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Three New Species of the Genus *Periacma* from Nepal (Lepidoptera: Oecophoridae)

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Abstract

Three new species of the genus *Periacma*, viz., *P. harutai* sp. nov., *P. nepalensis* sp. nov. and *P. himalayensis* sp. nov., are described from Nepal, with illustrations of moths and genitalia. This is the first record of the genus from Nepal.

Introduction

The oecophorid genus *Periacma* is characterized by the exceptionally two-segmented labial palpus in the male and mainly distributed in the Oriental region¹⁾. Thirty-nine already described species belonging to the genus are known up to the date²⁾, but no species is recorded from Nepal. In the present paper, three new species of the genus *Periacma* are described from Nepal, the genus being new to the fauna of Nepal.

All the type specimens used in this study are deposited in the collection of Entomological Laboratory, College of Agriculture, University of Osaka Prefecture.

Periacma harutai sp. nov.

(Figs. 1, 4)

Forewing length: ♂ 7.5 mm.

Head orange-ocherous. Antenna orange-ocherous, suffused with dark fuscous above; scape largely suffused with dark fuscous above. Labial palpus with first segment dark yellowish-ocherous; second segment orange-ocherous, largely suffused with dark fuscous outwardly. Thorax orange-ocherous. Legs yellowish-ocherous; fore and mid tibiae suffused with orange-ocherous, mixed with fuscous; fore and mid tarsi orange-ocherous, the posterior four segments being nearly wholly fuscous, and mid tarsus scattered with dark fuscous. Forewing with R_5 to apex; orange-ocherous with some scattered dark fuscous scales; markings dark fuscous; costa with a dot at base; a streak above fold from near base to about middle of wing-length; a very short streak above it beyond its middle; dorsum marked basally; a fascia from costa just beyond middle to dorsum before tornus; a terminal fascia, zigzagging inwardly, meeting the preceding fascia on tornus; cilia orange-ocherous with a median shade, on dorsum grayish-brown.

Hindwing rather dark gray; cilia yellowish, on costa and termen with a gray subbasal shade, and on dorsum gray, except on base. Abdomen not observed.

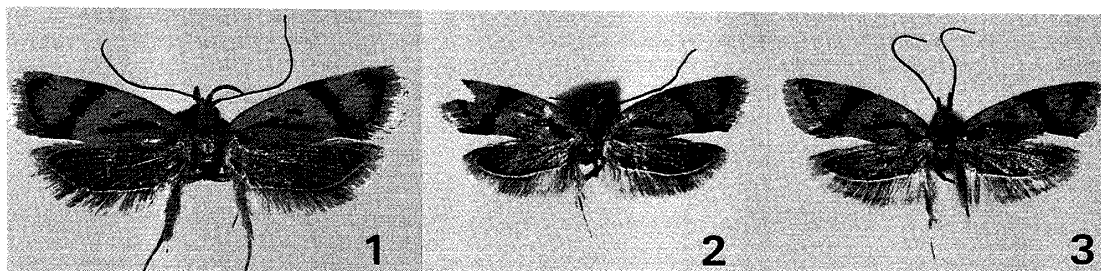
Male genitalia: Uncus spatulate, broadest at apical three-fourths; posterior margin slightly concave at middle. Gnathos with a well-developed ventral plate, which is set with many minute spines. Valva with long dorso-proximal process; sacculus large and bent towards dorsally in apical fifth, with distinct two processes, the apical one being slightly concave at apex, and the inner one situated at four-fifths, triangular, the dorso-proximal corner strongly produced into a thorn-like process, the left saccular process larger than right one, and the basal margin with a small process at middle. Aedeagus slender, the ventral side with two triangular processes, the apical one of which is smaller than the median one.

♀: Unknown.

Holotype ♂, Nepal, Gandaki, Pokhara City, alt. 1300–1400m, 16–19, VI. 1994, T. Ueda & Y. S. Bae.

Host-plant: Unknown.

Remarks. Although nearest to *P. orthiodes* Meyrick³⁾ and *P. kanchanaburiensis* Moriuti,



Figs. 1–3. *Periacma* spp.: 1, *P. harutai* sp. nov., ♂, holotype; 2, *P. nepalensis* sp. nov., ♂, holotype; 3, *P. himalayensis* sp. nov., ♂, holotype.

Saito, et Lewvanich in the male genitalia, *P. harutai* can be easily distinguished from them by the presence of a distinct saccular process before the apex, and thence the apical part being strongly bent dorsally.

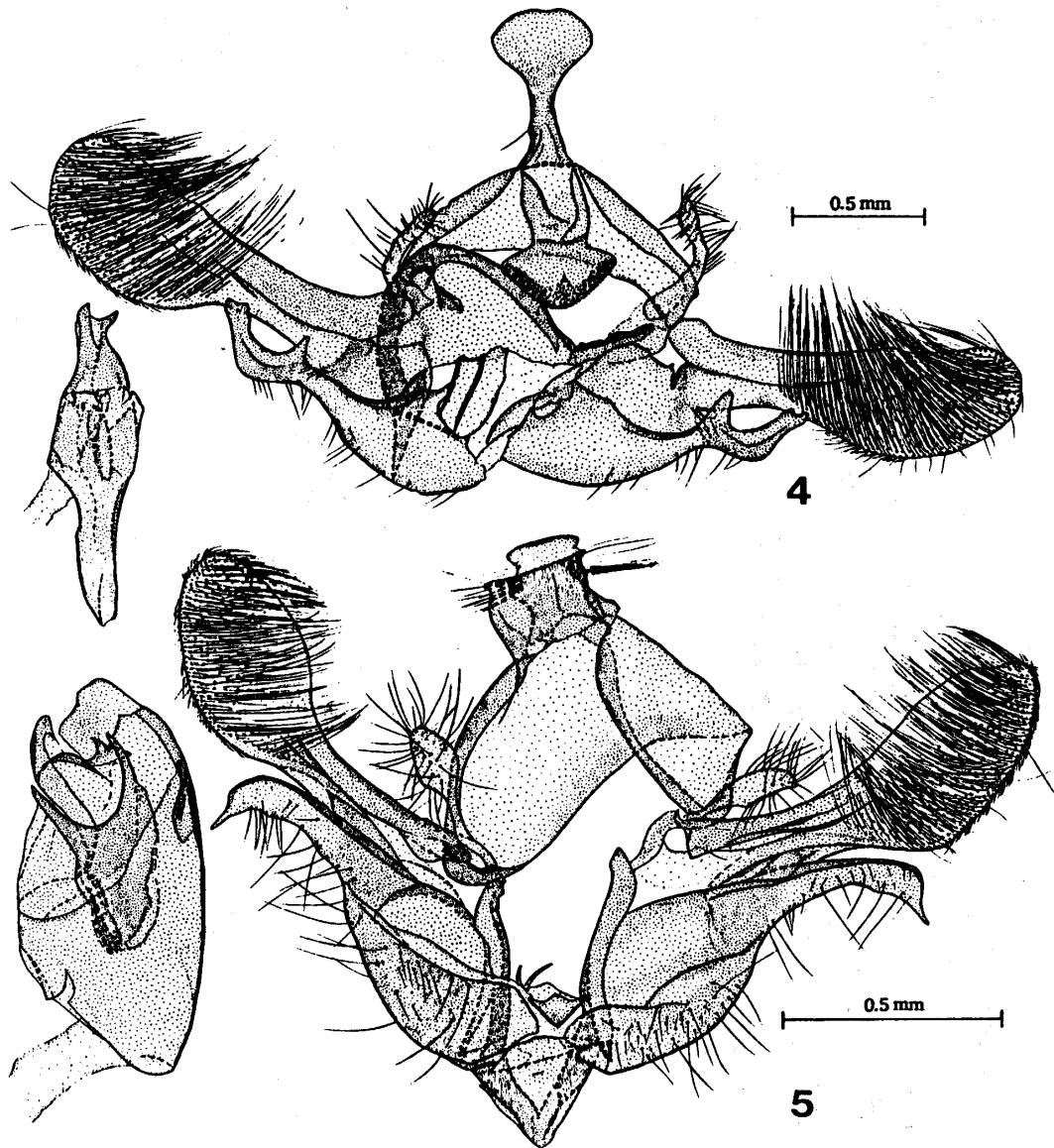
***Periacma nepalensis* sp. nov.**

(Figs. 2, 5)

Forewing length: ♂ 5.9 mm.

Head orange-ocherous. Antenna dark orange-ocherous, annulated with dark fuscous; scape suffused with dark fuscous above. Labial palpus orange-ocherous; first segment suffused with fuscous outwardly; second segment sparsely scattered in apical half, except at apex. Thorax orange-ocherous; central part wholly suffused with fuscous; tegula very sparsely dotted with dark fuscous. Legs yellowish-ocherous; fore femur largely suffused with fuscous outwardly; fore tibia orange-ocherous, suffused with dark fuscous outwardly; fore tarsus orange-ocherous, with apical four segments suffused with dark fuscous; mid femur mixed with dark fuscous in-

wardly; mid tibia orange-ocherous, with basal half mixed with, and apical half suffused with dark fuscous; mid tarsus orange-ocherous; first segment with a broad dark fuscous band at middle and the remainder annulated with dark fuscous; hind tibia suffused with blackish-fuscous on apical half; hind tarsus suffused with blackish-fuscous on each segment. Forewing with R_5 to apex; rather dark orange-ocherous, sprinkled with dark fuscous scales throughout; markings blackish-fuscous; costa with a dot at base; an elongate streak rising from dorsum before base, running above fold and reaching middle of wing-length; a short streak above it beyond its middle; a fascia from costa just beyond middle to dorsum before tornus; a terminal fascia never meeting the preceding fascia on tornus; a dot at apex and four dots along termen; cilia with basal half concolorous with wing, and with apical half much paler than basal one, on dorsum dark fuscous. Hindwing dark gray; cilia a little paler, with outer two-thirds yellow.

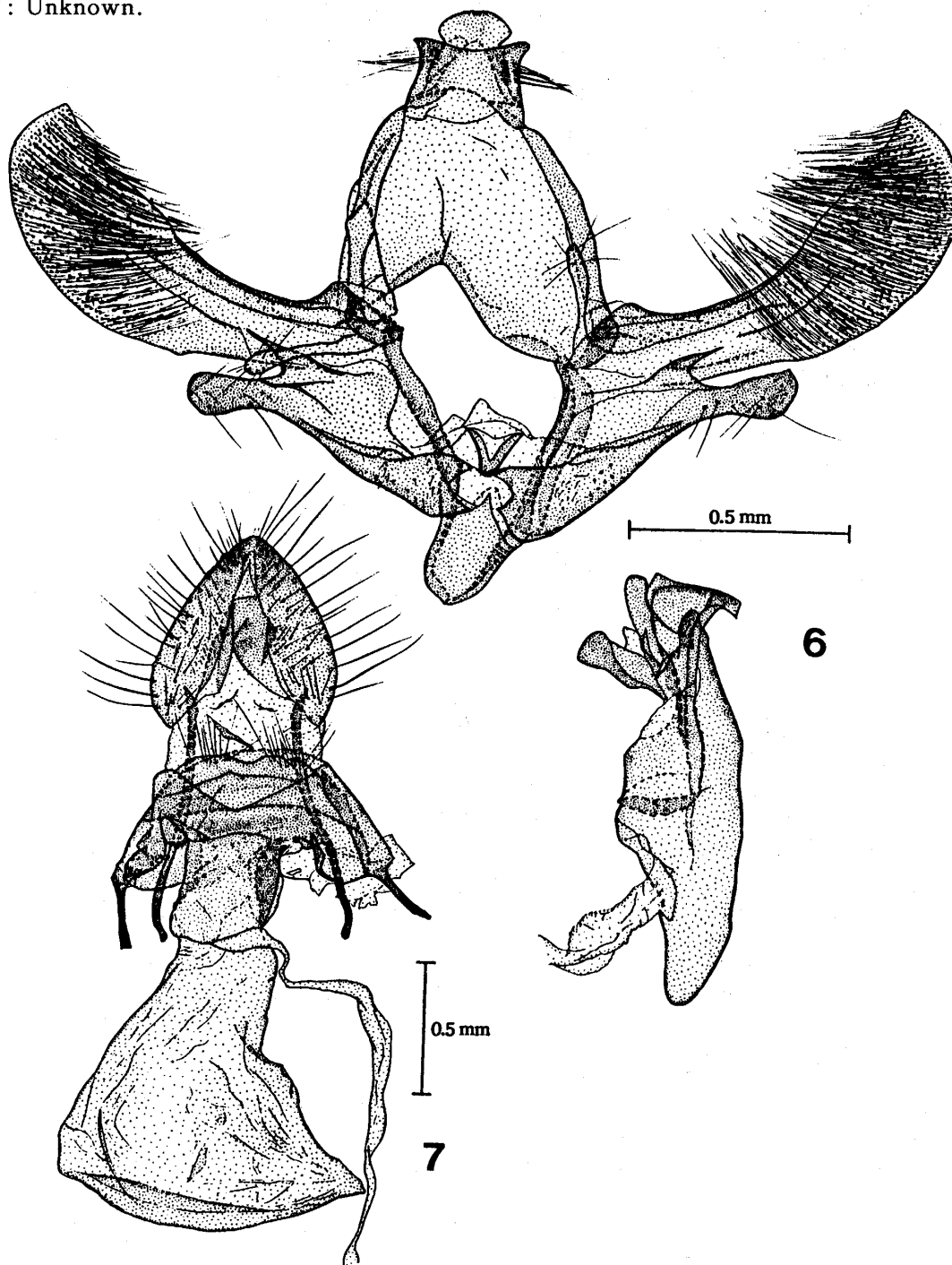


Figs. 4—5. Male genitalia: 4, *Periacma harutai* sp. nov., holotype;
5, *P. nepalensis* sp. nov., holotype.

wiwh on upper half of termen. Abdomen not studied.

Male genitalia: Uncus longer than wide (4:3); lateral margin concave at one-fourth and three-fourths. Gnathos with very short arm; ventral plate short, without spinules. Valva dilated from middle, with distal margin rounded; dorso-proximal process club-shaped; sacculus ending in a ventrally curved, pointed apex. Saccus short, with a pointed apex. Aedeagus stout, forming a flattened apical plate, with two strongly sclerotized processes, one of which is long, with a hooked apex, and the other is broad and claw-shaped.

♀: Unknown.



Figs. 6-7. *Periacma himalayensis* sp. nov., genitalia: 6, ♂, holotype; 7, ♀, paratype.

Holotype ♂, Nepal, Bagmati, Kathmandu, Nagarjun Ban, alt. 1450-1500m, 15. VI. 1994, Y.S. Bae & T. Ueda.

Host-plant: Unknown.

Remarks. This species is allied to *P himalayensis* sp. nov., from which it differs in the male genitalia, as noted under the latter species.

***Periacma himalayensis* sp. nov.**

(Figs. 3, 6, 7)

Forewing length: ♂ 6.5 mm, ♀ 7.4 mm.

Head yellowish-ocherous, slightly tinged with fuscous. Antenna orange-ocherous, annulated with dark fuscous; scape suffused with dark fuscous above. Labial palpus orange-ocherous; first segment mixed with dark fuscous; in ♂ apical third of second segment fuscous, tipped with orange-ocherous; in ♀ second segment with rough scales beneath, mixed with dark fuscous; in ♀ third segment marked with fuscous. Thorax orange-ocherous, largely suffused with fuscous except on each side; tegula very sparsely orange-ocherous, scattered with fuscous. Legs yellowish-ocherous; fore femur suffused with fuscous; fore tibia and tarsus orange-ocherous, mixed with dark fuscous in tibia, the tarsus suffused with dark fuscous on apical two segments; mid femur scattered with dark fuscous; mid tibia with a fuscous dot at base and with a broad fuscous band beyond middle; mid tarsus with first segment marked with dark fuscous band at middle, with second and third segments annulated with dark fuscous and with apical two segments suffused with dark fuscous; hind tibia suffused dorsally with brownish-gray; hind tarsus with basal segment suffused medially with pale fuscous. Forewing with R_s to apex; orange-ocherous to rather dark orange-ocherous, scattered with dark fuscous scales; markings very similar to those of *nepalensis*; two transverse fasciae approximated together on dorsum; cilia concolorous with ground color of wing, with a very interrupted fuscous median line; dorsal cilia fuscous. Hindwing rather dark gray; cilia yellowish, on costa and termen with a pale brownish-gray subbasal shade; dorsal cilia pale brownish-gray.

Male genitalia: Uncus tapered apically and produced into a lateral lobe at apical third; posterior margin slightly rounded. Gnathos with very short arm; ventral plate short, without spinules. Valva elongate; dorsal margin gently concave; dorso-proximal process slender, club-shaped; sacculus produced into a broad distal process. Saccus moderate; anterior margin angled at middle. Aedeagus long, with three lobes at near apex; one at about apical two-fifths, broad, with swollen apex; another at about apical two-fifths, with rounded apical margin, and the third at about apical fifth, short, with pointed apex; apical margin bent outwardly.

Female genitalia: Lamella antevaginalis with strongly concave posterior margin. Ductus bursae broad, complicated twice. Ductus seminalis arising from posterior third of ductus bursae. Signum absent.

Holotype ♂, Nepal, Bagmati, Kathmandu, Nagarjun Ban, alt. 1450-1500m, 15. VI. 1994, Y.S. Bae & T. Ueda.

Paratypes: 1 ♂, 2 ♀, same data as holotype.

Host-plant: Unknown.

Remarks. In appearance this species is very closely allied to the preceding species, but the

hind tarsus is suffused with blackish-fuscous on each of the segments in *nepalensis*, whereas it is suffused on the first segment in *himalayensis*. The male genitalia separate them from each other by the recurved and pointed sacculus of *nepalensis*, compared with straight and truncated sacculus of *himalayensis*.

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