

**Two new species of *Jaklia* Novák  
(Coleoptera: Tenebrionidae: Alleculinae) from Thailand**

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**Taxonomy, new species, description, key, Coleoptera, Tenebrionidae, Alleculinae, *Jaklia*, Thailand**

**Abstract.** Two new species *Jaklia marketae* sp. nov. and *Jaklia viktorai* sp. nov. from Thailand are described, illustrated and keyed. New distribution data on the species *Jaklia horaki* Novák, 2010 (Laos) are added.

INTRODUCTION

The genus *Jaklia* Novák, 2010 with the type species *Jaklia serraticornis* Novák, 2010 from Indonesia (Mentawai Isls) and Malaysia was described by Novák (2010). In the same paper *Jaklia horaki* Novák, 2010 from Thailand was described as new and *Jaklia rufipennis* (Pic, 1915) from Indonesia (Sumatra isl.) was transferred from the genus *Allecula* Fabricius, 1801 to the genus *Jaklia* Novák, 2010. Species of the genus *Jaklia* clearly differ from species of other genera of the subtribe Alleculina Laporte, 1840 mainly by antennomeres 4-10 strongly serrate, space between eyes very narrow and by impressions on dorsal surface of pronotum. Two new species *Jaklia marketae* sp. nov. and *Jaklia viktorai* sp. nov. from Thailand are described, illustrated, compared and keyed with other species of the genus *Jaklia*. New distribution data on the species *Jaklia horaki* Novák, 2010 (Laos) are added.

MATERIAL AND METHODS

Two important morphometric characteristics used for the descriptions of species of the subfamily Alleculinae are employed: the 'ocular index' dorsally (Campbell & Marshall, 1964), calculated by measuring the minimum distance between the eyes and dividing this value by the maximum dorsal width across eyes, the quotient resulting from this division being converted into an index by multiplying by 100, and the 'pronotal index' dorsally (Campbell, 1965), the ratio of the length of the pronotum along the midline to the width at the posterior angles, this ratio being multiplied by 100 for convenience.

The following codens are used in the paper:

- OKZC private collection of Ondřej Konvička, Zlín, Czech Republic;
- PVKC private collection of Petr Viktora, Kutná Hora, Czech Republic;
- VNPC private collection of Vladimír Novák, Praha, Czech Republic.

Measurements of body parts and corresponding abbreviations used in text are as follows:

- AL total antennae length

BL	maximum body length
EL	maximum elytral length
EW	maximum elytral width
HL	maximum length of head (visible part)
HW	maximum width of head
OI	ocular index dorsally
PI	pronotal index dorsally
PL	maximum pronotal length
PW	pronotal width at base
RLA	ratios of relative lengths of antennomeres 1-11 from base to apex (3=1.00)
RL/WA	ratios of length / maximum width of antennomeres 1-11 from base to apex
RLT	ratios of relative lengths of tarsomeres 1-5 respectively 1-4 from base to apex (1=1.00).

Measurements were made with Olympus SZ 40 stereoscopic microscope with continuous magnification and with Soft Imaging System AnalySIS.

Slash (/) separates data in different rows on locality labels, double slash (//) separates data on different labels.

## TAXONOMY

### *Jaklia marketae* sp. nov.

(Figs 1-6)

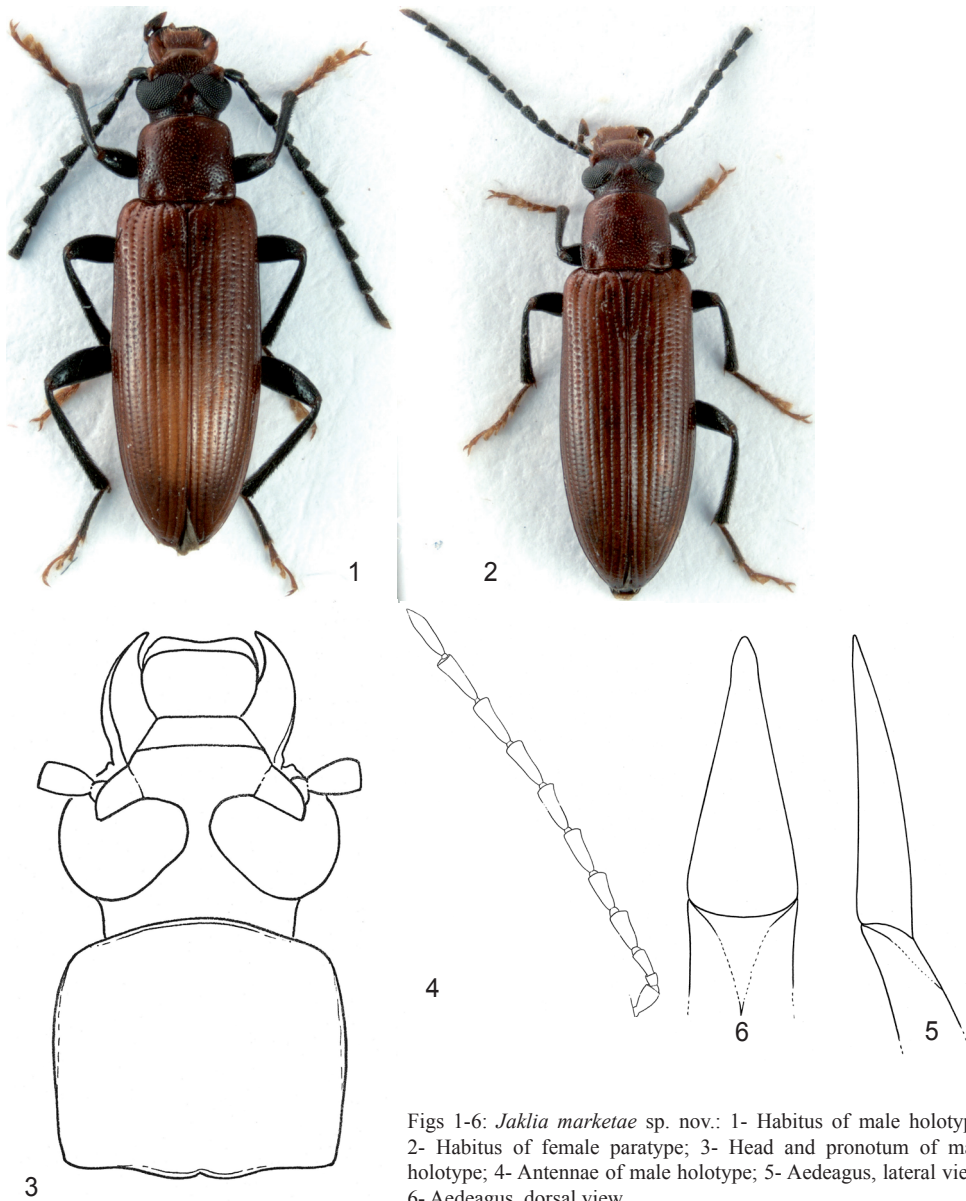
**Type locality.** N Thailand, Chiang Rai prov., Wiang Pa Pao.

**Type material.** Holotype (♂): white label [printed black]: N THAILAND / Chiang Rai prov. / Wiang Pa Pao env. / 7.-22.v.2010 / P. Viktora lgt., (VNPC); Paratype: (1 ♀): white label [printed black]: N THAILAND Chiang / Rai prov.; Wiang Pa / Pao env. 21.v.-10.vi. / 2011; P. Viktora lgt., (PVKC). The types are provided with a printed red label: *Jaklia marketae* sp. nov. HOLOTYPUS [resp. PARATYPUS] V. Novák det. 2012.

**Description of holotype.** Habitus of male holotype as in Fig. 1. Body narrow, elongate, parallel, BL 7.28 mm, from reddish-brown to black, dorsal surface slightly shiny, maximum width near elytral half 2.05 mm. BL/EW 3.55.

Head (Fig. 3) relatively long and wide, reddish-brown, posterior part finely darker than anterior part or other dorsal surface. Posterior part with dense and coarse punctuation and distinct microgranulation, anterior part and clypeus with sparse pale brown setation, clypeus impunctate, matte. Mandibles with black top, large and shiny. Eyes large, transverse, deeply excised, space between eyes very narrow and sparsely punctuate, approximately as long as length of antennomere 2. OI equal to 6.05. Head widest across eyes, HW 1.33 mm, approximately 0.98 times as wide as width of pronotal base. HL (visible part) 1.19 mm.

Antenna (Fig. 4). Black, relatively long, distinctly longer than half of body length, AL 4.33 mm, AL/BL 0.60. Antennomeres 1-3 very slightly shiny, antennomeres 4-11 rather matte with punctuation, microgranulation and brown setation, distinctly broadened anteriorly, antennomeres 4-10 serrate. Antennomeres 2 shortest, antennomere 3 distinctly shorter than each of antennomeres 4-11. RLA (1-11): 1.07: 0.50: 1.00: 1.41: 1.36: 1.63: 1.66: 1.76: 1.77:



Figs 1-6: *Jaklia marketae* sp. nov.: 1- Habitus of male holotype; 2- Habitus of female paratype; 3- Head and pronotum of male holotype; 4- Antennae of male holotype; 5- Aedeagus, lateral view; 6- Aedeagus, dorsal view.

1.86: 2.06. RL/WA (1-11): 1.76: 1.28: 2.20: 2.21: 2.13: 2.75: 2.58: 2.68: 2.79: 3.05: 4.28.

Maxillary palpus dark reddish-brown with pale brown setation and microgranulation, matte. Palpomere 2 and penultimate palpomere slightly dilated anteriorly. Penultimate palpomere shorter than palpomere 2 and ultimate palpomere. Ultimate palpomere broadly triangular.

Pronotum (Fig. 3) almost square with rounded anterior margin, surface reddish-brown, glabrous, shiny with punctuation, fine microgranulation and fine rugosities, distinctly narrower than base of elytra. Punctures large and coarse. Dorsal surface with distinct four impressions, one transverse near anterior margin in middle, the second and the third oblique near posterior angles and the fourth transverse on ante-scutellar area. Lateral margins parallel, longest in the middle, PL 1.23 mm, PW at base 1.36 mm. PI equal to 90.35. Borders complete, posterior margin finely bisinuate and finely excised on ante-scutellar area. Posterior angles finely rectangular, anterior angles indistinct, roundly obtuse.

Elytra elongate, parallel, anterior half finely rounded, dorsal surface unicolored reddish-brown, glabrous, shiny. EL 4.86 mm, EW 2.05 mm, widest near elytral half. EL/EW ratio equal to 2.37. Rows of punctures in elytral striae distinct, punctures relatively large, space between punctures in striae very narrow, dorsal surface of elytral intervals with fine microgranulation. Elytral epipleura well-developed, reddish-brown, evenly narrowing in basal half to ventrite 1, in apical half parallel, then narrowing to rounded apex.

Scutellum reddish-brown as elytron itself, roundly triangular with microgranulation.

Legs long and narrow, blackish-brown with brown setation, tarsi slightly paler than femora and tibia, with pale brown setation. Tibia and femora with distinct punctuation and rugosities, setation of tibia distinctly denser than that of in femora. Protarsomere and mesotarsomere 3, 4 and metatarsomere 3 of each tarsus distinctly broadened and lobed. RLT (1-5): 1.00: 0.66: 0.66: 0.76: 1.30 (protarsus); 1.00: 0.44: 0.38: 0.44: 0.74 (mesotarsus); (1-4): 1.00: 0.40: 0.41: 0.63 (metatarsus). Anterior tarsal claws with 7 and 6 visible teeth.

Ventral side of body. Prosternum reddish-brown with sparse punctuation and shiny, mesosternum and metasternum distinctly darker than prosternum, with denser punctuation. Abdomen dark brown with short pale brown setation, microgranulation and shallow punctuation.

Aedeagus (Figs 5, 6) pale brown, slightly shiny. Basal piece 4.27 as long as apical piece. Basal piece rounded laterally, regularly narrowing dorsally. Apical piece longitudinally triangular dorsally and laterally.

**Female** (Fig. 2). Antennae slightly shorter than in male (AL/BL 0.52), reaching approximately half of body length. Antennomeres 4-10 less serrate than in male. Space between eyes broader than in male (OI equal to 13.99), slightly longer than length of antennomere 2. Anterior tarsal claws with 6 and 7 visible teeth.

HL 1.11 mm; HW 1.31 mm; OI 13.99; PL 1.22 mm; PW 1.42 mm; PI 85.88; EL 5.09 mm; EW 2.16 mm; BL 7.42 mm; AL 3.89 mm; AL/BL 0.52. RLA (1-11): 1.00: 0.44: 1.00: 2.16: 2.11: 1.58: 1.62: 1.96: 1.67: 1.81: 2.35. RL/WA (1-11): 1.30: 1.27: 1.86: 2.05: 1.90: 1.95: 2.33: 3.00: 2.18: 2.61: 3.50. RLT (1-5): 1.00: 0.78: 0.77: 0.82: 1.29 (protarsus); 1.00: 0.40: 0.38: 0.51: 0.93 (mesotarsus); (1-4): 1.00: 0.39: 0.37: 0.51 (metatarsus).

**Differential diagnosis.** (for details see the key). The new species *Jaklia marketae* sp. nov. is clearly different from similar species *Jaklia viktorai* sp. nov. mainly by metatibia without excision and tooth in middle of inner side; while *Jaklia viktorai* has distinct excision and tooth in middle of inner side of metatibia. *J. marketae* is clearly different from similar species *Jaklia rufipennis* (Pic, 1915) and *Jaklia horaki* Novák, 2010 mainly by narrow pronotum (PI

equal to 90); while *J. rufipennis* and *J. horaki* has broader pronotum (PI equal to 70). *J. marketae* is clearly different from similar species *Jaklia serraticornis* Novák, 2010 mainly by antennomere 3 distinctly longer than antennomere 2; while *J. serraticornis* has antennomere 3 approximately as long as antennomere 2.

**Distribution.** Thailand.

**Etymology.** The new species is dedicated to collector's wife Markéta.

***Jaklia viktorai* sp. nov.**

(Figs 7-12)

**Type locality.** N Thailand, Chiang Rai prov., Wiang Pa Pao.

**Type material.** Holotype (♂): white label [printed black]: N THAILAND / Chiang Rai prov. / Wiang Pa Pao env. / 7.-22.v.2010 / P. Viktora lgt., (VNPC). The type is provided with a printed red label: *Jaklia viktorai* sp. nov. HOLOTYPE V. Novák det. 2012.

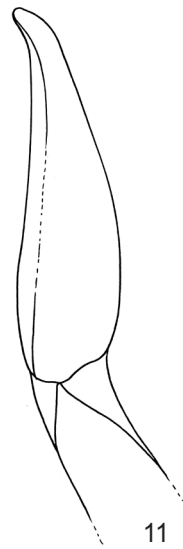
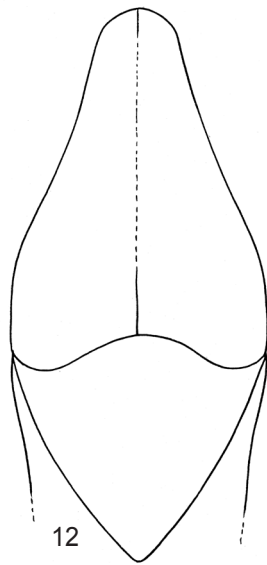
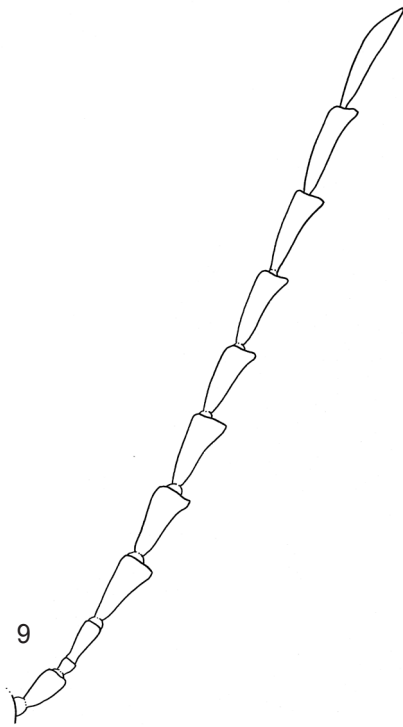
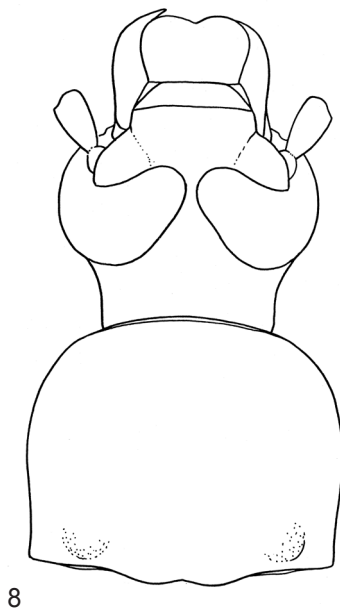
**Description of holotype.** Habitus of male holotype as in Fig. 7. Body narrow, elongate, parallel, BL 10.13 mm, from pale brown to dark brown, slightly shiny, dorsal surface with punctuation and microgranulation, maximum width near elytral half EW 2.81 mm. BL/EW 3.61.

Head (Fig. 8) relatively long, posterior part dark brown with dense punctuation and microgranulation, anterior part distinctly paler than posterior part with long, golden yellow setation, punctuation and microgranulation. Clypeus with long golden yellow setation and microgranulation, punctuation indistinct. Eyes large, transverse, deeply excised with dark setae behind eyes, space between eyes very narrow, distinctly narrower than length of antennomere 2. OI equal to 9.10. Head widest across eyes, HW 1.57 mm, slightly narrower than pronotum, approximately 0.86 times as wide as width of pronotal base. HL (visible part) 1.26 mm.

Antenna (Fig. 9). Relatively long, brown, with dense golden yellow setation, small punctures and microgranulation. Antennomeres 1-3 slightly shiny, antennomeres 4-11 matte and distinctly longer than length of antennomere 3; antennomeres 4-10 broadened anteriorly, distinctly serrate, antennomere 2 shortest. AL 6.10 mm; AL/BL 0.60; RLA (1-11): 1.16: 0.43: 1.00: 1.70: 1.52: 1.68: 1.70: 1.80: 1.85: 1.93: 2.51. RL/WA (1-11): 2.02: 1.06: 2.35: 3.09: 2.89: 3.19: 3.09: 3.13: 2.96: 3.50: 5.56.

Maxillary palpus pale brown with long golden yellow setation and microgranulation, slightly shiny. Palpomere 2 and penultimate palpomere slightly broadened anteriorly. Penultimate palpomere shorter than palpomere 2 and ultimate palpomere. Ultimate palpomere broadly triangular.

Pronotum (Fig. 8) dark reddish-brown, glabrous, shiny, distinctly narrower than base of elytra. Dorsal surface with dense punctuation and microgranulation, punctures large. Longest in the middle, PL 1.61 mm, widest near two thirds from base, PW at base 1.92 mm. PI equal to 83.84. Borders complete, posterior margin finely bisinuate and on ante-scutellar area distinctly excised, anterior margin finely rounded. Posterior angles finely rectangular, lateral margins slightly rounded in anterior half dorsally. Dorsal surface with distinct four



Figs 7-12: *Jaklia viktorai* sp. nov.: 7- Habitus of male holotype; 8- Head and pronotum of male holotype; 9- Antennae of male holotype; 10- Metatibia of male holotype; 11- Aedeagus, lateral view; 12- Aedeagus, dorsal view.

impressions, one shallow, transverse near anterior margin in middle, the second and the third oblique near posterior angles and the fourth transverse on ante scutellar area.

Elytra elongate, very finely oval, dorsal surface dark blackish-brown, glabrous, shiny. EL 7.26 mm; EW 2.81 mm; widest near elytral half. EL/EW ratio equal to 2.58. Dorsal surface with distinct rows of medium-sized punctures in elytral striae, punctures close together. Elytral intervals distinctly rounded, with microgranulation, sparse, small punctures and rugosities near elytral striae. Elytral epipleura well-developed, dark reddish-brown with two or three rows of punctures evenly narrowing in basal half to metasternum, in apical half with one row of punctures leads parallel, then narrowing to rounded apex.

Scutellum triangular, reddish-brown, distinctly paler than elytron itself, sides darker, with punctures and microgranulation.

Legs long, distinctly paler than dorsal surface with microgranulation and punctuation, femora strong, ochre yellow with golden yellow setation, distinctly denser on inner side. Tibia and tarsi pale brown with membranous lobes and ochre yellow, long, dense, golden yellow setation. Protarsomeres 2-4, mesotarsomeres 3, 4 and metatarsomere 3 distinctly broadened and lobed. Metatibia as in Fig. 10 with excision and distinct tooth on inner side. RLT (1-5): 1.00: 0.78: 0.79: 0.92: 1.38 (protarsus); 1.00: 0.44: 0.50: 0.70: 1.08 (mesotarsus); (1-4): 1.00: 0.51: 0.52: 0.59 (metatarsus). Both anterior tarsal claws with 12 visible teeth.

Ventral side of body dark reddish-brown with small punctures, shiny, abdomen black with golden yellow setation, microgranulation and small, shallow punctures, shiny. Apical part of ventrite 5 golden yellow with distinct impression.

Aedeagus (Figs 11, 12) pale brown, shiny. Basal piece 5.35 as long as apical piece. Basal piece rounded laterally and narrowing dorsally. Apical piece broadly triangular with rounded top dorsally and beak-shaped laterally.

**Female.** Unknown.

**Differential diagnosis.** (for details see the key). The new species *Jaklia viktorai* sp. nov. is clearly different from other similar species of the genus *Jaklia* by metatibia with distinct excision and tooth in middle of inner side; while other *Jaklia* species have metatibia without distinct excision and tooth in middle of inner side.

**Distribution.** Thailand.

**Etymology.** The new species is dedicated to the collector and my friend Petr Viktora (Kutná Hora, Czech Republic), specialist in Cerambycidae.

### *Jaklia horaki* Novák, 2010

*Jaklia horaki* Novák, 2010: 181.

**Material examined.** (♂): white label [printed black]: Petr Vicherek / 4.iv.2005 / Don Santiphap / Laos, (OKZC).

**Distribution.** Thailand, new species for Laos.

## KEY TO THE MALES

- 1 (2) Metatibia with distinct excision in posterior half and with distinct tooth in middle of inner side. Habitus as in Fig. 7; head and pronotum as in Fig. 8; antenna as in Fig. 9; metatibia as in Fig. 10; aedeagus as in Figs 11 and 12. Thailand. .... *Jaklia viktorai* sp. nov.
- 2 (1) Metatibia without distinct excision and tooth in inner side. .... 3
- 3 (4) Antennomere 3 approximately as long as antennomere 2. .... *Jaklia serraticornis* Novák, 2010
- 4 (3) Antennomere 3 distinctly longer than antennomere 2. .... 5
- 5 (6) Pronotum narrow, almost square (PI near 90). Small species with reddish-brown dorsal surface and blackish-brown antennae, tibiae and femora. Habitus as in Fig. 1; head and pronotum as in Fig. 3; antenna as in Fig. 4; aedeagus as in Figs 5 and 6. Thailand. .... *Jaklia marketae* sp. nov.
- 6 (5) Pronotum distinctly broader than long (PI near 70). Large species with reddish-brown tibiae and femora, brown antenna and dark blackish-brown dorsal surface. .... *Jaklia horaki* Novák, 2010

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