SHORT NOTES

A new host (*Nordmannia acaciae* (Fabricius) (Lep.: Lycaenidae)) record for *Aplomya confinis* (Fallén) (Dip.: Tachinidae) from Turkey

Halil Bolu¹ & Kenan Kara²

- ¹ Dicle University, Faculty of Agriculture, Plant Protection Dept., 21280-Diyarbakır, Turkey. Tel :90 412 248 85 66; Fax :+90 412 248 8351; e-mail : besni@dicle.edu.tr
- ² Gaziosmanpasa University, Faculty of Agriculture, Plant Protection Dept., Tokat, Turkey. e-mail: kkara@gop.edu.tr

Corresponding Author: Dr. Halil Bolu, Dicle University, Faculty of Agriculture, Plant Protection Dept., 21280-Diyarbakýr; Turkey; Tel: 90 412 248 85 09; Fax: +90 412 248 83 51; e-mail: besni@dicle.edu.tr

KEY WORDS. *Aplomya confinis*, New host, *Nordmannia acaciae*, Almond, Turkey.

The Tachinidae is the largest family of Diptera (among the suborder Brachycera). The larvae live as endoparasites in insects (Lepidoptera, Hymenoptera, Coleoptera, Heteroptera, Orthoptera and a few others) (1). The detailed general information on host data were obtained by (2; 3), and the most recent data about hosts of Turkish Tachinidae were given by (4). This family includes approximately 10.000 species worldwide, of which about 1650 are found in the Palearctic Region (2). Because of their role as natural enemies of pests in agricultural and forest ecosystems, some species of tachinids have been the focus of applied biological control studies (5). Nordmannia acaciae (Fabricius) (Lep.: Lycaenidae) were recorded on Almond trees in Southeast Anatolian Region for the first time (6). It is distributed in Russia, Middle and South Europe, Iran and Turkey and found on stone fruit trees (7). There is no information about natural enemies of N. acaciae so far. Aplomya confinis (Fallén), the first recorded tachinid parasitoid of N. acaciae. It was previously found in Turkey by sweep net collections thus the host was unknown (8).

This study was carried out in 2004. The larvae of *Nord-mannia acaciae* were collected from almond tree plantations in the provinces of Diyarbakir, Elazig and Mardin Turkey during April, June and were brought to the laboratory for rearing. During the course of the study, a total 52 larvae of the host were collected.

The larvae were reared in boxes containing almond leafs from the same field. Distilled water was provided. The larvae were reared at a temperature of $26\pm1^{\circ}\text{C}$, relative humidity of $65\pm5^{\circ}$ %, and illumination of 3500 lux for 16 hours per day. The boxes were checked daily. The last instar tachinid larvae left the host larvae and transformed to the puparia next to the remains of their hosts. Host pupae and tachinid puparia were placed in separate petri dishes containing moistened cotton until the adult moths and flies emerged.

Subfamily : Exoristinae Tribe : Eryciini Aplomya confinis (Fallén)

Reared material:

Elazig, emergence of fly, 12.05.2004, 19

Nordmannia acaciae is a new host record for *Aplomya confinis*.

Biology:

It was found scrubby dry slopes, warm, dry forest edges, and dry meadows. Flight period is early may to early October. It has several generations (3).

Recorded hosts exclusive of Turkey: Specific parasitoid of Lycaenidae (3). Callopyrus rubi L., Thecla walbum Knoch (9, 10), Chrysophanus phleas L., Lycaena icarus Rott., L. bellargus Rott. (11), L. coridon Poda (9), Cyaniris argilus L. (9). Zephyrus quercus L. (12; 13).

Distribution:

It was frequently found in warmer central Europe (and in Southern Europe), rarely in the North (3): Switzerland, France, Great Britain, Sweden, Transcaucasus, Soviet Middle Asia, East Siberia, Far East, Israel, Mongolia, Japan, Canari Is. (14).

ACKNOWLEDGMENTS

We are grateful to Dr. H.-P. Tschorsnig (Staatliches Museum für Naturkunde, Stuttgart, Germany) for confirming the first host-parasitoid couple record and to Dr. Feza Doganlar (University of Mustafa Kemal, Antakya, Turkey) for identification of the host.

REFERENCES

 TSCHORSNIG, H.-P. & M. BARTÁK (2001). Tachinidae. Folia Fac. Sci. Nat. Univ. Masaryk. Brun., Biol., 105: 497-505.

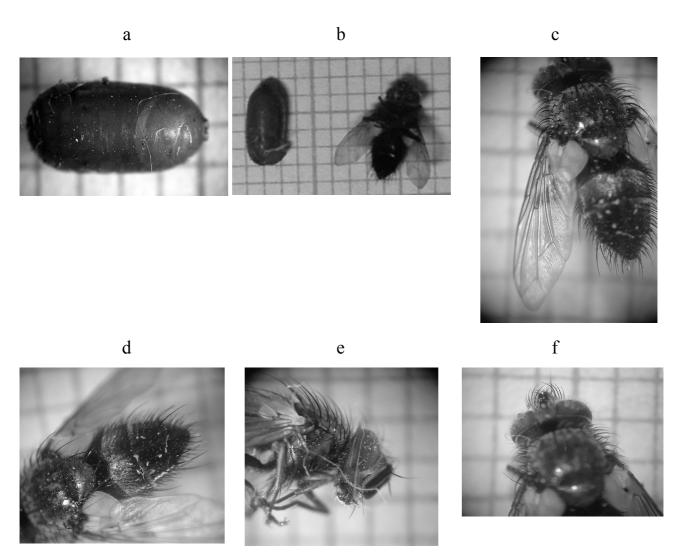


Fig. 1. – Some *Aplomya confinis* images a : Pupa; b : Pupa and adult (); c : Dorsal view; d : Dorsal view of abdomen; e : Lateral view of head; f : Dorsal view of head and thorax.

- HERTING, B. (1960). Biologie der westpaläarktischen Raupenfliegen (Dipt., Tachinidae) Monogrn angew. Ent., 16, 188 pp.
- 3. TSCHORSNIG, H.-P. & B. HERTING (1994). Die Raupenfliegen (Diptera: Tachinidae) Mitteleuropas: bestimmungstabellen und Angaben zur Verbreitung und Ökologie der einzelnen Arten. Stuttg. Beitr. Naturk., (A) 506: 170 S.
- KARA, K. & H.-P. TSCHORSNIG, (2003). Host catalogue for the Turkish Tachinidae (Diptera). J. Appl. Ent., 127: 465-476 (SCI).
- GREINER, S. (1988). Applied Biological Control with Tachinid Flies (Diptera: Tachinidae). A review. Anz. Schädlingskde., Pflanzenschutz, Umweltschutz, 61: 49-56.
- 6. MACAN, G. (1986). Investigations on the Almond pests, their morphology, distribution and economic importance in south eastern region of Turkey. Ministry of Agriculture and Forestry. *Research publications series*, Number: 5:19-22.
- VASILEVA, A.P. (1974). Vrediteli Selskohazyaystvenýyh Kultur i Lesnýyh Nasajdeniy. Tom II. Vrednýye Chlenistonogie (Prodoljenie). Pozvonchnýye. Izadatelstvo "Urajay", Kiev, p. 605.

- 8. KARA, K. & O. ALAOGLU (2002). New records for Turkish Tachinidae (Diptera) Fauna. *Proceedings of fifth Turkish national congress of Biological control*, .4-7 Sept. 2002. Erzurum: 217-226.
- 9. WAINWRIGHT, C.J. (1928). The British Tachinidae. *Trans. Ent. Soc. London*, 76: 139-254.
- PARMENTER, L. (1953). Bred Tachinids (Dipt.) and Hosts. Ent. Rec., 65: 29-31.
- 11. AUDCENT, H. (1942). A Preliminary list of the hosts of some British Tachinidae. *Trans. Soc. Ent.*, 8:1-42.
- 12. GIRSCHNER, E. (1899). Beitrag zur Biologie und Systematik der Musciden. *Ent.Nachr.*, 25: 177-186.
- 13. BAER, W. (1921). Die Tachinen als Schmarotzer der schälichen Insekten. Ichre Lebensweise, wirtschaftliche Bedeutung und systematische Kennzeichnung. *Z. angew. Ent.*, 11: 23-34.
- 14. HERTING, B. & Á. DELY-DRASKOVITS (1993). Family Tachinidae. In: A. Soós & L. PAPP (eds), *Catalogue of Palaearctic Diptera*. *Anthomyiidae—Tachinidae* 13: 118–458.

Received: October 25, 2004 Accepted: May 9, 2005