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# First record of the genus *Lepteucosma* DIAKONOFF from China, with description of one new species (Lepidoptera: Tortricidae)

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Abstract. The present paper reports the genus *Lepteucosma* DIAKONOFF for the first time from China. A new species, *Lepteucosma torreyae* Wu, is described from Zhejiang Province, China. The larvae attacked the buds of *Torreya grandis* FORT. (Taxaceae). The adult and genitalia are illustrated.

Key words: Lepidoptera, Tortricidae, *Lepteucosma*, new species, China.

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## INTRODUCTION

The genus *Lepteucosma* DIAKONOFF currently comprises 15 species, distributed in Oriental and Palaearctic regions, including Europe (1 species: *L. huebneriana* KOÇAK = *ustulana* HÜBNER), Japan (1 species: *L. ceriodes* MEYRICK), Karakoram (1 species: *L. oxychrysa* DIAKONOFF), Afghanistan (1 species: *L. lutescens* RAZOWSKI), India (5 species: *L. alfredi* POONI & ROSE, *L. byuni* POONI & ROSE, *L. ceriodes* MEYRICK, *L. ferruginoptera* POONI & ROSE, *L. punjabica* KUZNETZOV), Thailand (2 species: *L. blanda* KAWABE, *L. siamensis* KAWABE), and Vietnam (4 species: *L. ceriodes* MEYRICK, *L. oxychrysa* DIAKONOFF, *L. oxychrysoides* KUZNETZOV, *L. fuscicaput* DIAKONOFF). In this paper, the genus *Lepteucosma* DIAKONOFF is newly recorded in China, with one species described as new to science. The photographs of the adult and genitalia are provided. The type specimens, holotype and paratypes are deposited respectively in the Institute of Zoology, Chinese Academy of Sciences, Beijing, China, and in the Institute of Systematics and Evolution of Animals, Polish Academy of Sciences, Krakow, Poland.

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## Genus *Lepteucosma* DIAKONOFF, 1971

*Lepteucosma* DIAKONOFF, 1971, *Veröff. Zool. Staatsamml. München* **15**: 179.

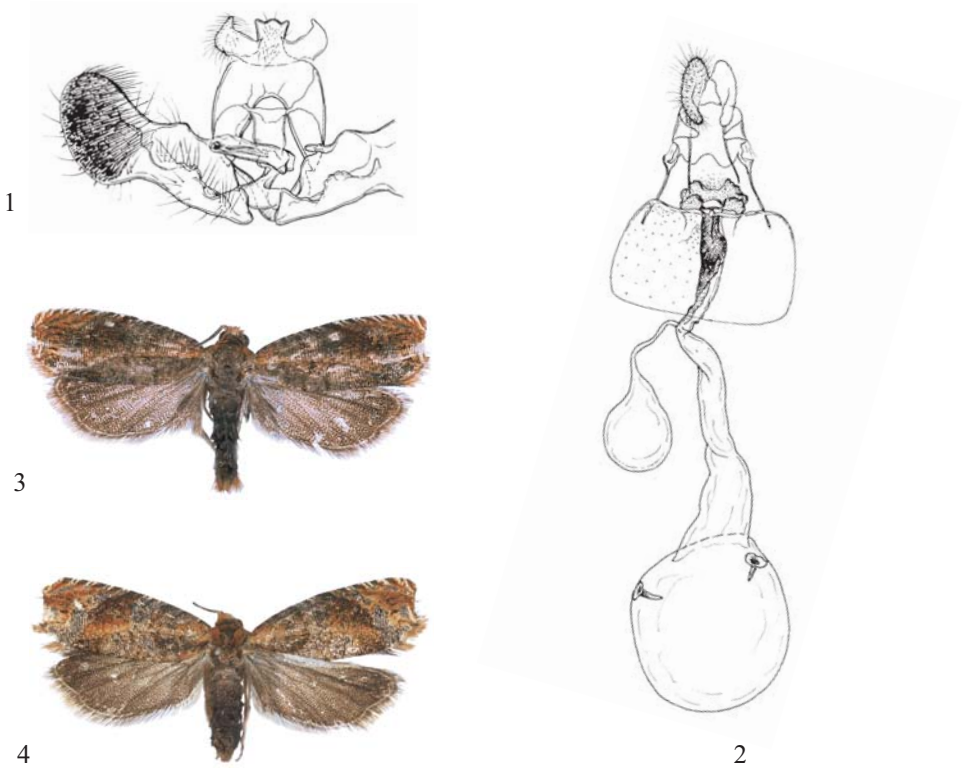
Type species: *Lepteucosma oxychrysa* DIAKONOFF, 1971.

A group of slender, narrow-winged species. The genus is related to *Eucosma*, but differs by the presence of a well developed uncus; it is also close to *Epinotia*, but can be distinguished by the elongate basal cavity of the valva.

### *Lepteucosma torreyae* sp. n.

(Figs 1-4)

Adult (Figs 3-4). Wing expanse 11 mm. Antenna dark yellowish brown. Labial palpus and head light yellowish brown. Thorax and abdomen dark yellowish brown, end of the latter yellowish brown. Forewing with ground colour pale ochreous, shaded with yellow orange, especially apical area; costal area with a series of silver white streaks; a broad blackish fasica from costal 2/3 to tornus; cilia yellowish orange, mixed with brownish scales. Hindwing brown; cilia pale yellowish brown.




Figs 1-4. Adults and genitalia: 1 – male genitalia of paratype, 2 – female genitalia of paratype, 3 – male paratype, 4 – female paratype.

Male genitalia (Fig. 1): Uncus rather broad, a square base and a bicuspide tops; socius short and narrow, with dilated base and up-turned top; valva narrow and long, slightly concave before cucullus, its neck very short; costa protruding at basal 1/3; cucullus elliptic, outer margin with series of short spines; aedeagus short and thick; cornuti a cluster of 4-5 long spines.

Female genitalia (Fig. 2): Anterior apophysis as long as posterior apophysis; 1amel1a antevaginalis roughly square; antrum indistinct; ductus bursae relatively wide and long; corpus bursae roughly rounded, with a pair of subulate signa.

Holotype (male): Zhaojiazhen, Zhuji Co. (600m, 29.7°N, 120.2°E), Zhejiang Province, 2004.III.9, leg. By XU Zhihong.

Paratypes: 5 males, 4 females, same data as holotype.

Host plant: *Torreya grandis* FORT. (Taxaceae)

B i o l o g i c a l n o t e: This moth has two generations each year in Zhuji City, Zhejiang Province, China and overwinters in pupal stage. The adults emerge, next March. The larvae feed in buds of the host plant.

D i s t r i b u t i o n: China (Zhejiang).

D i a g n o s i s. This new species differs from the all known species of the genus by the unique shape of the valva.

E t y m o l o g y. The specific name refers to the generic name *Torreya* (Taxaceae) of the food plant.

## REFERENCES

DIAKONOFF A. 1971. South Asiatic Tortricidae from the zoological collection of the Bavarian State (Lepidoptera). *Veröffentlichungen der Zoologischen Staatsammlung München*, **15**: 179- 202.

KAWABE A. l989. Records and descriptions of the Subfamily Olethreutinae from Thailand. *Microlepidoptera of Thailand*, **2**:23-82.

KUZNETZOV V. I. 1988. New and little known leaf-rollers of the subfamily Olethreutinae (Lepidoptera, Tortricidae) of the fauna of the North Vietnam. *Trudy Zoologitcheskovo Instituta, Leningrad*, **176**: 72-97.

KUZNETZOV V. I. 1997. New species of tortricid moths of the subfamily Olethreutinae (Lepidoptera, Tortricidae) from the South of Vietnam. *Entomologitcheskoe Obozrene*,**76**: 805.

POONI H. S., ROSE H. S. 2004. Three new species of *Lepteucosma* DIAKONOFF (Tortricidae: Lepidoptera: Eucosmini) from India. *Journal of the Lepidopterologist's Society*, **58**(2): 118-121.

RAZOWSKI J. 1967. Afghanische Wickler-Arten (Lepidoptera: Tortricidae und Cochylidae). *Beiträge zur naturkunde Forschungen in Südwest Deutschland*, **26**: 97-108.

RAZOWSKI J. 1999. Catalogue of the species of Tortricidae. Part V: Palaearctic Eucosmina and Enarmoniina (Insecta: Lepidoptera). *SHILAP Revista de Lepidopterologia*, **27**(108): 437-506.