. <i>Parasaissetia nigra</i> (Nietner)**	<i>Olea europaea</i>	Fayoum	Present work
10. <i>Pulvinaria floccifera</i> (Westwood)	<i>Psidium guajava</i>	Gharbiya	Abd-Rabou and Badary, 2004
11. <i>Pulvinaria mesembryanthemi</i> (Vallot)**	<i>Mesembryanthemum</i> sp.***	Helwan	Present work
12. <i>Pulvinaria psidii</i> (Maskell)	<i>Psidium guajava</i>	Kafr El-Shikh	Hendaway, 1999
13. <i>Pulvinaria tenuivalvata</i> (Newstead)**	<i>Saccharum officinarum</i> ***	Daqahliya	Present work
14. <i>Saissetia coffeae</i> (Walker)	<i>Olea europaea</i>	Northern Coast	Abd-Rabou, 1999
15. <i>Saissetia oleae</i> (Oliver)	<i>Olea europaea</i>	El-Arish	Abd-Rabou, 2001b
<b>II. Hymenoptera: Aphelinidae</b>			
<i>Marietta leopardina</i> (Motschulsky)**	<i>Citrus</i> sp.	Gharbiya	Present work
<b>III. Hymenoptera: Encyrtidae</b>			
<i>Cheiloneurus claviger</i> (Thomson)**	<i>Citrus</i> sp.	Gharbiya	Present work
<b>IV. Hymenoptera: Pteromalidae</b>			
<i>Pachyneuron concolor</i> (Förster)*	<i>Mangifera indica</i>	Ismailia	Present work

\* new to Egypt

\*\* new to Egypt and world

\*\*\* new host plants

## REFERENCES

- Abd-Rabou S. (1999) Parasitoids attacking the Mediterranean black scale, *Saissetia oleae* (Hemiptera: Coccidae) in Egypt. *Entomologica Bari*, **33**: 169–172.
- Abd-Rabou S. (2001a) Parasitoids attacking citrus wax scale, *Ceroplastes floridensis* Comstock (Homoptera: Coccidae) in Egypt. *First Conference of Safe Alternatives of Pesticides for Pest Management*, Assiut university, pp. 227–233.
- Abd-Rabou S. (2001b) A survey of parasitoids associated with the hemispherical scale, *Saissetia coffeae* (Walker) (Hemiptera: Coccidae) in North-west Coastal area of Egypt. *Bulletin Faculty Agriculture Cairo, Universty Special Edition*, pp. 1–5.
- Abd-Rabou S. (2003) Host range and distribution of *Marietta leopardina* (Hymenoptera: Aphelinidae), a hyperparasitoid of hemipterous and hymenopterous species in Egypt. *Egyptian Journal of Agricultural Research*, **81**(2): 555–562.
- Abd-Rabou S. and Badary, H. (2004) Survey and abundance of natural enemies of the cottony camellia scale, *Pulvinaria floccifera* (Homoptera: Coccidae) in Egypt. *Annals of Agricultural Science, Moshtohor*, **42**(2): 831–838.
- Abd-Rabou S., Hanafi, A. and Hussein, N. (1999) Notes on the parasitoids of the soft brown scale, *Coccus hesperidum* (Hemiptera: Coccidae) in Egypt. *Entomologica Bari*, **33**: 179–184.
- Hart W. G. (1972) Compensatory releases of *Microterys flavus* as a biological control agent against brown soft scale. *Environmental Entomology*, **1**(4): 414–419.
- Hendawy A. S. (1999) Studies on certain natural enemies of scale insects attacking guava trees at Kafr El-Sheikh governorate. *Ph. D. Thesis*, Faculty of Agriculture, Tanta University, 145 pp.
- Morsi G. A. (1999) Studies on the natural enemies of scale insects infesting some fruit trees. *Ph. D. Thesis*, Benha Branch, Zagazig University, 235 pp.
- Noyes J. S. (2010) Encyrtidae of Costa Rica (Hymenoptera: Chalcidoidea), 3. Subfamily Encyrtinae: Encyrtini, Echthroplexiellini, Discodini, Oobiini and Ixodiphagini, parasitoids associated with bugs (Hemiptera), insect eggs (Hemiptera, Lepidoptera, Coleoptera, Neuroptera) and ticks (Acari). *Memoirs of the American Entomological Institute*, 84 pp.
- Noyes J. S. (2011) Universal Chalcidoidea Database. The Natural History Museum. <http://www.nhm.ac.uk/chalcidoids>. [Last accessed 19 May 2012]
- Xu Z. H. and Chen H. L. (2000) Six new species of the genus *Microterys* of China (Hymenoptera: Encyrtidae). *Entomologia Sinica*, **7**(2): 97–106.
- Abd-Rabou S. (2012) New records of host insects and distribution of the effective parasitoid, *Microterys nietneri* Motschulsky (Hymenoptera: Encyrtidae) in Egypt. *LEPCEY - The Journal of Tropical Asian Entomology* **01**: 29–31