A New Host, *Sphenoptera tappesi* Marseul (Coleoptera: Buprestidae), for *Dolichomitus kriechbaumeri* (Schulz) (Hymenoptera: Ichneumonidae) from Turkey

Halil BOLU

Dicle University, Faculty of Agriculture, Plant Protection Department, 21280 Diyarbakır - TURKEY

Received: 02.03.2007

Abstract: This study was conducted during April-June 2004 in Diyarbakır province. The ichneumonid parasitoid, *Dolichomitus kriechbaumeri* (Schulz) (syn. *subglabratus*), was reared from the larvae of *Sphenoptera tappesi* Marseul, which infests the trunks and twigs of peach and plum trees in orchards. *S. tappesi* is a new host for *D. kriechbaumeri*.

Key Words: Dolichomitus kriechbaumeri, Sphenoptera tappesi, new host, Ichneumonidae

Dolichomitus kriechbaumeri (Schulz) (Hymenoptera: Ichneumonidae) İçin Yeni Bir Konukçu, Sphenoptera tappesi (Marseul) (Coleoptera: Buprestidae)

Özet: Bu çalışma, Nisan-Haziran 2004'de Diyarbakır ilinde yürütülmüştür. Bir ichneumonid parazitoit olan *Dolichomitus kriechbaumeri* (Schulz) (syn. *subglabratus*), meyve bahçelerindeki şeftali ve erik ağaçlarının gövde ve dallarında beslenen *Sphenoptera tappesi* Marseul'un larvalarından elde edilmiştir. Bu çalışma ile ilk defa *S. tappesi* nin *D. kriechbaumeri*'nin konukçusu olduğu ortaya konmuştur.

Anahtar Sözcükler: Dolichomitus kriechbaumeri, Sphenoptera tappesi, yeni konukçu, Ichneumonidae

The family Ichneumonidae is parasitoids, some of which are very important in the control of pest species of Lepidoptera, Diptera, Coleoptera, Hymenoptera, and some others (Gauld and Bolton, 1988; Gauld and Huber, 1993).

The larvae of the buprestid beetle, *Sphenoptera tappesi*, were collected from peach and plum tree plantations in the province of Diyarbakır during April-June 2004 and reared to obtain parasitoids and adults of buprestids. During the course of the study, a total of 28 larvae (15 from peach and 13 from plum) of the host were collected. The larvae were reared in boxes containing peach and plum branches from the same field. The larvae were reared at a temperature of 26 ± 1 °C, relative humidity of $65 \pm 5\%$ and illumination of 3500 lux for 16 h per day. The boxes were checked daily. The last instar ichneumonid larvae left the host larvae and

transformed to the pupae next to the remains of their hosts. The pupae of host and ichneumonid were placed in separate petri dishes containing moistened cotton until the adult buprestid and ichneumonid wasp emerge.

Host identification was made by Dr. Göksel TOZLU (Atatürk University, Plant Protection Department, Erzurum, Turkey). *Dolichomitus kriechbaumeri* identification was made by Dr. Yasemin ÖZDEMİR (Plant Protection Research Institute, Ankara, Turkey).

In conclusion, the ichneumonid parasitoid, *Dolichomitus kriechbaumeri*, was reared from the larvae of *Sphenoptera tappesi*. Six parasitoids were obtained from 28 *S. tappesi* larvae. *D. kriechbaumeri* were reported by Altay (1966) on *Cydia molesta* (Busck.) in Marmara region, by Aubert (1969) on *Anthaxia manca* L. (Coleoptera: Buprestidae), by Kalashyan (1984) on *Anthaxia caucasica*, and by Cinar et al. (2004)

E-mail: besni@dicle.edu.tr

Buprestidae species in cherry orchard. Specimens were collected in Diyarbakır (37°53'N, $40^{\circ}16'E$ at the altitude of about 669 m). Total: $49\ 2\sigma$ ($39\ 1\sigma$ peach tree, $19\ 1\sigma$ plum tree)

The larvae feed in branches of the host and become pupae (Figure). The adults feed on leaves and bark (Figure).









Figure. A. Adult stages; B. Pupae and adult stages in galleries of *Sphenoptera tappesi*; C. Pupae stage; D. Adult female stage of *Dolichomitus kriechbaumeri*.)

References

- Altay, M. 1966. Investigations on Biology and Control of *Laspeyresia molesta* Busck in Bursa province and Marmara region. İstanbul, pp. 55.
- Aubert, J. F. 1969. Les Ichneumonides Ouest-Paléarctiques et leurs hôtes, Tome, 2.Pimplinae, Xoridinae et Acaenitinae, pp. 302.
- Çınar, M., Çimen, I. and Bolu, H. 2004. Elazığ ve Mardin İlleri kiraz ağaçlarında zararlı olan türler, doğal düşmanları ve önemlileri üzerindeki gözlemler. Türk. entomol. derg., 28: 1-11.
- Gauld, I. D. and Bolton, B. 1988. The Hymenoptera: Oxford University Press/British Museum. pp. 332.
- Gauld, I. D. and Huber, J. T. 1993. Hymenoptera of the word: An identification guide to familes. Research Branch. Publication 1894/E, pp. 668.
- Kalashyan, M. Yu. 1984. Species of parasites of Armenian metallic wood-borers (Coleoptera, Buprestidae) 37: 986-987.