

**Contributions to the knowledge of the ‘*Staphylinus*-complex’
(Coleoptera: Staphylinidae: Staphylinini) of China.
Part 19. The genus *Ocypus* Leach, 1819,
subgenus *Pseudocypus* Mulsant & Rey, 1876. Section 3.**

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Abstract. The paper deals with the three species of the *lewisius*-lineage of the subgenus *Pseudocypus* Mulsant & Rey, 1876 of the genus *Ocypus* Leach, 1819, known to occur at present on the territory of the People’s Republic of China. *Ocypus lewisius* Sharp, 1874 and *O. densissimus* (Bernhauer, 1933) are redescribed, and *Ocypus jelineki* sp. nov. is described as new from specimens from Henan, Hubei and Shaanxi. Each species is described, illustrated and all available distributional and bionomic data are given. A key to the Chinese species of the *lewisius*-lineage of the subgenus *Pseudocypus* is given.

Key words. Coleoptera, Staphylinidae, Staphylinini, Staphylinina, *Ocypus*, *Pseudocypus*, taxonomy, new species, redescription, description, distribution, Palaearctic Region, mainland China

Introduction

This is the nineteenth of a series of papers dealing with the genera of the ‘*Staphylinus*-complex’ (see SMETANA & DAVIES 2000) of the People’s Republic of China. It treats the three species of the *lewisius*-lineage that are at present known to occur on the territory of the People’s Republic of China. The concept of *Pseudocypus* Mulsant & Rey, 1876 used in this paper is the one applied in my previous paper dealing with this subgenus (SMETANA 2007).

Material and methods

The specimens this paper is based upon come from many sources. The specimens were taken by several European and Japanese coleopterists, their names appear in ‘Type material’ or ‘Additional material examined’ under each species. The material is deposited in various

collections, both institutional and private. The specimens that are said to be housed at present in the collection of the author will be eventually deposited in the Muséum d'histoire naturelle, Genève, Switzerland.

Please refer to my previous paper (SMETANA 2007) for the details of how the features on the aedeagus are described.

The symbols used in the text, when referring to the deposition of specimens, are as follows:

APC	Andreas Pütz collection, Eisenhüttenstadt, Germany;
ASC	Aleš Smetana collection, Ottawa, Canada;
FMNH	Field Museum of Natural History, Chicago, Illinois (A. Newton);
MSC	Michael Schülke collection, Berlin, Germany;
NMW	Naturhistorisches Museum, Wien, Austria (H. Schillhammer);
YSC	Yasutoshi Shibata collection, Tokyo, Japan.

The number of paratypes is given for each locality behind the locality data, followed by the acronym of the collection in which the paratypes are deposited. All data are presented in full for holotypes and allotypes.

Key to Chinese species of subgenus *Pseudocypus* of the *O. lewisius*-lineage

1. Tergite 2 (anterior to first visible tergite) entirely punctate and pubescent. Abdominal tergites 6 and 7 (fourth and fifth visible) almost always with a patch of yellowish tomentose pubescence in middle. Aedeagus of characteristic shape (Figs. 19–21). Length 14.0–18.0 mm. *O. jelineki* sp. nov.
- Tergite 2 (anterior to first visible tergite) with at least basal portion lacking punctation and pubescence. Abdominal tergites 6 and 7 (fourth and fifth visible) without a patch of yellowish tomentose pubescence. Aedeagi different (Figs. 7–9, 13–15). 2
2. Abdominal tergite 2 (anterior to first visible tergite) punctate and pubescent only along apical margin; tergite 7 (fifth visible) with pale apical seam of palisade setae. Apical portion of median lobe of aedeagus in ventral view extended on side close to paramere into slightly curved, narrow process (Fig. 13); paramere of aedeagus extremely narrow, dagger-like (Figs. 14, 15). Length 16.0–18.0 mm. *O. densissimus* (Bernhauer, 1933)
- Abdominal tergite 2 (anterior to first visible tergite) with apical third to half punctate and pubescent; tergite 7 (fifth visible) without pale apical seam of palisade setae. Apical portion of median lobe of aedeagus of different shape (Fig. 7); paramere not dagger-like (Figs. 8, 9). Length 17.0–19.0 mm. *O. lewisius* Sharp, 1874

Descriptions of species

Ocypus (*Pseudocypus*) *lewisius* Sharp, 1874

(Figs. 1, 5–10)

lewisius Sharp, 1874: 33 (*Ocypus*); BERNHAUER & SCHUBERT (1914: 387) (*Staphylinus*; subg. *Ocypus*); SCHEERPELTZ (1933: 1395) (*Staphylinus*); NAKANE (1963: 93) (*Ocypus*); HAYASHI (1993: 298) (*Ocypus*); LI (1993: 38) (*Ocypus*); SMETANA & DAVIES (2000: 34, 44) (*Ocypus*; subg. *Pseudocypus*); HERMAN (2001: 3385) (*Ocypus*); SMETANA (2004: 677) (*Ocypus*; subg. *Pseudocypus*).

kobensis Cameron, 1930: 207 (*Ocypus*); CAMERON (1949: 469) (*Ocypus*); SCHEERPELTZ (1933: 1395) (*Staphylinus*); SMETANA & DAVIES (2000: 34, 44) (*Ocypus*; subg. *Pseudocypus*; synonym of *lewisius*); HERMAN (2001: 3386) (*Ocypus*; synonym of *lewisius*); SMETANA (2004: 677) (*Ocypus*; subg. *Pseudocypus*; synonym of *lewisius*).

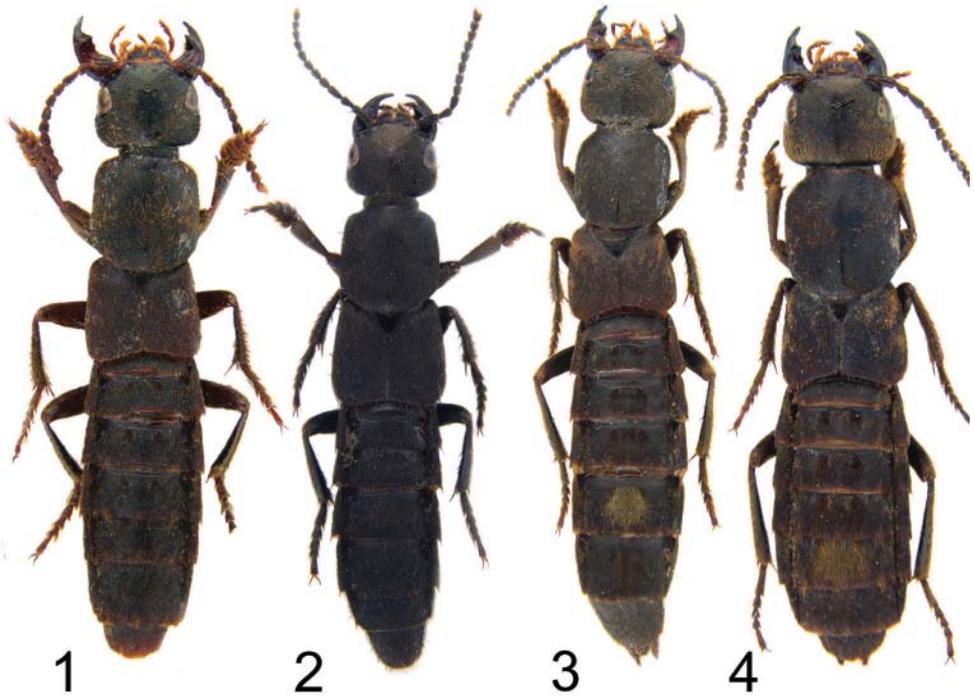
Type locality. Japan, Yokohama.

Type material. The original series of *Ocypus lewisius* was studied and described by SMETANA & DAVIES (2000: 34), who designated the lectotype.

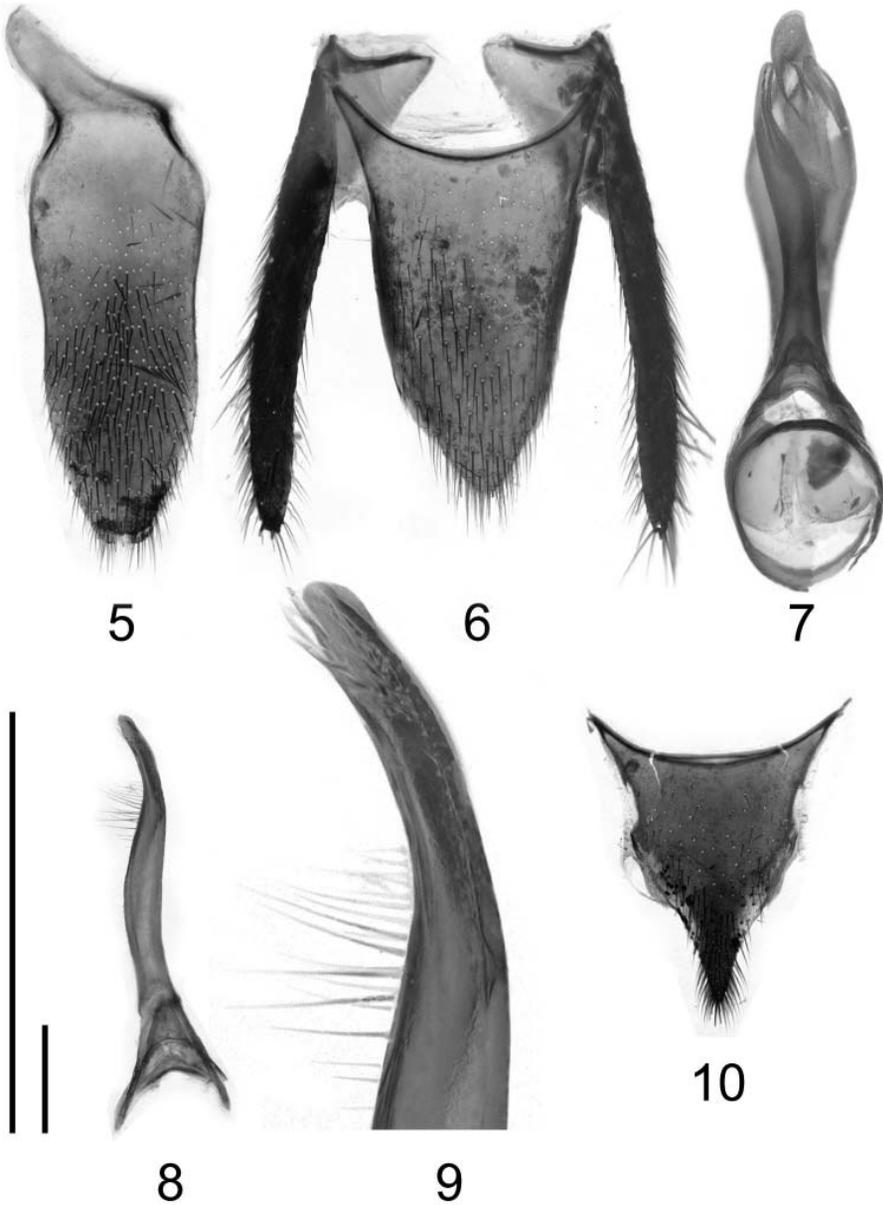
Additional Chinese material examined. CHINA: HUBEI: E-Hubei, Dabie Shan, Wujiashan, 31.1N 115.8E, 4.–22.v. 2005, leg. J. Turna, 2 ♂♂ (ASC, NMW); central Hubei, Dahongshan, 31.5N 113.0E, 1.–31.v. 2005, Jaroslav Turna leg., 1 ♂ (NMW). LIAONING: ‘Chikuanshan S. Mandschur. [= Zi Yang Guan]’, 1 ♂ (FMNH). ZHEJIANG: ‘Da-laen-saen. Nr. Nong-po. Walker Coll. 93.-18 [= very likely Dalei Shan near (45km SW) Ningbo]’, 1 ♂ (ASC).

Diagnosis. A large species with very densely punctate head and pronotum, with pronotum lacking entire impunctate midline, with tergite 2 (anterior to first visible tergite) with apical third to half punctate and pubescent, with abdominal tergites 6 and 7 (fourth and fifth visible) without a patch of yellowish tomentose pubescence, with abdominal tergite 7 (fifth visible) without pale seam of palisade setae, and with characteristically shaped aedeagus.

Redescription. Black, moderately shiny; pubescence of dorsal side of body brownish-piceous on abdomen with intermixed paler hairs; maxillary and labial palpi testaceobrunneous to dark brunneous, antennae piceous to brunneous, becoming more or less paler toward apex;



Figs. 1–4. Habitus. 1 – *Ocypus lewisius* Sharp, 1874; 2 – *Ocypus densissimus* (Bernhauer, 1933); 3, 4 – *Ocypus jelineki* sp. nov.



Figs. 5–10. *Ocypus lewisius* Sharp, 1874. 5 – sternite 9 of male genital segment; 6 – tergite 10 and styli of tergite 9 of male genital segment; 7 – aedeagus, ventral view; 8 – underside of paramere; 9 – apical portion of ventral side of paramere with apical setae; 10 – tergite 10 of female genital segment. Scales: 1 mm (short bar for Figure 9 only).

legs piceous with paler tarsi. Head of rounded quadrangular shape, with obtuse to rounded posterior angles, slightly dilated posteriad, markedly wider than long (ratio 1.28), eyes moderately large, rather flat, tempora longer than eyes from above (ratio 1.27); dorsal surface of head finely and densely punctate, interspaces between punctures on disc distinctly narrower than diameters of punctures, punctation gradually becoming denser toward posterior and lateral margins, less dense toward and on clypeus, interspaces between punctures without microsculpture; impunctate midline absent, V-shaped front portion of epicranial suture present in most specimens; dorsal side of neck with punctation finer and denser than that on head. Antenna moderately long, segment 3 longer than segment 2 (ratio 1.28), segments 4 to 8 longer than wide, becoming gradually shorter, segments 9 and 10 about as long as wide, last segment short, considerably shorter than two preceding segments combined. Pronotum about as wide as long, subparallelsided, moderately convex, narrow marginal groove disappearing downwards just in front of middle of pronotal length; impunctate narrow midline slightly indicated just in front of posterior margin of pronotum, punctation on disc fine and very dense, appreciably finer and denser than that on disc of head. Pronotal hypomerion without microsetae. Scutellum densely punctate, with black tomentose pubescence. Elytra moderately long, parallelsided to vaguely dilated posteriad, at suture distinctly shorter (ratio 0.78), at sides somewhat shorter than pronotum at midline (ratio 0.89); punctation very fine and very dense, granulose. Wings each folded once under elytron, probably non-functional (see Bionomics and Comments). Abdomen with fifth visible tergite lacking pale apical seam of palisade setae; tergite 2 (anterior to first visible tergite) with apical third to half punctate and pubescent; all tergites evenly, densely and very finely punctate; interspaces with very fine and dense, transversely meshed microsculpture.

Male. Sternite 8 with deep triangular medioapical emargination. Genital segment with sternite 9 long, with rather short basal portion, apical portion largely subparallelsided with subtruncate apex (Fig. 5). Tergite 10 relatively large and long, with subacute apex (Fig. 6). Aedoeagus (Figs. 7–9) of quite characteristic shape, with both median lobe and paramere highly asymmetrical, apical portion of paramere in ventral view markedly twisted mediad; underside of paramere lacking sensory peg setae, apical setae situated in unusual way, as in Fig. 9.

Female. Tergite 10 of genital segment of characteristic shape, with differentiated apical portion narrowed into sharp apex (Fig. 10).

Length 17.0–19.0 mm.

Bionomics. No details are known about the habitat requirements of this species. Several specimens collected in Japan (Ibaraki, Tsukuba) by M. J. Sharkey were taken from a flight intercept trap, set in a park-like environment. The Japanese specimens from Tsukuba, bearing the label ‘flight trap’ or ‘FIT’, very likely crawled in the plastic containers at the bottom of the flight intercept trap. The specimens from Hubei were taken from pitfall traps, but nothing is known about the habitat the traps were set in. I believe that *Ocypus lewisius* is a flightless species.

Geographical distribution. *Ocypus lewisius* is at present known from Japan (Honshu, Shikoku) and from the provinces of Hubei, Liaoning and Zhenjiang in the mainland China.

Recognition and comments. *Ocypus lewisius* may only be confused with *O. densissimus*, but the shape of the aedeagus distinguishes these two species instantly. In addition, *Ocypus densissimus* differs by the dark color of the appendages, longer elytra and by the presence of the pale apical seam of palisade setae on fifth visible abdominal tergite (see the description for details).

Ocypus (*Pseudocypus*) *densissimus* (Bernhauer, 1933)

(Figs. 2, 11–16)

densissimus Bernhauer, 1933: 35 (*Staphylinus*; subg. *Pseudocypus*); SMETANA & DAVIES (2000: 43) (*Ocypus*; subg. *Pseudocypus*); HERMAN (2001: 3373) (*Ocypus*; subg. *Pseudocypus*); SMETANA (2004: 677) (*Ocypus*; subg. *Pseudocypus*).

Type locality. People's Republic of China, 'Kiang-Si T'en-gan' (= Jiangxi: De'an).

Type material. HOLOTYPE: ♀, 'Kiang-Si T'en-gan' / '320' / 'densissimus Brnh. Typ. Unic. [white]' / 'densissimus Pseudocypus Brnh. Typus unic.' / 'Chicago NMus M. Bernhauer Collection' (FMNH).

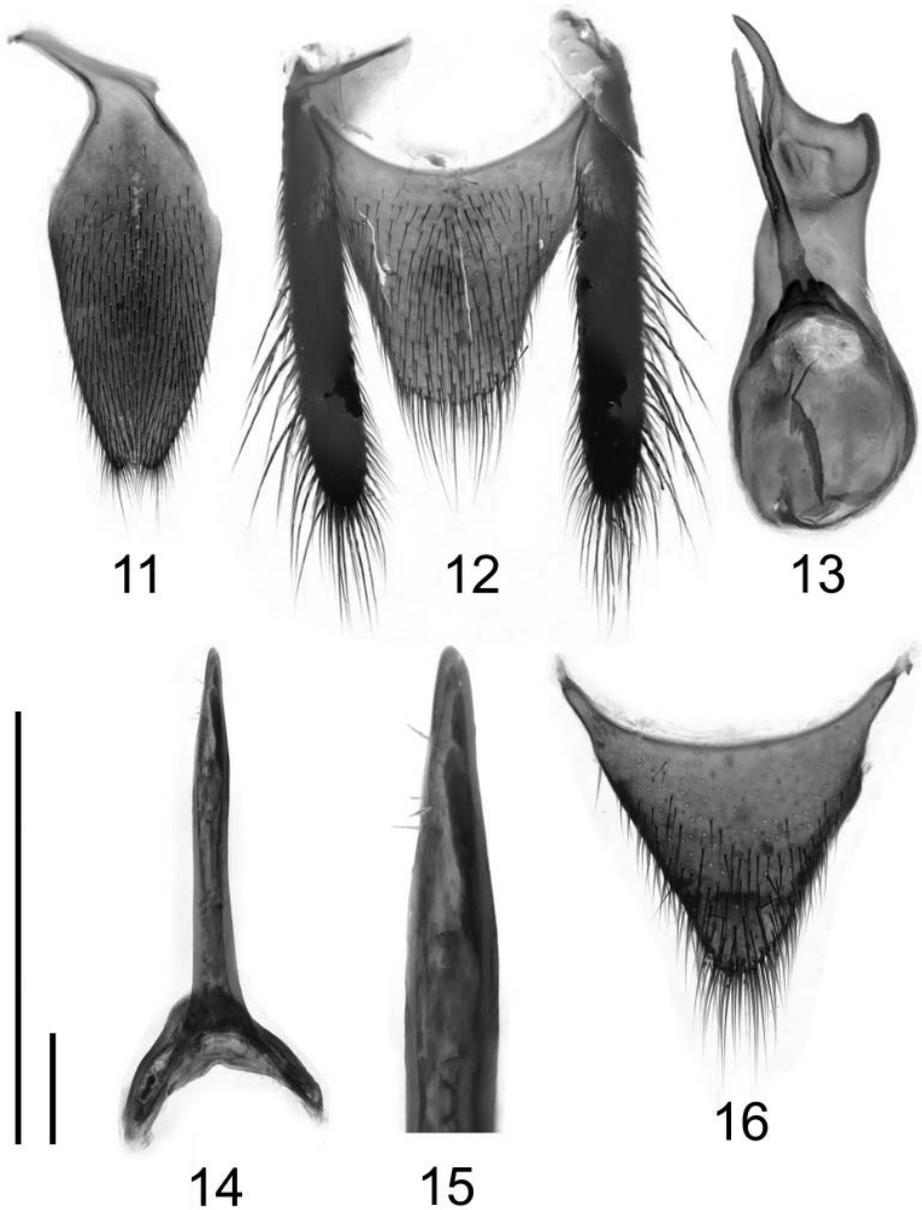
The holotype is in poor condition, both antennae are entirely missing, right tibia and tarsus, and left hind tarsus are also missing.

Additional material examined: CHINA: SICHUAN: 'W Szechuan, China Senkiangkou leg. Friedrich' / 'Wolung 2000 m Wassuland 7.-10. 1934', 6 ♂♂, 4 ♀♀ (ASC, NMW); 'W Szechuan, China Senkiangkou leg. Friedrich' / 'Lungai 2000 m Wassuland 7.-10. 1934', 1 ♂ (NMW); 'Nitou Tatsienlu Szechuan China Em. Reitter [= Kangding]', 1 ♂ (FMNH); 'W-Sichuan Aba Tibetan Aut. Pref., Weizhou Co., Qionglai Shan Wolong valley, 20km W Guanxian, 1110 m, 31.04.55N 103.26.38E, 14.VII.1999, leg. A. Pütz', 1 ♂ (APC).

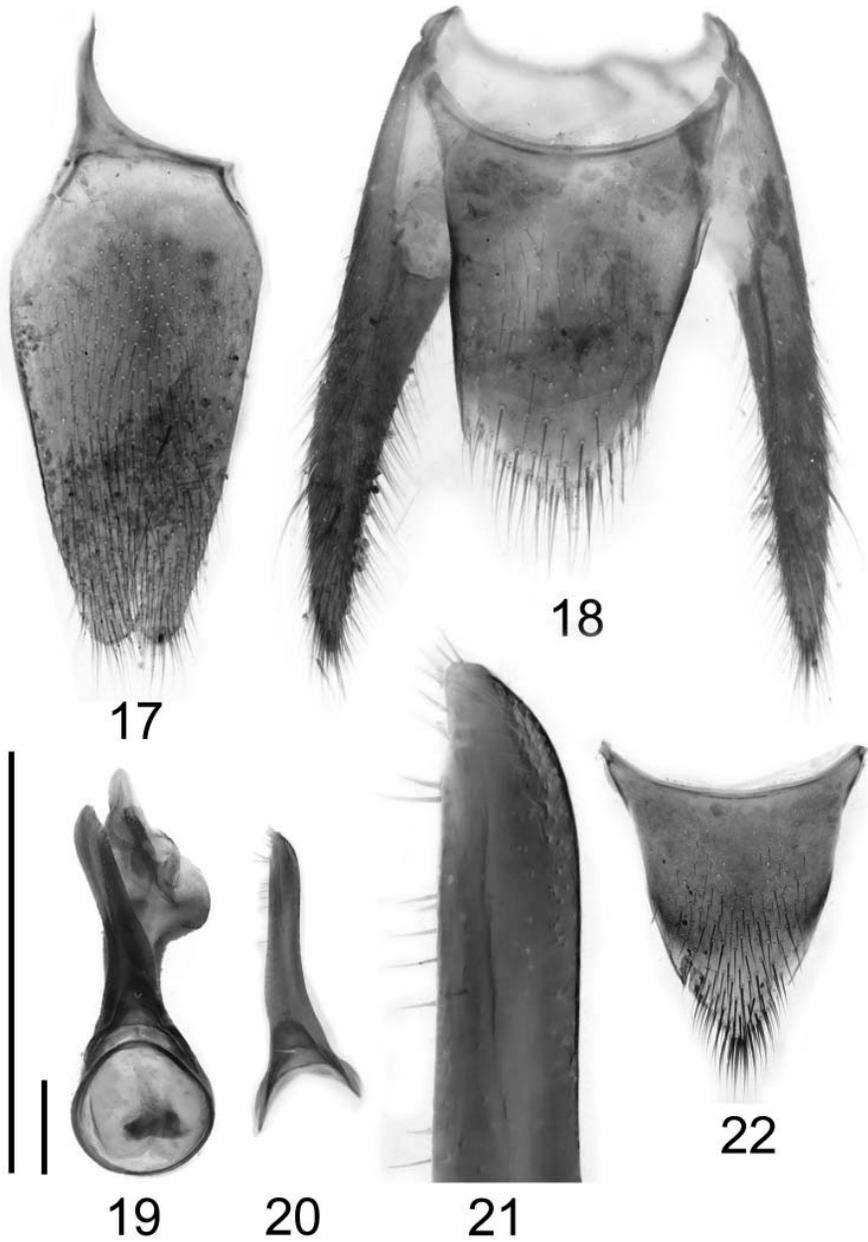
Diagnosis. A large species with very densely punctate head and pronotum, with pronotum lacking entire impunctate midline, with tergite 2 (anterior to first visible tergite) punctate and pubescent only along apical margin; with abdominal tergites 6 and 7 (fourth and fifth visible) without a patch of yellowish tomentose pubescence, with abdominal tergite 7 (fifth visible) with pale seam of palisade setae, and with characteristically shaped aedeagus.

Redescription. In all character states similar to *O. lewisius*, but different by a few external characters, and by entirely different aedeagus. Coloration of appendages darker, maxillary and labial palpi piceous with apices of last segments of both paler, antennae and legs black, front tarsi of latter indistinctly paler; head smaller, narrower (ratio width/length 1.20) and more rounded, V-shaped front portion of epicranial suture not apparent; elytra longer, at suture somewhat shorter (ratio 0.85), at sides about as long as pronotum at midline; abdominal tergite 2 (anterior to first visible tergite) punctate and pubescent only along apical margin, tergite 7 (fifth visible) with pale apical seam of palisade setae.

Male. Medioapical emargination of abdominal sternite 8 markedly narrower and less deep than that of *O. lewisius*. Genital segment with sternite 9 smaller, with apical portion rather oval in shape and with apex minutely emarginate (Fig. 11). Tergite 10 markedly shorter, with widely arcuate apex (Fig. 12). Aedeagus (Figs. 13–15) of quite characteristic shape, with median lobe in ventral view highly asymmetrical, apex of median lobe on side close to paramere extended into slightly curved, slender process; paramere situated on median lobe markedly asymmetrically, quite narrow and elongate, dagger-like, with apex distinctly not reaching apex of slender process of median lobe; underside of paramere without sensory peg setae, with apical setae extremely small, minute, situated as in Fig. 15.



Figs. 11–16. *Ocypus densissimus* (Bernhauer, 1933). 11 – sternite 9 of male genital segment; 12 – tergite 10 and styli of tergite 9 of male genital segment; 13 – aedoeagus, ventral view; 14 – underside of paramere; 15 – apical portion of ventral side of paramere with apical setae; 16 – tergite 10 of female genital segment. Scales: 1 mm (short bar for Figure 15 only).



Figs. 17–22 *Ocypus jelineki* sp. nov. 17 – sternite 9 of male genital segment; 18 – tergite 10 and styli of tergite 9 of male genital segment; 19 – aedeagus, ventral view; 20 – underside of paramere; 21 – apical portion of ventral side of paramere with apical setae; 22 – tergite 10 of female genital segment. Scales: 1 mm (short bar for Figure 21 only).

Female. Tergite 10 of female genital segment wide, markedly, evenly narrowed toward narrowly arcuate apex (Fig. 16).

Length 16.0–18.0 mm.

Bionomics. Nothing is known about the habitat requirements of this species.

Geographical distribution. *Ocyopus densissimus* is at present known from the provinces of Jiangxi and Sichuan of the mainland China.

The type locality 'Kiang-Si: T'en-gan' (various spellings Tengan, Te-an, De'an) is today De'an (29°20'N 115°46'E) in the province of Jiangxi.

Recognition and comments. *Ocyopus densissimus* may only be confused with *O. lewisius*, but it differs by the entirely different, characteristically shaped aedeagus, as well as by a few external characters as specified in the description.

Since the female holotype of this species is in poor condition (see above) I choose not to dissect it; the description and illustration of tergite 10 of the female genital segment is therefore that of a female collected subsequently.

Ocyopus (Pseudocyopus) jelineki sp. nov.

(Figs. 3, 4, 17–22)

Type locality. People's Republic of China, West Henan, Funiu Shan, Baotianman, 33°5'N 111° 9'E.

Type material. HOLOTYPE: ♂, 'China, W Henan, 15.V.–2.VI. Funiu Shan, BAOTIANMAN pitfall traps, 33.5N 111.9E Jaroslav Turna leg. 2005' (NMW). ALLOTYPE: ♀, same label data as in holotype (ASC). PARATYPES: **CHINA:** **HENAN:** same data as holotype, 36 spec. of both sexes (ASC, NMW). **HUBEI:** 'C-HUBEI, for. Park 15km SE Yichang, 30.7N 111.4E, 11.5.–4.6.2005, leg. J. Turna', 4 ♂♂ (ASC, NMW). **SHAANXI:** 'Shaanxi (Qinling Shan) Taibashan mt. Houzhenzi, 1500-2000m 33°52'N 107°44'E', 'IV–V.2000' or 'V.–VI. 2000, Plutenko', 53 spec. of both sexes (ASC, MSC); 'Foping Nat. Res., Panda area, 1600m, 33°45'N 107°48'E, 20.4.–11.5. 1999, leg. Sinaiev & Plutenko', 2 ♂♂ (ASC, MSC); '65km S Xi'an, 2200–2500m, 2.–10.VIII. 1998, P. F. Cavazzuti', 1 ♂ (ASC); 'near the headwaters (or defile) of Riv. Feng-He, SW of Chang'an Xian, 1900m, 9.V.1993, Y. Imura leg.', 6 ♂♂ (ASC, YSC); 'near the headwaters of Riv. Laoyu-He, SW of Hu Xian, 2000m, 11.V.1993, Y. Imura leg.', 3 ♂♂ (ASC, YSC); 'Defile of Riv. Layou-He, SW of Hu-Xian, 1300-1500m, 11. May 1993, Y. Imura leg.', 1 ♂ (YSC).

Diagnosis. A moderately sized to large species with very densely punctate head and pronotum, with pronotum lacking entire impunctate midline, with tergite 2 (anterior to first visible tergite) entirely punctate and pubescent, with abdominal tergites 6 and 7 (fourth and fifth visible) almost always with a patch of yellowish tomentose pubescence, with abdominal tergite 7 (fifth visible) without pale seam of palisade setae, and with characteristically shaped aedeagus.

Description. Black, moderately shiny; elytra usually more or less paler, dark brownish to piceous brown; maxillary and labial palpi testaceobrunneous to brunneous, antennae piceous; legs piceous with slightly paler front tarsi; pubescence of dorsal side of body dark brown to brownish-piceous, with intermixed paler hairs on humeral area of each elytron and on abdomen, and with yellowish hairs on temporal area of head in some specimens (see Comments), visible tergites 1 to 3 in middle with a pair of small patches of black tomentose pubescence, bordered by some pale brownish hairs, visible abdominal tergites 4 and 5 each with a patch of golden-yellowish, usually not dense, tomentose pubescence, patch on fifth visible tergite usually smaller and entirely missing in some specimens, rarely both patches

of golden-yellowish tomentose pubescence absent. Head of rounded quadrangular shape, with obtuse to rounded posterior angles, usually vaguely dilated posteriad, wider than long (ratio 1.22), eyes moderately large, rather flat, tempora longer than eyes from above (ratio 1.80); dorsal surface of head finely and densely punctate, interspaces between punctures on disc distinctly narrower than diameters of punctures, punctuation gradually becoming denser toward posterior and lateral margins, less dense toward and on clypeus, interspaces between punctures without microsculpture; impunctate midline absent, V-shaped front portion of epicranial suture present in most specimens; dorsal side of neck with punctuation finer and denser than that on head. Antenna moderately long, segment 3 longer than segment 2 (ratio 1.25), segments 4 to 8 slightly longer than wide, becoming gradually shorter, segments 9 and 10 about as long as wide, last segment short, considerably shorter than two preceding segments combined. Pronotum slightly longer than wide, subparallelsided or slightly narrowed posteriad, moderately convex, narrow marginal groove disappearing downwards just in front of middle of pronotal length; impunctate narrow midline usually apparent on posterior third of pronotal length, or only in front of posterior margin of pronotum; punctuation on disc fine and very dense, appreciably finer and denser than that on disc of head. Pronotal hypomeron without microsetae. Scutellum densely punctate and dark brownish pubescent, with patch of black tomentose pubescence at apex. Elytra rather short, parallelsided to vaguely dilated posteriad, at suture distinctly shorter (ratio 0.68), at sides somewhat shorter than pronotum at midline (ratio 0.82); punctuation very fine and very dense, granulose. Wings each reduced to short, nonfunctional stump. Abdomen with fifth visible tergite lacking pale apical seam of palisade setae; tergite 2 (anterior to first visible tergite) entirely punctate and pubescent; all tergites evenly, densely and very finely punctate; interspaces with very fine, dense, transversely meshed microsculpture.

Male. Sternite 8 with moderately wide and deep triangular medioapical emargination. Genital segment with sternite 9 with very narrow basal portion, apical portion gradually narrowed toward minutely emarginate apex (Fig. 17). Tergite 10 moderately wide, with narrowly arcuate apex (Fig. 18). Aedeagus (Figs. 19–21) of quite characteristic shape; median lobe in ventral view highly asymmetrical, with right portion conspicuously dilated and extended at side close to paramere into short, narrow apical portion with narrowly arcuate apex; apical half of paramere in ventral view markedly turned and twisted laterad, with subtruncate apex; underside of paramere lacking sensory peg setae, apical setae minute, situated as in Fig. 21.

Female. Tergite 10 of genital segment relatively narrow, apical portion gradually, evenly narrowed toward acute apex (Fig. 22).

Length 17.0–19.0 mm.

Etymology. The species is named in honor of the outstanding coleopterist and my dear friend, Dr. Josef Jelinek, Praha, in fond memories of several joint collecting trips, particularly the one undertaken in 1964 to southern Hungary together with Dr. Ivan Löbl, Genève, Switzerland, a trip that was outstanding and memorable in many aspects.

Bionomics. Very little is known about the habitat requirements of this species. Most specimens were taken from pitfall traps, but nothing is known about the habitats the traps were set in, except that most were operating at elevations between 1300–2000 m. A few specimens (from Hubei) bear the habitat note 'for. park' (assuming that it means forest park).

Geographical distribution. *Ocypus jelineki* sp. nov. is at present known from Henan, Hubei and Shaanxi.

Recognition and comments. *Ocypus jelineki* sp. nov. may be distinguished from the two remaining species of the *lewisius*-lineage instantly by the entirely punctate and pubescent abdominal tergite 2, and by the characteristic shape of the aedoeagus. The pubescence of the abdominal tergites shows some variability, the patches of black tomentose pubescence on visible tergites 1 to 3 vary in size and are absent in some specimens and so does also the number of pale brownish hairs surrounding them; the number of intermixed paler hairs in general abdominal pubescence varies to such extent that the paler hairs may be dominant in some specimens that at the same time often lack one or both patches of golden-yellowish tomentose pubescence on visible tergites 4 and 5, and bear pale, yellowish hairs on temporal area of the head (specimens from Shaanxi). Due to the character of the pubescence, the specimens of the Shaanxi population seem to be specifically different. However, both the male and female sexual characters are identical to those of the specimens from Henan and Hubei; the Shaanxi specimens are therefore not considered to represent a different taxon.

Acknowledgments

I thank all colleagues, who supported my work by kindly putting the material in their care at my disposition. Their names are included under 'Type material' or 'Additional material examined'. The specimens of the original series of *Staphylinus lewisius* Sharp, and of the holotype of *Staphylinus densissimus* Bernhauer were studied during my stay at The Natural History Museum, London, and at the Field Museum of Natural History, Chicago, respectively. I thank the staff members of these two institutions for their support during my stay there.

I thank Eduard Jendek, Ottawa, for producing the color habitus and additional photographs of body parts.

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classes Crustacea, Myriapoda, spiders, mites and insects, from their affinities and structure, according to the views of Dr. Leach. Also an explanation of the terms used in entomology; a calendar of the times of appearance and usual situations of 3,000 species of British Insects; with instructions for collecting and fitting up objects for the microscope. Longman, Hurst, Rees, Orme, Brown & Green, London, 496 pp.

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