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Description of Two New Species of the Tribe Teleiodini (Lepidoptera, Gelechiidae) from Korea

Kyu Tek PARK

Center for Insect Systematics, Kangweon National University,
Chuncheon, 200–701 Korea

Abstract Two species belonging to the tribe Teleiodini, *Pseudotelphusa daehania* sp. nov. and *Teleiodes pekunensis* sp. nov., are described. The latter is separated from *Telphusa necromantis* MEYRICK, which has been confused and often misidentified with it by previous authors.

Key words: Systematics; Gelechiidae; *Pseudotelphusa*; *Teleiodes*; Korea; Japan.

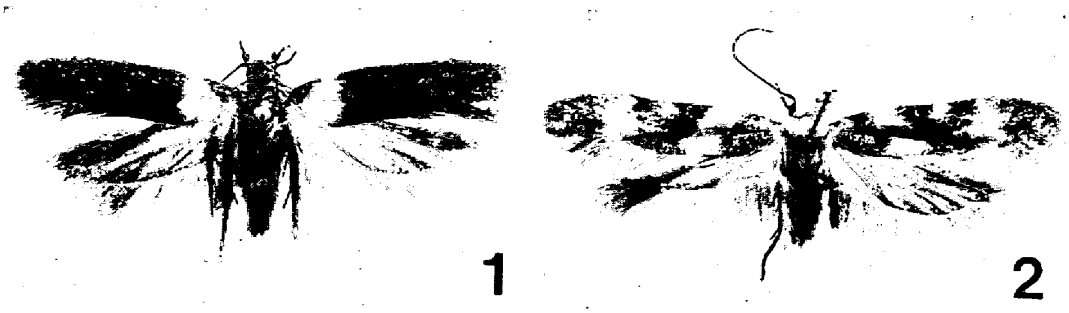
Introduction

In my previous paper on the tribe Teleiodini in Korea (PARK, 1992), I enumerated 20 species of the tribe, including 11 new species of *Teleiodes* SATTLER, one species of *Pseudotelphusa* JANSE and two species of *Telphusa* CHAMBERS. In the present paper, two additional species belonging to the genera *Pseudotelphusa* and *Teleiodes* are described as new to science. The new species of *Teleiodes* is quite similar to *Telphusa necromantis* MEYRICK in superficial appearance, but differs from it in the genital characters. The difference in genital characters between the two allied species, especially in males, is so large that they should be placed in different genera. Thus further study on the generic status of *Telphusa* and its related genera is needed.

Pseudotelphusa daehania sp. nov.

(Figs. 1, 3–4)

Adult. Wingspan, 11.5–13 mm. Head creamy white, speckled with fuscous scales on frons; vertex and crown dark grey. Antenna fuscous brown, paler towards end, with dark grey annulations. Thorax dark grey anteriorly, distal triangular portion white; mesothorax with well-developed two hair-tufts at both dorsolateral sides. Second segment of labial palpus furrowed beneath, fuscous outwardly, with basal stripe irrorated with white scales near 1/3, broad middle stripe white and apex with white scales; 3rd segment same as 2nd, with broad dark fuscous stripes near 1/3 and beyond 2/3; apex white, acute. Forewing dark brown evenly; creamy white semiovate patch developed beyond basal dark fascia, with a well-developed white scale-tuft at anterior margin and two dark fuscous scale-tufts along posterior margin; another 2–3 scale-tufts near middle obliquely and usually two



Figs. 1–2. Adults —— 1, *Pseudotelphusa daehania* sp. nov.; 2, *Teleiodes pekunensis* sp. nov.

tufts at end of cell. Hindwing grey, with long hair-pencils at base and on vein 3A.

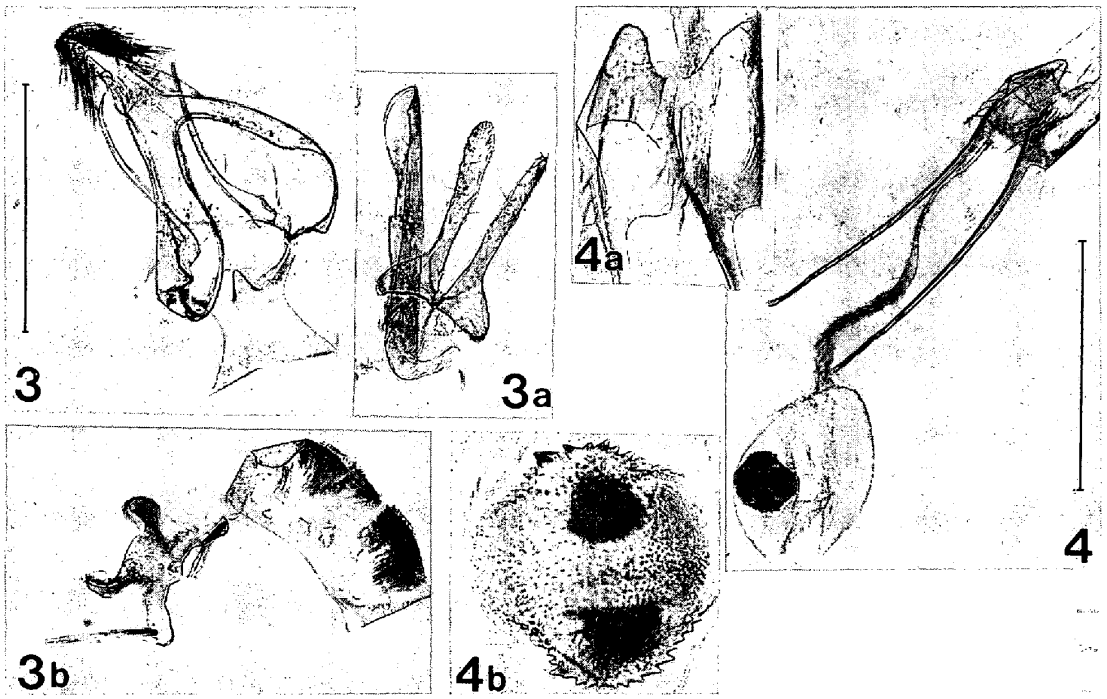
Male genitalia (Fig. 3). Eighth tergite short, posterior half trapezoidal with sensory hair-pencils at lateral ends, distal margin almost straight; anterior half evenly tapered, convex at middle, with long hair-pencils at bases; 8th sternite moderate, length shorter than 1/2 of width, without emargination at middle of distal margin, set with long hairs along distal margin. Uncus spatulate, bearing dense hairs laterally. Gnathos weakly developed, with lateral sclerites. Tegumen broader towards base. Cucullus thin, lanceolate. Arms of aedeagal fulcrum (Fig. 3 a) digitate, stout, rather broader towards distal end, little shorter than length of valva, very close to each other at base. Aedeagus long, stout, tubular and truncate ventrally; dorsal margin almost straight.

Female genitalia (Fig. 4). Eighth sternite heavily sclerotized, distal margin convex, cone-shaped. Apophysis posterioris and anterioris very long; length of anterioris almost same as that of ductus bursae. Ostium bursae tubular; ductus seminalis arising from anterior end of ductus bursae. Corpus bursae ovate; signum hexagonal in outline, coarsely serrated at anterior and posterior edges, with two semicircular dentate plates inside.

Material examined. Holotype: ♂, Naemyun, Hongcheon, Gangweon Prov., Korea, 14. VIII. 1987 (K. T. PARK), gen. prep. no. 1868. Paratypes: 1 ♂, 1 ♀, Pyungchang, Gangweon Prov., 31. VII. 1991 (K. T. PARK); 1 ♀, Mt. Jeombong-san, 22. VI. 1992 (K. T. PARK); 1 ♀, Gwanglung, Gyunggi Prov., 27. VI. 1986 (K. T. PARK & U. PARK). All the type specimens are preserved in the Center for Insect Systematics, Kangweon National University, Korea. Other material: Japan — 1 ♀, Fumizuki, Oonocho, Kameta, Hokkaido, 1. VIII. 1990 (K. FUJISAWA), in Mr. FUJISAWA's private collection.

Distribution. Korea (South), Japan.

Remarks. In genital characters, this species is similar to *P. fugitiveller* (ZELLER), but it can be easily distinguished from the latter by the well-developed sensory hair-pencils at the lateral ends of 8th tergite and more stout arms of aedeagal fulcrum in male genitalia, and the shape of signum in female genitalia. A specimen taken from Gwanglung, Gyunggi Province has a dull patch, instead of creamy white patch near base of the forewing and also has the posterior part of thorax concolorous. It



Figs. 3–4. *Pseudotelphusa daehania* sp. nov. —— 3, Male genitalia; 3 a, ditto, aedeagus and processes of juxta; 3 b, 8th tergite and sternite; 4, female genitalia; 4 a, ditto, 8th segment; 4 b, ditto, magnification of signum. Scales: 0.5 mm.

seems to be an individual variation in colour within the same species.

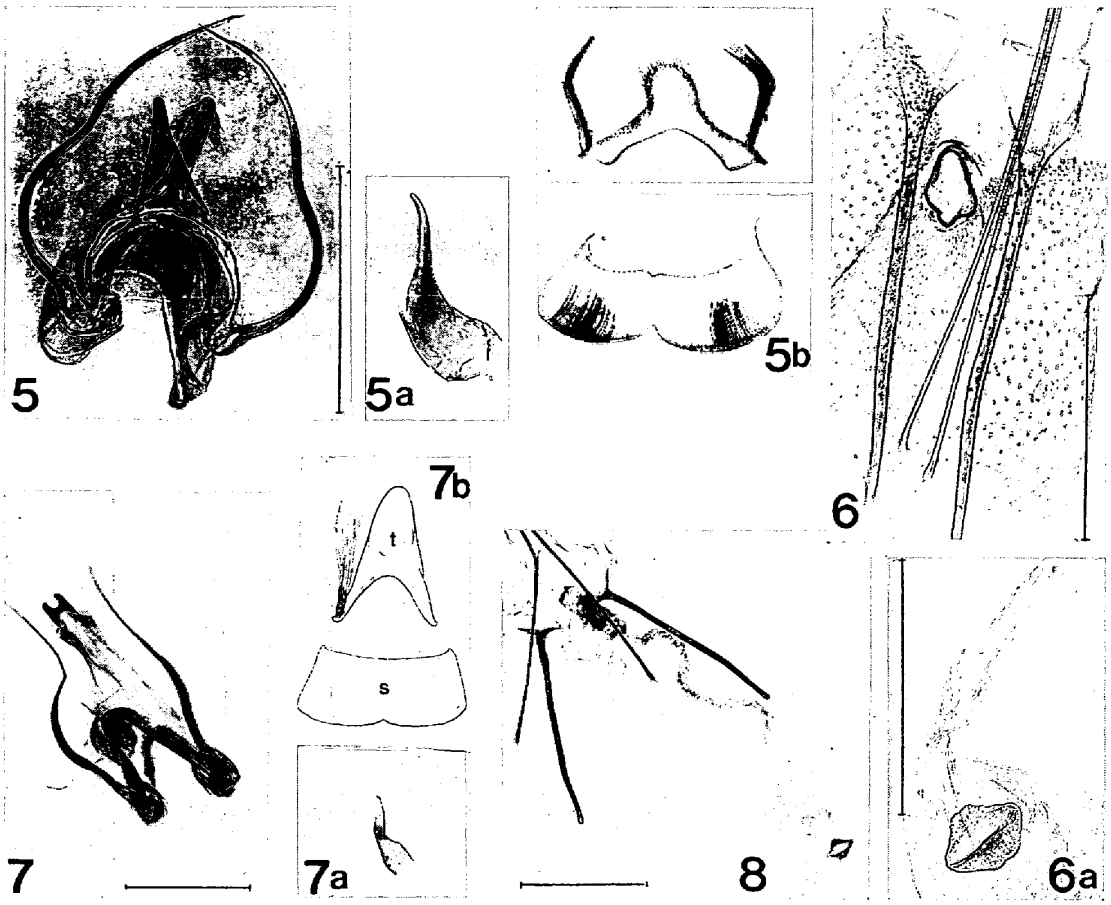
Teleiodes pekunensis sp. nov.

(Figs. 2, 5–6)

Telphusa necromantis: MORIUTI, 1977, 133, fig. 4; PARK, 1983, 85; 1992, 18–19, figs. 15, 33 (misidentification, nec MEYRICK, 1932).

Adult. Wingspan. 12.5–13.5 mm. This species has no superficial characters useful to distinguish it from *Telphusa necromantis* MEYRICK; thus, the former has been confused and misidentified with the latter by the author (see PARK, 1992). In venation the two species are similar to each other, except that the stalk of R_4+R_5 in the forewing of this new species is longer than that of *necromantis*. However, their genitalia in both sexes are quite different, as illustrated in Figs. 5–8.

Male genitalia (Fig. 5). Eighth sternite very similar to that of *necromantis* (Fig. 7), but 8th tergite with posterior half semicircular and with anterior half tapered. Uncus elongate, rather long, bearing setae distolaterally, distal margin round, whereas bifid in *necromantis*. Gnathos triangular, distal 1/4 and lateral arms strongly sclerotized, apex rather round. Cucullus slender, lanceolate, globular at base, and much longer than the length of tegumen+uncus. Aedeagus much narrowed beyond middle, with inflated basal half; no cornutus.



Figs. 5–8. *Teleiodes pekunensis* sp. nov. (5–6) and *Telphusa necromantis* (7–8). —— 5, Male genitalia; 5 a, ditto, aedeagus; 5 b, ditto, 8th sternite and tergite; 6, female genitalia; 6 a, ditto, signum; 7, male genitalia; 7 a, ditto, aedeagus; 7 b, 8th sternite and tergite; 8, female genitalia. Scales: 0.5 mm.

Female genitalia (Fig. 6). Apophysis posterioris about twice as long as apophysis anterioris; anterioris very strong, rod-like. 8th sternite short, weakly sclerotized. Ostium bursae forming an oval pit, placed on posterior margin of 7th sternite. Ductus bursae membraneous, narrow, longer than apophysis anterioris. Ductus seminalis arising from posterior 1/5 of ductus bursae. Corpus bursae pyriform; signum almost hexagonal, with wide diagonal slit, whereas *necromantis* has quite differently shaped ostium bursae, forming a long tube, with 2 triangular sclerites laterally on distal margin (Fig. 8).

Material examined. Holotype: ♂, Mt. Pekun-san, Jeonam Prov., 19. VIII. 1992 (K. T. PARK). gen. prep. no. 1782. Paratypes: same locality as for holotype, 3 ♂, 4 ♀, 19. VIII. 1992 (K. T. PARK); 1 ♂, 1 ♀, Sogumgang, Mt. Odae-san, Gangweon Prov., 24. V. 1988 (K. T. PARK); 1 ♂, 2 ♀, Chuncheon, Gangweon Prov., 7. V. 1989 (K. T. PARK); 1 ♀, Chuncheon, 28. V. 1990 (K. T. PARK); 2 ♂, Gwanglung, Gyunggi Prov., 13. VIII. 1986 (K. T. PARK); 1 ♂, Mt. Daedun-san, Jeonbug Prov.,

3. V. 1991 (K. T. PARK); 1 ♂, Mt. Halra-san, Isl. Jeju-do, 30. V. 1987 (T. K. PARK). All the type specimens are preserved in the Center for Insect Systematics, Kangweon National University, Korea.

Distribution. Korea (South), Japan.

Remarks. Telphusa necromantis MEYRICK was described based on a single female specimen taken at Iwawakisan, Kii [Mt. Iwawaki, Wakayama Pref., Honshu], Japan. The holotype is deposited in the Natural History Museum, London, but unfortunately its abdomen is missing. Recently I found that a different species in the structure of genitalia of both sexes has been mixed in the collection of *necromantis* MEYRICK. To solve the confused and doubtful identities of these closely allied species, I examined several male and female specimens (see bleow) taken from near the type locality in Japan, and found that all of them were the same species which is undoubtedly *necromantis*. Due to its similarity with *T. necromantis* in the superficial characteristics, recently I (PARK, 1992, p. 19, fig. 33) illustrated female genitalia of this new species erroneously as those of *necromantis*.

On the other hand, MORIUTI (1977, p. 133, fig. 4) illustrated male genitalia of "*necromantis*" to compare them with those of *Telphusa linearvalvata* MORIUTI, but they are not those of *necromantis* and identical with those of this new species. In view of these facts, the two species are distributed in Japan, but *necromantis* is certainly a dominant species and there seems to be no doubt that the Japanese specimens examined are conspecific with the holotype of *necromantis*. In Korea, the above two species occur throughout the country, but the new species is more abundant.

The species *necromantis* has been placed in the genus *Telphusa* by the previous authors (MEYRICK, 1932; CLARKE, 1969; MORIUTI, 1982; PARK, 1983, 1992), especially on the basis of its bifid uncus in male genitalia, but this new species is much more similar to *Teleiodes* in the characters of genitalia. From the result of comparision of these two sibling species in genital characters, the taxonomic status of *Teleiodes* and *Telphusa* based on the shape of uncus (SATTLER, 1982) should be reconsidered.

The following specimens of *T. necromantis* from Japan were examined: Tobiraonsen, Nagano Pref., Honshu, 1 ♀, 23. VIII. 1954 (A. MUTUURA); Kisojihara, Nagawa, Nagano Pref., Honshu, Japan, 1 ♂, 14. VI. 1992 (T. HIROWATARI), 1 ♂, 1 ♀, same locality, 27. VI. 1992 (T. HIROWATARI); Mt. Wasamatayama, Kamikitayama, Nara Pref., 1 ♀, 5. VIII. 1992 (T. UEDA); Mt. Mikusayama, Inagawa-town, Hyougo Pref., Honshu, 1 ♂, 3. V. 1992 (T. UEDA); 2 ♀, same locality, 1–4. VI. 1992 (T. UEDA).

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