

### The genus *Capidentalia* PARK in China (Insecta: Lepidoptera: Gelechiidae)<sup>1)</sup>

With 10 Figures

HOU-HUN LI & ZHE-MIN ZHENG

**Abstract.** Five species of the genus *Capidentalia* are reported from China in this paper, of which two species are described as new for science: *Capidentalia eucalla* LI et ZHENG spec. nov. and *Capidentalia yanglingensis* LI et ZHENG spec. nov. *Capidentalia claviformis* (PARK) is reported for the first time from this country.

#### Introduction

The genus *Capidentalia* PARK was proposed in 1995. The crown-shaped uncus is the most distinct character. Up to date, eight species have been recorded in this genus (PONOMARENKO, 1995), mainly known from Asia except one species from South Africa. This paper treats five Chinese species of the genus *Capidentalia*, with two species described as new to science and the generic type species *Capidentalia claviformis* (PARK) reported for the first time from China. The type specimens are deposited in the Institute of Zoology, Shaanxi Normal University, Xi'an, P. R. China, except four paratypes (2 ♂♂ and 2 ♀♀) of *Capidentalia yanglingensis* spec. nov. which are kept in the Lepidoptera Collection of Staatliches Museum für Tierkunde Dresden, Germany.

#### Key to the Chinese species of the genus *Capidentalia*

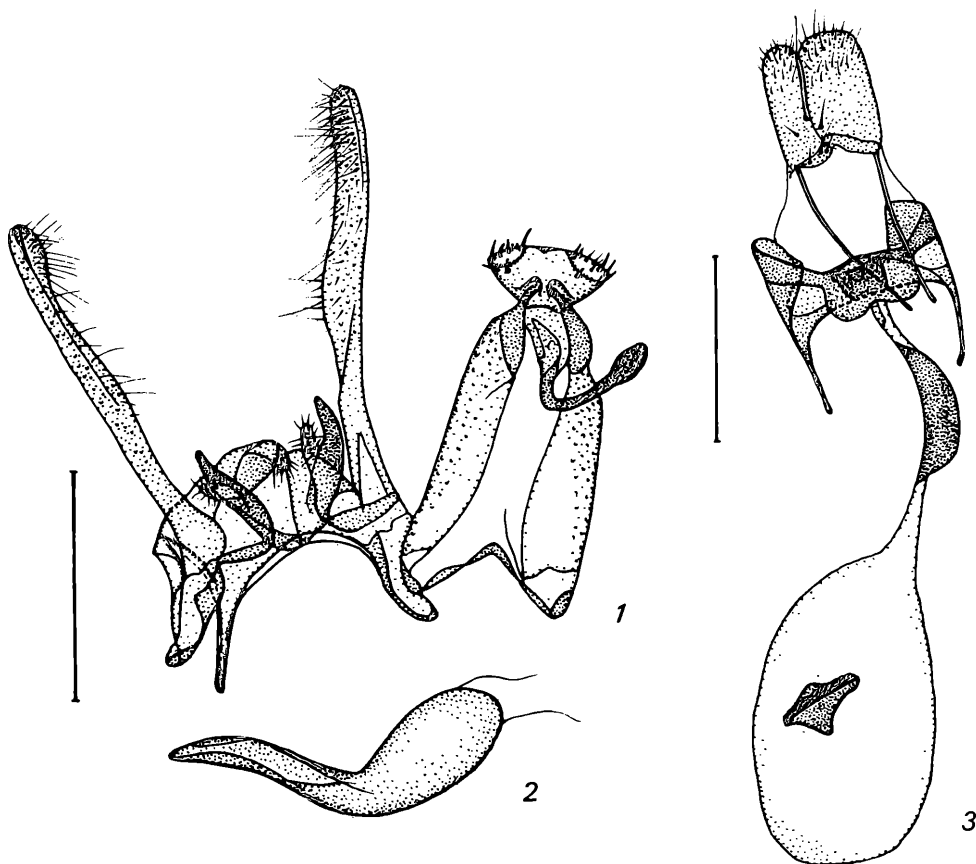
1. Wing expanse more than 13.0 mm; valvella long in male. 2  
Wing expanse less than 11.0 mm; valvella short in male. 3
2. Valvella apically bifurcate; valva long, end reaching far beyond uncus, both sides almost parallel; aedeagus strongly bent. *C. eucalla* spec. nov.  
Valvella apically digitate; valva short, end not extending to uncus, narrowed basally. *C. paroctas* (MEYRICK)
3. Gnathos pointed distally. 4  
– Gnathos dilated distally; valva straight, with middle portion somewhat expanded; valvella bent. In female, ostium bursae wide and short, ductus bursae medially widened and sclerotized. *C. claviformis* (PARK)

<sup>1)</sup> The project (No. 39770114) was supported by National Natural Science Foundation of China.

#### Authors' addresses:

Hou-Hun Li, Department of Biology, Nankai University, Tianjin 300071, P. R. China

Zhe-Min Zheng, Institute of Zoology, Shaanxi Normal University, Xi'an 710062, P. R. China



Figs. 1–3: *Capidentialia claviformis* (PARK). 1 – male genitalia; 2 – aedeagus (1–2: slide no. L95221); 3 – female genitalia (slide no. L90025). Scales: 0.5 mm.

4. Valva with spines on outside near apex; valvella apically bifurcate; aedeagus greatly bent at basal  $\frac{1}{4}$ . In female, ostium bursae projecting; signum elliptical. *C. yanglingensis* spec. nov.  
 – Left valva with a long spine on inside near base; valvella digitate; aedeagus slightly bent at basal  $\frac{1}{3}$ . In female, ostium bursae cavate; signum rhomboidal. *C. salicicola* PARK

***Capidentialia claviformis* (PARK, 1993) (Figs. 1–3)**

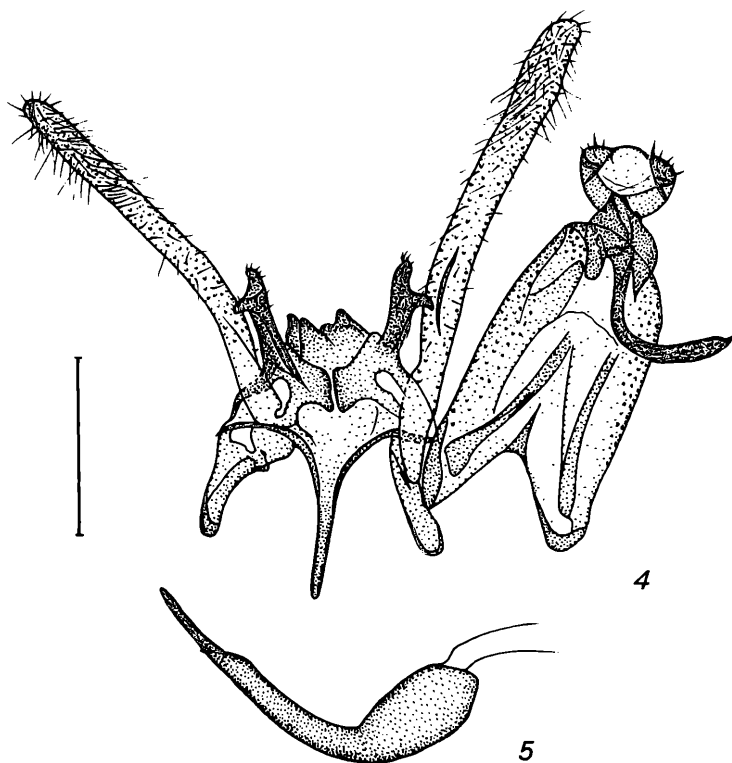
*Hypatima claviformis* PARK, 1993, Insecta Koreana **10**: 31.

*Capidentialia claviformis* (Park): PARK, 1995, Tropical Lepidoptera **6** (1): 84, figs 72, 73; PONOMARENKO, 1995, Actias **2** (1): 47.

Male genitalia (Figs. 1–2): as illustrated.

Female genitalia (Fig. 3): as illustrated.

Distribution: China (new record): Shaanxi, Gansu, Henan, Anhui; Korea.



Figs. 4–5: *Capidentalia eucalla* LI et ZHENG spec. nov. 4 – male genitalia; 5 – aedeagus (slide no. L95200). Scale: 0.5 mm.

***Capidentalia salicicola* PARK, 1995**

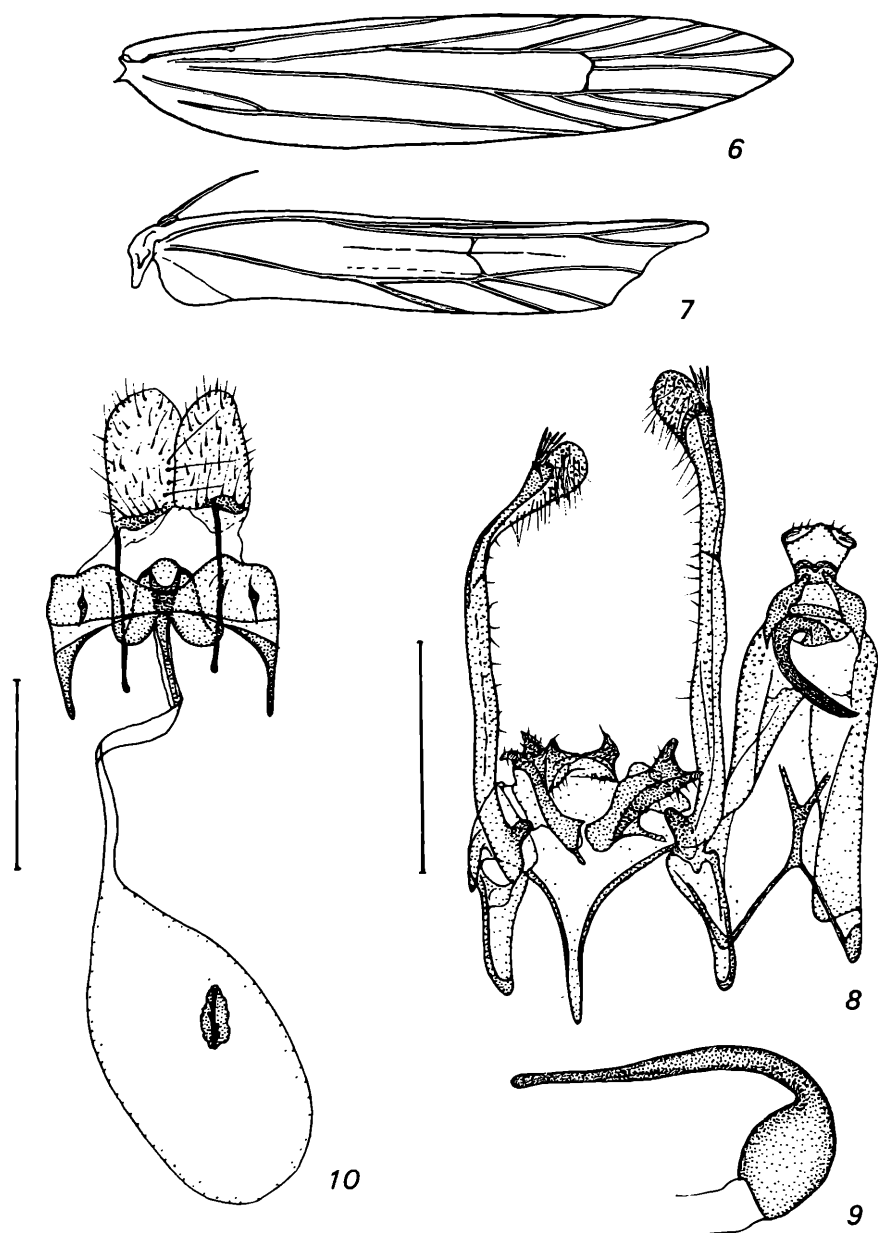
*Capidentalia salicicola* PARK, 1995, Tropical Lepidoptera 6 (1): 84; PONOMARENKO, 1995, Actias 2 (1): 47.

Distribution: China: Taiwan.

***Capidentalia eucalla* LI et ZHENG spec. nov. (Figs. 4–5)**

**Male:** Wing expanse 14.0 mm. Head greyish white, with some greyish brown scales. Labial palpi with first and second segments ochreous brown on outer surface, inner surface greyish white, distally with greyish brown scales; ventral surface of second segment with triangular scale tuft; third segment longer than second, greyish white, but black at  $\frac{1}{3}$  and  $\frac{3}{4}$ . Antennae greyish white ringed brown. Thorax and tegula greyish brown, mixed with brown scales. Forewing long and narrow, basal  $\frac{1}{3}$  greyish white, densely with black brown scales, a small black scale tuft near base; a wide black band at  $\frac{1}{3}$  extending from posterior margin almost to costal margin; distal  $\frac{2}{3}$  ochreous brown, with scattered greyish white and brown scales; scale tuft at costal  $\frac{1}{3}$ ,  $\frac{1}{2}$  and  $\frac{3}{4}$  respectively, first one largest, black, outside slightly white, third one smallest, second and third ochreous brown; apex with black scales forming obscure spots; cilia ochreous. Hindwing and cilia grey. Fore and mid femora greyish brown, tibiae and tarsi brown ringed white; hind femur and tibia greyish white, mottled brown, tarsus brown.

**Male genitalia (Figs. 4–5):** Uncus wide and short, cupuliform, anterior margin long and narrow, posterior margin somewhat convex at middle, laterally with short spines. Gnathos slender, distal half



Figs. 6–10: *Capidentalia yanglingensis* LI et ZHENG spec. nov. 6–7 – venation (slide no. L94162); 8 – male genitalia; 9 – aedeagus (8–9: slide no. L94165); 10 – female genitalia (slide no. L94163). Scales: 0.5 mm.

slightly thicker, apically pointed; bent at middle, somewhat hooked. Tegumen wide, anterior margin deeply concave, ventrally with two membranous stripes. Valva long and narrow, lateral margins nearly parallel, rounded apically, extending beyond end of uncus, setose. Valvella long, about  $\frac{1}{3}$  length of valva, distally divided into two branches, outer branch shorter, setose. Lobes of juxta wide at base, triangular apically, with hairs. Saccus wide basally, distally long and narrow. Aedeagus with basal  $\frac{1}{3}$  bulbous, bent at  $\frac{1}{3}$ , middle portion stout, suddenly narrowed distally.

Female: Unknown.

Holotype: ♂, China: Shaanxi Province (Fengxian County: Mt. Xinjiashan [N 33.9, E 106.5], alt. 1600 m), 9. VII. 1988, HOU-HUN LI leg., genitalia slide no. L95200.

Remarks: This new species resembles *Capidentalia claviformis* (PARK), but its forewing greyish white at basal  $\frac{1}{3}$ , valvella bifurcate and aedeagus suddenly narrowed distally in male genitalia.

***Capidentalia yanglingensis* LI et ZHENG spec. nov. (Figs. 6–10)**

Male and female: Wing expanse 8.5–10.0 mm. Head brown, with grey scales. Labial palpi with first and second segments ochreous brown on outer surface, inner surface greyish white; second segment ventrally with triangular scale tuft; third segment longer than second, greyish brown, somewhat ochreous, dark brown at  $\frac{1}{3}$ ,  $\frac{1}{2}$  and  $\frac{3}{4}$ . Antennae alternately greyish brown and brown. Thorax and tegula brown, speckled with greyish white scales. Forewing long and narrow, costal and posterior margins almost parallel, ground colour greyish white to ochreous brown, with scattered black scales; costal margin with scale tuft at near  $\frac{1}{4}$ ,  $\frac{1}{2}$  and  $\frac{3}{4}$  respectively, first one largest, third one smallest, each scale tuft white on outside; a small scale tuft near base; a wide fuscous fascia at  $\frac{1}{3}$  stretching from posterior margin to near costal margin; a round brown spot at end of cell, edged with greyish white; apex with more dark brown scales; cilia grey. Hindwing and cilia grey.  $R_4$  and  $R_5$  of forewing long stalked,  $M_2$  and  $M_3$  of hindwing from same point (Figs. 6–7). Legs brown with greyish white scales; hind tibia with pale long hairs dorsally. Abdomen greyish brown on dorsal surface, ventral surface and end grey. Male genitalia (Figs. 8–9): Uncus wide and short, corona-like, anteriorly narrow, posteriorly convex at middle, both sides with short spines. Gnathos slender, basal half bent, becoming semicircular. Tegumen wide, lateral sides nearly parallel, anterior margin deeply concave. Valva long and narrow, apex reaching far beyond end of uncus; bent inwardly at  $\frac{2}{3}$ , distally expanded, a small spined process on outside near apex; a short digitate process at inside of base, round apically. Valvella wide and short, distally divided into two remote cusps. Lobes of juxta triangular. Saccus with basal half wide, distal half long and narrow. Aedeagus with basal  $\frac{1}{4}$  bulbously expanded, strongly bent at  $\frac{1}{4}$ , distal  $\frac{3}{4}$  slender.

Female genitalia (Fig. 10): Seventh tergum and sternum posteriorly concave at middle, lateral sides slightly convex, heavily sclerotized. Eighth abdomere short, tergum with posterior margin deeply concave at middle, lateral sides with flange. Ostium bursae projecting, infundibulate, with a pair of foliolae anteriorly. Anterior apophyses about half length of posterior apophyses, stout. Ductus bursae slender, almost as long as corpus bursae. Corpus bursae elliptical, with warts on inner surface. Signum long slice-like, dentately with longitudinal sclerotized carinae.

Holotype: ♂, China: Shaanxi Province (Yangling District [N 34.2, E 108.0], alt. 450 m), 6. VII. 1993, HOU-HUN LI leg., genitalia slide no. L94165. Paratypes: 17 ♂♂, 5 ♀♀, 17.–22. VI. 1985, same data as holotype; 1 ♂, 3. V 1993, MAN-TANG LIU leg.; 1 ♂, 4. V 1995, AISHAER MAIMAITI leg., 10 ♂♂, 2 ♀♀, 3. V.–18. VI. 1995, DUOLIKEN BAISHANBAYI leg., same locality as holotype.

Remarks: The new species is closely allied to *Capidentalia eucalla* LI et ZHENG spec. nov. in appearance, but can be separated from it by the body smaller, aedeagus and valva of male genitalia different from those of the former in shape.

***Capidentalia paroctas* (MEYRICK, 1913)**

*Chelaria paroctas* MEYRICK, 1913. Journ. Bombay Nat. Hist. Soc. **22**: 166; Clarke, 1969. Cat. Type Specimens Microlep. Br. Mus. nat. Hist. descr. E. MEYRICK **6**: 421.

*Capidentalia paroctas* (MEYRICK): PARK, 1995. Tropical Lep. **6** (1): 84; PONOMARENKO, 1995, Actias **2** (1–2): 47.

Distribution: S. China; Vietnam; Sri Lanka.

## Acknowledgements

We gratefully acknowledge the assistance with information received from Dr. K.T. PARK (Center for Insect Systematics Kangweon National University, Chuncheon, Korea) and Dr. M.G. PONOMARENKO (Laboratory of Entomology, Institute of Biology and Pedology of the Far Eastern Branch, Russian Academy of Sciences, pr. Stoletya, Vladivostok, Russia).

## References

- CLARKE, J.F.G. (1969): Catalogue of type specimens of Microlepidoptera in the British Museum (Natural History) described by Edward Meyrick, Vol. 6, 537 pp. London.
- MEYRICK, E. (1913): Description of Indian Microlepidoptera. – Journ. Bombay Nat. Hist. Soc. 22: 160–182.
- PARK, K.T. (1993): A review of the genus *Hypatima* and its related genera (Lepidoptera: Gelechiidae) in Korea. – Ins. Koreana 10: 25–49.
- PARK, K.T. (1995): Gelechiidae of Taiwan. II. *Hypatima* and allies, with descriptions of a new genus and five new species (Lepidoptera: Gelechiidae). – Tropical Lepidoptera 6 (1): 67–85.
- PONOMARENKO, M.G. (1995): Review of the genus *Capidentalia* Park (Lepidoptera: Gelechiidae, Dichomeridinae) with the description of two new species. – Actias 2 (1–2): 45–51.

(Received on July 7, 1997)

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Reichenbachia](#)

Jahr/Year: 1997-1998

Band/Volume: [32](#)

Autor(en)/Author(s): Li Hou-Hun, Zheng Zhe-Min

Artikel/Article: [The genus Capidentialia Park in China \(Insecta: Lepidoptera: Gelechiidae\) 307-312](#)