# A new species of *Traumatocampa* Wallengren (Lepidoptera: Thaumetopoeidae) feeding on cedar from Isparta (Türkiye)

Miktat DOĞANLAR\* Mustafa AVCI\*\*

#### Summary

A new species of *Traumatocampa ispartaensis* n.sp. (Lepidoptera: Thaumetopoeidae) was described and named, its diagnostic characters were illustrated. The caterpillars of species feed on cedar around Isparta, Türkiye. Two new combinations to *Traumatocampa* are proposed: *Thaumetopoea libanotica* Kriakoff & Talhouk and *T.wilkinsoni* Tams.

Key words: *Traumatocampa ispartaensis* n.sp., cedar pest, fauna Isparta, Turkey Anahtar sözcükler: *Traumatocampa ispartaensis* n.sp. sedir zararlısı, Isparta, Türkiye

#### Introduction

Many works have been conducted on the species of Thaumetopoeidae (Lepidoptera), because of their pest status on various forest trees. (Maksymov, 1978; Freina & Witt, 1985; 1987). Freina and Witt (1985) revised the Palearctic species of Thaumetopoeidae and added a new genus, *Helianthocampa* in the subfamily Thaumetopoeinae. Freina and Witt (1987) studied the European and Northafrican species of the family and stated that it has 6 species from three genera in the region. Kriakoff & Talhouk (1975) described a new species as *Thaumetopoea libanotica* the status of which is *Traumatocampa libanotica* (Kriakoff & Talhouk) n.comb. feeding on cedar (*Cedrus libani*) from Lebanon.

Mendel (1990) and Halperin (1990) stated three species of Thaumetopoeini from the Middle Eastearn countries including Cyprus. The species are;

Mustafa Kemal Üniversitesi, Ziraat Fak., Bitki Koruma Böl. Antakya, Hatay, Türkiye E-mail: doganlar@mku.edu.tr

<sup>\*\*</sup> Süleyman Demirel Üniversitesi, Orman Fakültesi, Isparta, Türkiye Alınış (Received): 6.06.2000

Thaumetopoea wilkinsoni Tams. (=Traumatocampa wilkinsoni (Tams.) n.comb. on pines, mainly on Aleppo pine (Pinus halepensis Mill.), Thaumetopoea solitaria (Frr.), mostly on the indigenous Pistacia spp. and Thaumetopoea jordana (Stgr.) on Rhus tripartita.

**T.** wilkinsoni and **T.** libanotica are transferred from **Thaumetopoea** to **Traumatocampa** in having teethed frontal process which is absent in **Thaumetopoea** spp.

The species was obtained by the second author as feeding on needles of cedar, **Cedrus libani** L. in Senirkent, Kapıdağı, Isparta. By the studying the characters of the species of Thaumatopoeinae, it is found that the materials from Isparta are different from all of the species of the subfamily and present a new species.

#### Material and Methods

The adults of the material was reared from the caterpillars collected from the needles of cedar in forests around Senirkent, Kapıdağı, Isparta. The adults were prepared for collections. The morphological characters were studied and identical ones for the species were drawn by aid of camera-lucida from stereoscobic microscope.

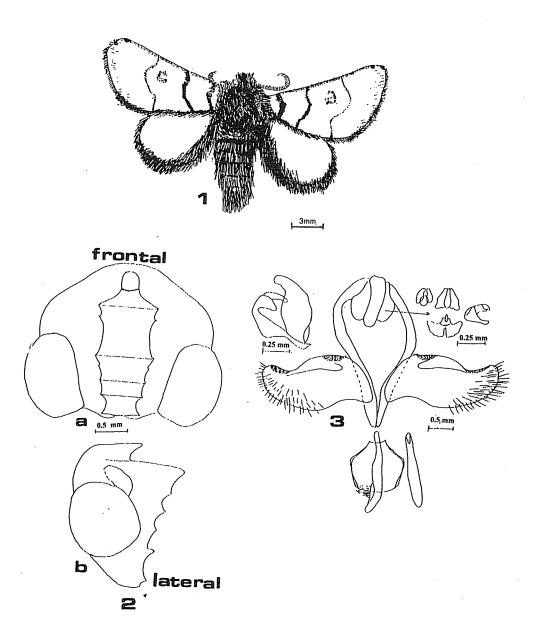
#### Results and discussions

#### Traumatocampa ispartaensis sp.n.

**Description:** Holotype male: (Fig. 1). Forewing length in span 26-29 (28) mm. Wing colour whitish grey with distinct, dark brown, three mid lines, one of them small in basal position, the midcone and outer one more or less parallel between costa and anal margin, the both of them outwardly projecting, the outer one more sharly serrated in middle; discocellular spot fairly vague, halfmoon shaped, light-brown in colour. Hindwings white without lines and without any analspot sometimes with vague one; anal margin with a greyish band; fringes greyish brown; underside of all wings without any special patterns. Head and thorax dark brown, antennae light brown, distinctly bipectinate; abdomen redish brown, with dark bands marginally. Front with a process having special appearance (Fig. 2-a; b), it has two long and five small teeth, in frontal view as seen (Fig. 2-a).

**Male genitalia:** (Fig. 3). Uncus large, its tip curved, gnathos broad, triangled, pedunculus strongly developed in middle broadening, valva with costal margin concaved medially its tip rounded. Aedeagus slightly longer than valva, vesica with tip, immargined medially; fultura inferior almost six-edged, as long as broad; saccus not developed.

**Allotype female:** Forewing length, in span, 3.4-3.7 (3.5 mm). Color of wings paler than male, pale brown; lines on front wings almost lost; antennae with small-teethed-comb; hind wings whitish, without dark spots on anal border. Head and thorax with greyish hairs, abdomen yellow haired with brownish rings on hind margin of each segments, tips of abdomen with many scales.



Figures 1-3. **Traumatocampa ispartaensis** n.sp.: 1.male; 2.frontal process of male: a:frontal, b:lateral view; 3.male genitalia.

**Variations:** The lines on front wings, especially mid ones and outher ones are lighter or almost lost in some paratypes.

**Holotype:** Male, Kapıdağı, Senirkent, İsparta, Türkiye, 21.VIII.1999; host: **Cedrus libani**, altitute: 1100-1500 m. Allotype female and paratypes have same data as holotype (2 males; 3 females). The types are deposited in the insect collection of Mustafa Kemal University, Agriculture Faculty, Plant Protection Department, Antakya, Türkiye.

**Diagnosis:** The new species is similar to **T. bonjeani** (Powell) from Marocco and **T. libanotica** feeding on **C. libani**. It differs from both of them in having the frontal process in special apparence and very long uncus and gnathos, the valva concaved on costal border. The frontal process of **T. bonjeani** and of **T. libanotica** have five teeth and the upper ones are smaller; the uncus in the both species shorter than gnathos; valva almost bifid in **T. bonjeani**, very broad in **T. libanotica**. Aedeagus broader in basal half in **T. bonjeani**, gradually broadening in **T. libanotica** but in **T. ispartaensis** it curved basally and broadening medially.

### Özet

## Isparta'da, sedir ağaçlarında zararlı *Traumatocampa* (Lepidoptera: Thaumetopoeidae) cinsinden yeni bir tür

**Traumatocampa ispartaensis** n.sp. (Lepidoptera: Thaumetopoeidae) isimlendirilmiş ve tanımlanmıştır. Yeni tür İsparta yöresinde sedir ağaçlarına zarar vermektedir. Aynı zamanda **Thaumatopoea** cinsinden iki tür, **Traumatocampa libanotica** (Kriakoff & Talhouk) ve **T.wilkinsoni** (Tams) olarak **Traumatocampa** cinsine nakledilmişlerdir (n.comb.).

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