

**A contribution to the knowledge of the *Colenisia* Fauvel, 1902 species
(Coleoptera: Leiodidae: Leiodinae) from continental China, Taiwan and Thailand**

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Taxonomy, new species, descriptions, faunistics, Coleoptera, Leiodidae, Leiodinae, *Colenisia*, China, Taiwan, Thailand

Abstract. *Colenisia fragilis*, *C. insolita*, *C. yunnanica*, *C. seriepunctata*, *C. gracilis*, *C. dilatata*, *C. fortipes*, *C. cooteri*, *C. jelineki* spp. nov. from continental China, *C. stanislavi* sp. nov. from Taiwan and *C. neglecta* sp. nov. from Thailand are described and distinguished from similar species. All the Chinese species are keyed. *C. miyatakei* (Hisamatsu, 1957) is recorded from Thailand and China (Yunnan, Gansu) and *C. schuelkei* Švec, 2012 from China (Jianxi) for the first time. Notes on variability and/or faunistic records on *C. johanni* Daffner, 1988, further on *C. ovalis* Daffner, 1988, *C. luteicornis* (Hlisnikovský, 1972) and *C. pygmaea* (Portevin, 1905) are presented.

INTRODUCTION

The tribe Pseudoliadini Portevin, 1929 belonging to the subfamily Leiodinae comprises 11 genera including the genus *Colenisia* Fauvel, 1902 currently with 51 species (Daffner 1986, 1987, 1988, 1989, 1991, Angelini & Švec 1994, 1998, Hoshina 1999, Leschen 2000, Perkovsky 2000, Cooter & Švec 2002, Švec 1997, 2011). The *Colenisia* fauna from Taiwan comprising eight species described or recorded up to now (Daffner 1988) seems to be more fully studied than that of continental China which has only four species described or recorded until now (Angelini & Švec 1994, Hoshina 1999, Švec 2011).

In the material available for the present study, there were identified 17 species, including the 11 species new to science described here. One species has been identified with reservation. In addition, the material contained another species, predominantly represented by females - three species from Taiwan and 11 species from continental China that were not identified. Some of these are doubtless also new to science. They were not described as new species due to their sex and/or the shortage of the material.

MATERIAL AND METHODS

Thanks to the courtesy of my entomological friends and colleagues who collected or provided me with interesting material from Thailand, Taiwan and continental China I had the opportunity to study altogether 142 specimens of the genus *Colenisia*. The material is preserved in the following collections.

Abbreviations of the collections:

JCHC private collection of Jonathan Cooter, Hereford, England;
MSBC private collection of Michael Schülke, Berlin, Germany;

NHMG Natural History museum of Geneva, Switzerland;
 NKME Naturkunde Museum, Erfurt, Germany;
 SMZD State Museum of Zoology, Dresden, Germany;
 ZSPC private collection of Zdeněk Švec, Praha, Czech Republic.

The examined material was compared with the type and other material of the genus *Colenisia* deposited in the collections of the Oxford University Museum of Natural History, ZSPC and JCHC.

Unless otherwise stated, the descriptions of the new species are based on the holotypes only. The measurements of the total body length were taken from all the specimens examined. Specific measurements of the individual body parts were taken from the holotypes only. They were measured to the first decimal place of millimetre except of the distance of strigosities on elytra or even on pronotum. The ratio of width of eye to width of frons was measured in dorsal view at the mid-length of both the eye. The description of the variability is based on the paratype specimens or other material.

The dissected male and female genitalia were mounted in gum Arabic on the same plate or on a transparent plate added to the same pin as the relevant specimen.

Each type specimen is indicated by a red label bearing the status of the specimen (holotypus or paratypus, respectively) name of the new species and name of the author and the year of the designation added to the same pin as the type. The collecting data of the type material are presented in quotation marks; the individual lines from the original locality labels are separated by a slash; the individual labels are separated by double slash in this work.

DESCRIPTIONS, NOTES ON VARIABILITY AND FAUNISTIC RECORDS

Key to the identification of the Chinese species of the genus *Colenisia* Fauvel, 1902 (the newly described species from Thailand is included in brackets)

| | | |
|------|---|-------|
| 1 | Dorsal surface without transverse strigosity with exception of clypeus. | 2 |
| - | At least elytra partly or entirely transversely strigose. | 5 |
| 2(1) | Lateral margins of elytra widened, visible simultaneously in dorsal view. | 3 |
| - | Lateral margins with unobtrusive narrow channel, not visible simultaneously in dorsal view. | 4 |
| 3(2) | Elytral striae sparsely punctured but easily detectable also on disc of elytra. Dorsum black. Aedeagus as in Fig. 3, spermatheca as in Fig. 12. Length 1.6-1.7 mm. China (Yunnan). .... | ..... |
| | <i>Colenisia seriepunctata</i> sp. nov. | |
| - | Dorsal puncturation of elytra unobtrusive, traces of punctured elytral rows hardly visible on disc, more visible along suture. Brown-black. Aedeagus as in Fig. 1, spermatheca as in Fig. 10. Length 1.1-1.4 mm. China (Yunnan). .... | ..... |
| | <i>Colenisia fragilis</i> sp. nov. | |
| 4(2) | Median lobe of aedeagus roundly tapered to narrowly rounded tip (Fig. 2). Basal part of spermatheca large, globose distinctly separated from proximal part (Fig. 11). Dorsum black. Length 1.1 mm. China (Yunnan). .. | ..... |
| | <i>Colenisia insolita</i> sp. nov. | |
| - | Median lobe of aedeagus angulate before tip (Fig. 4 in Daffner 1988). Basal part of spermatheca small, poorly separated from proximal part (Fig. 6 in Daffner 1988). Dorsum brown-black. Length 1.3 mm. Taiwan. .... | ..... |
| | <i>C. glabella</i> . Daffner, 1988 | |
| 5(1) | Elytra partly transversely strigose. Dorsum black or brown-black. | 6 |
| - | Dorsum including elytra entirely transversely strigose. Dorsum yellow-red to chestnut with exception of one dark brown species (<i>C. gracilis</i> sp. n.). | 8 |
| 6(5) | Transverse strigosities distinct only at apex of elytra. Basal part of spermatheca globose or oblong oval. Parameres as long as median lobe of aedeagus or shorter. | 7 |

| | | |
|--------|---|-------|
| - | Transverse strigosities developed on apical two-thirds of elytra. Spermatheca ring-shaped (Fig. 13). Parameres longer than median lobe of aedeagus (Fig. 4). Length 1.0-1.1 mm. China (Yunnan). .... | ..... |
| | <i>Colenisia yunnanica</i> sp. nov. | |
| 7(6) | Parameres of aedeagus distinctly shorter than median lobe (Fig. 1 in Daffner 1988). Basal part of spermatheca oblong oval (Fig. 3 in Daffner, 1988). Length 0.9 mm. Taiwan, Vietnam. .... | ..... |
| | <i>Colenisia topali</i> Daffner, 1988 | |
| - | Parameres approximately as long as median lobe (Fig. 4 in Daffner 1988). Basal part of spermatheca globose (Fig. 6 in Daffner 1988). Length 0.9-1.0 mm. Taiwan, India, Vietnam. .... | ..... |
| | <i>C. pygmaea</i> (Portevin, 1905) | |
| 8(5) | Elytra with detectable rows of punctures. Also punctures of intervals tend to seriate. Pronotal base straight also near pronotal hind angles. Elytral strigosities sparse, separated by about 0.03 mm. | 9 |
| - | Elytral punctures inordinate, in case elytral punctures tends to become seriate in some places forming feebly expressed, unobtrusive irregular rows pronotal base emarginated before hind angles. | 10 |
| 9(8) | Antennal club dark. Elytral row punctures strong, dense, separated by about 1-2 times their diameter. Intervals with dense punctures a little smaller than those in rows. Spermatheca with distal part simply bent as in Fig. 91 in Angelini & Švec (1994). Length 1.9 mm. China (Yunnan). .... | ..... |
| | <i>Colenisia similata</i> Angelini & Švec, 1994 | |
| - | Antennae entirely light. Elytral row punctures small, separated by about 2-3 times their diameter. Intervals with very sparse punctures much smaller than those in rows. Spermatheca with ring-shaped distal part (Fig. 21). Aedeagus as in Fig. 22. Length 1.5-1.6 mm. Thailand. .... | ..... |
| | (<i>Colenisia neglecta</i> sp. nov.) | |
| 10(8) | Parameres of aedeagus much more shorter than median lobe, basal part of spermatheca globose; with diameter larger than length of short stout rectangularly bent distal part of spermatheca or spermatheca J-shaped with vaguely differentiated basal and distal parts. | 11 |
| - | Parameres of aedeagus longer or as long as or at most a little shorter than median lobe of aedeagus. Spermatheca with globose basal part, its diameter much smaller than long, slender, simply bent or twisted distal part. | 15 |
| 11(10) | Base of pronotum straight, posterior angles rectangular in dorsal view. | 12 |
| - | Base of pronotum tapered toward obtuse posterior angles in dorsal view. | 14 |
| 12(11) | Antennal club noticeably darker than rest of antennae. Median lobe of aedeagus broadly rounded on its tip or angulate before shortly rounded tip. | 13 |
| - | Antennae unicolorous. Apex of median lobe very abruptly rounded (aedeagus as in Figs 17, 18, spermatheca as in Fig. 19 in Daffner 1988). Length 1.7-1.8. Taiwan. .... | ..... |
| | <i>Colenisia rotunda</i> Daffner, 1988 | |
| 13(12) | Size larger, 1.5-1.9 mm. Median lobe of aedeagus feebly concave before broadly rounded apex (Fig. 42 in Švec 2011). Spermatheca elongate, its basal part poorly differentiated from distal part (Fig. 45 in Švec 2011). China (Zhejiang). .... | ..... |
| | <i>Colenisia castanea</i> Švec, 2011 | |
| - | Size smaller, 1.1-1.5 mm. Median lobe of aedeagus angulate before top (aedeagus as in Figs 20, 21 in Daffner 1988); spermatheca with distinct globose basal part (Fig. 22 in Daffner 1988). Taiwan. .... | ..... |
| | <i>Colenisia johanni</i> Daffner, 1988 | |
| 14(11) | Elytral strigosity very dense, separated approximately by about 0.01 mm or less. Median lobe very broadly rounded (Fig. 41 in Švec 2011). Length 1.6-1.9 mm. China (Yunnan). .... | ..... |
| | <i>Colenisia schuelkei</i> Švec, 2011 | |
| - | Elytral strigosity sparse, separated by about 0.02 mm. Median lobe slim, very shortly rounded, almost pointed on its tip. Aedeagus as in Fig. 5, spermatheca as in Fig. 14. China (Yunnan). .... | ..... |
| | <i>Colenisia gracilis</i> sp. nov. | |
| 15(10) | Sutural striae developed on elytra. | 16 |
| - | Sutural striae not developed. | 21 |
| 16(15) | Antennae unicoloured, yellow. Size smaller 1.4-1.6 mm. Aedeagus as in Figs 29, 30 in Daffner (1988); spermatheca as in Fig. 31 in Daffner, 1988. Japan, Taiwan, Vietnam, Thailand, China (Yunnan, Gansu). .... | ..... |
| | <i>Colenisia miyatakei</i> (Hisamatsu, 1957) | |
| - | Antennal club dark or at least a little darkened. Size on average larger, 1.6-2.2 mm. | 17 |
| 17(16) | Puncturation of elytra tending to become seriate in some places. All tarsi stout, conically tapered distally in male. | 18 |
| - | Elytra irregularly punctured. Only some tarsomeres of anterior or at most mid-tarsi thickened in male. | 20 |
| 18(17) | Elytral puncturation sparse, by about 5-6 times their diameter on elytra, punctures separated by about 10 or more times of their diameter on head and pronotum. Dorsum yellow-red. Parameres of aedeagus slender (Fig. 7), spermatheca as in Fig. 16. Length 1.8-2.1 mm. China (Yunnan). .... | ..... |
| | <i>Colenisia fortipes</i> sp. nov. | |
| - | Elytral puncturation dense, punctures separated by about 1-3 times their diameter. | 19 |

- 19(18) Elytral strigosity sparse, separated by about 0.02-0.03 mm, elytral punctures strong. Parameres dilated apically. Aedeagus as in Fig. 6, spermatheca as in Fig. 15. Length 1.6-2.0 mm. China (Yunnan). *Colenisia dilatata* sp. nov.
 - Elytral strigosity denser, separated by about 0.01 mm, elytral punctures finer. Parameres slim all along its length. Aedeagus as in Fig. 19, spermatheca as in Fig. 20. Length 1.7-2.1 mm. China (Yunnan)..... *Colenisia jelineki* sp. nov.
 20(17) Size larger, 1.7-2.2 mm. Eyes smaller, ratio of frontal width:eye width approximately 11.5. Median lobe of aedeagus constricted laterally before abruptly rounded apex. Aedeagus as in Fig. 8. Spermatheca with simply bent distal part (Fig. 17). China (Hubei, Beijing distr.) *Colenisia cooteri* sp. nov.
 - Size smaller, 1.6 mm, Eyes larger; ratio of frontal width:eye width approximately 7. Median lobe of aedeagus evenly roundly tapered toward apex. Aedeagus as in Fig. 22 in Hoshina 1999. Spermatheca with twisted distal part (as in Fig. 11 in Daffner 1988). Japan. *Colenisia pecki* Daffner, 1988
 20(15) Body broadly rounded (Fig. 31). Pronotal base straight; posterior angles of pronotum acute in dorsal view. Parameres of aedeagus much longer than median lobe. Aedeagus as in Fig. 9, spermatheca (Fig. 18) with globose basal part. Length 1.0-1.2 mm. Taiwan. *Colenisia stanislavi* sp. nov.
 - Body oblong oval. Pronotal base obliquely tapered to rectangular posterior angles. Parameres of aedeagus approximately as long as median lobe. Aedeagus as in Figs 26, 27 in Daffner, 1988. Spermatheca C-shaped without globose basal part (Fig. 28 in Daffner, 1988). Length 1-3-1.4 mm. Taiwan. *Colenisia ovalis* Daffner, 1988.

DESCRIPTIONS

Colenisia fragilis sp. nov. (Figs 1, 10, 23)

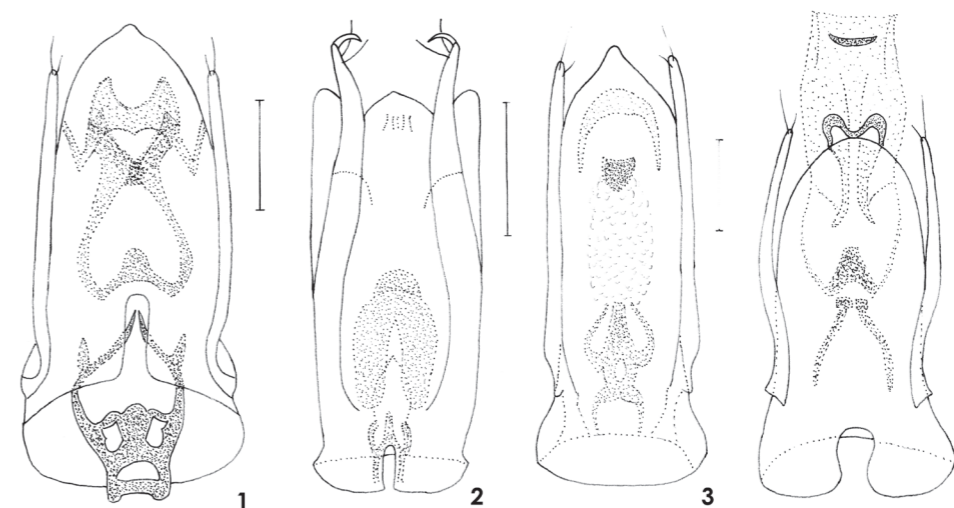
Type material. Holotype (♂): "CHINA: Yunnan, Lincang Pref./ Laobie Shan, Wei Bo Shan pass/ 24°08'16"N 99°42'53"E, 2375 m/ creek valley, devastated second./ decid. forest, litter&moss sifted/ 8.ix.2009, leg. M. Schülke [CH09-35]", (MSBC). Paratypes (5 ♂♂, 3 ♀♀, 6 specimens sex indet.): the same locality data (MSBC, ZSPC); (1 ♂, 4 ♀♀, 5 specimens, sex indet.): "CHINA: Yunnan, Lincang Pref., Xue/ Shan, 11 km ENE Lincang, 2510 m/ 23°55'01"N 100°11'17.5" E, second./ pine forest with Rhodod., small cleft with/ water, litter & mushrooms sifted/ 10.ix.2009, leg. M. Schülke [CH09-39]" (MSBC, ZSPC); (1 ♀): "CHINA: Yunnan [CH07-30], Nujiang/ Lisu Aut. Pref., Nu Shan, 7 km NNW/ Coajian 25°43'29"N 99°07'57"E, 2420/ m, second. pine forest with shrubs, litter/ bark sifted, 11.vi.2007, M. Schülke" (MSBC).

Description. Length 1.1-1.4 mm, in holotype 1.3 mm; length of body parts in holotype: head 0.1 mm, pronotum 0.4 mm, elytra 0.8 mm, antenna 0.4 mm. Maximum width of head 0.5 mm, pronotum 0.8 mm, elytra 0.8 mm.

Habitus as in Fig. 23. Dorsum slightly shining, sparsely unobtrusively pubescent with short setae, brown-black with elytral and pronotal margins lighter, legs reddish, antennomeres I-II yellow, antennomeres III-VI yellow-brown, antennal club brown-black. Ventral surface dark chestnut. Except for clypeus entire dorsum lacking strigosity.

Head. Eyes normally developed, ratio of width of front between eyes : eye = 8.0. Ratio of width of antennomeres VII-XI (antennomere VII equal 1): 1.0 - 0.8 - 1.5 - 1.8 - 1.8. Antennomere XI 1.5 times as long as antennomere X. Puncturation very fine, punctures very small, sparse, separated by 5-6 times their diameter. Clypeus very densely transversely strigose.

Pronotum. Broadest at base. Base deflected caudally in flat arc; posterior angles obtuse, closely rounded in dorsal view; obtuse very closely rounded in lateral view. Sides evenly curved from base to anterior angles in dorsal view, very flatly rounded in lateral view.



Figs 1-4: aedeagus dorsal; 1- *Colenisia fragilis* sp. nov.; 2- *C. insolita* sp. nov.; 3- *C. seriepunctata* sp. nov.; 4- *C. yunnanica* sp. nov. Scale = 0.1 mm.

Puncturation finer and sparser than that on head. Punctures very fine, small and sparsely arranged, separated by about 10 or more times their diameter.

Elytra. Puncturation similarly fine to that on head; along suture with two rows of slightly larger punctures sparsely arranged, separated by 5-6 times their diameter. Punctures distributed on rest of elytral surface smaller, sparse, tending to become seriate. Seriate punctures form hardly detectable irregular rows. Interstices with very sparse punctures similar to those in traces of discal elytral rows. Lateral channel widened all along the elytral margins except basal quarter and apical part of elytra. Widened lateral margin visible simultaneously in dorsal view. Sutural striae not developed.

Legs. Anterior tarsomeres I-III very slightly widened in male, slender in female.

Genitalia. Aedeagus as in Fig. 1, spermatheca as in Fig. 10. Distal part of the spermatheca is fragile having tendency to be broken away.

Variation. The type series grades from light chestnut coloured specimens to specimens almost black.

Differential diagnosis. *Colenisia fragilis* sp. nov. in habitus most similar to *C. seriepunctata* sp. nov. and *C. insolita* sp. nov. From *C. seriepunctata* it differs by smaller body, by elytra having small and sparse punctures tending to form hardly detectable irregular rows on disc while discal rows on elytra in *Colenisia seriepunctata* are distinct and regular consisting of larger, more densely arranged punctures. From *C. insolita* it differs by widened lateral channel of elytra simultaneously visible in dorsal view while it is very narrow and not visible in dorsal view in *C. insolita*. The new species is also similar to *C. polita* Daffner, 1991 from India and *C. glabella* Daffner, 1988 from Taiwan in the dorsal surface lacking microsculpture. From both species it differs by the shape of aedeagus and spermatheca as well. In contrast to

C. polita the median lobe of aedeagus in the lacking setae and the parameres are distinctly shorter than median lobe in the new species. The median lobe of the new species is roundly tapered proximally to small bump on its tip while the same in *C. glabella* is angulate before the tip. The shape of endophallus exhibits unique specific characters that differentiate it from similar species. The proximal part of the spermatheca is twisted or spiral-like in the new species, while the proximal part of spermatheca is simple in *C. seriepunctata*, *C. polita* and *C. glabella*.

Name derivation. The name of the new species draws attention to the fragile distal part of its spermatheca.

***Colenisia insolita* sp. nov.**
(Figs 2, 11, 24)

Type material. Holotype (♂): "CHINA: Yunnan [CH07-18]/ Baoshan Pref., mountain range/ 22 km S Tengchong, 1750 m/ 24°49'29" N, 98°29'27" E/ second. forest, litter, dead wood/ sifted, 2.vi.2007, leg A.Pütz" (SMZD). Paratypes (1 ♂, 1 ♀): the same locality data (SMZD, ZSPC).

Description. Length 1.1 mm, length of body parts in holotype: head 0.1 mm, pronotum 0.4 mm, elytra 0.6 mm, antenna 0.3 mm. Maximum width of head 0.4 mm, pronotum 0.7 mm, elytra 0.7 mm.

Habitus as in Fig. 24. Dorsum shining, sparsely unobtrusively pubescent with short setae, brown-black with pronotal base, lateral margins of pronotum and apex of elytra lighter; legs and antennomeres I-II yellow-red, antennomeres III-VI slightly infuscate, antennomeres VII-XI brown. Ventral surface dark chest-nut. Dorsum except clypeus without strigosity.

Head. Eyes rather large, ratio of width of front between eyes : eye = 6.0. Ratio of width of antennomeres VII-XI (antennomere VII equal 1): 1.0 - 0.8 - 1.3 - 1.3 - 1.5. Antennomere XI 1.8 times as long as antennomere X. Puncturation fine, punctures small, sparse, separated by 5-6 times their diameter. Clypeus very densely transversely strigose.

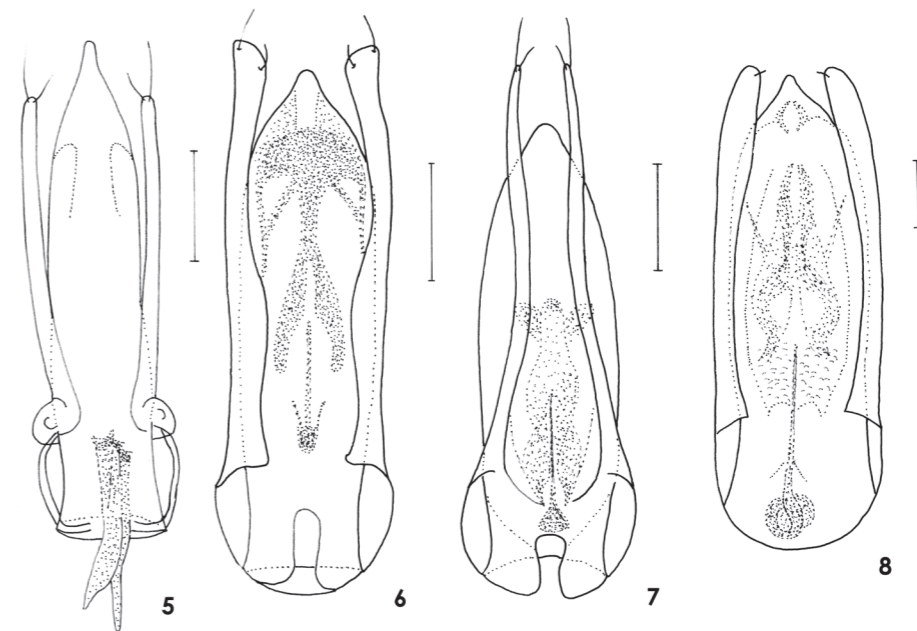
Pronotum. Base straight; posterior angles acute, very closely rounded in dorsal view; obtuse broadly rounded in lateral view. Sides evenly curved from base to anterior angles in dorsal view; straight in lateral view. Puncturation sparser than that on head; punctures separated by about 5-10 times their diameter; several larger punctures interposed.

Elytra. Punctures stronger than those on pronotum, toward base becoming smaller than those on disc. Most distinctive rows of large, sparsely arranged punctures located along the suture. Discal punctures tending to become seriate in weakly visible rows. Punctures separated by about 6 or more times their diameter. Sporadic punctures in interstices. A narrow unobtrusive channel developed in middle half of lateral margins only. Lateral margin not visible simultaneously in dorsal view. Sutural striae not developed.

Legs. Anterior tarsomeres I-III very slightly widened in male, slender in female.

Genitalia. Aedeagus as in Fig. 2, spermatheca as in Fig. 11.

Variation. The colour of the antennomeres II-VI grades from yellow to slightly infuscate in the type series.



Figs 5-8: aedeagus dorsal. 5- *Colenisia gracilis* sp. nov.; 6- *C. dilatata* sp. nov.; 7- *C. fortipes* sp. nov.; 8- *C. cooteri* sp. nov. Scale = 0.1 mm.

Differential diagnosis. *Colenisia insolita* sp. nov. is most similar in appearance to *C. fragilis* sp. nov. and *C. seriepunctata* sp. nov. From *C. seriepunctata* it differs by its distinctly smaller body, elytra having small sparse punctures tending to form poorly visible irregular rows while the elytral rows in *Colenisia seriepunctata* are distinct and regular consisting of larger rather dense arranged punctures. From *C. fragilis* it differs by having narrow unobtrusive lateral channel developed in the middle half of elytra, which is not simultaneously visible in dorsal view on both sides of elytra while the same is flatly widened and visible in dorsal view in *C. fragilis*. The new species is also similar to *C. polita* Daffner, 1991 from India and *C. glabella* Daffner, 1988 from Taiwan in having the dorsal surface lacking microsculpture. From both species it differs by the shape of aedeagus and spermatheca. In contrast to *C. polita* the median lobe of aedeagus lacking setae and the parameres being unusually stout in the new species. The median lobe of the new species is roundly tapered distally to narrowly rounded tip while the same is angulate before the tip of the median lobe in *C. glabella*. The shape of endophallus shows specific character in the new species having lung-shaped structures that are different from the related species. The basal part of the spermatheca is large, pear-shaped in the new species, while the basal part of spermatheca is small, globose in *C. polita* and poorly differentiated from the rest of spermatheca in *C. glabella*.

Name derivation. The name of the new species points to unusual shape of the parameres (from Latin *insolitus* = unusual).

Colenisia seriepunctata sp. nov.

(Figs 3, 12, 25)

Type material. Holotype (♂): "CHINA: Yunnan [CH07-13], Baoshan/ Pref., Gaoligong Shan, E pass, 36 km SE/ Tengchong, 2200 m, 24°49'32" N/ 98°46'06" E, decid. forest, litter, wood/ fungi sifted, 31.v.2007, M. Schülke", (MSBC). Paratypes (1 ♂, 2 ♀♀): the same locality data (MSBC, ZSPC); (1 ♂, 1 ♀): "CHINA: Yunnan [CH07-14], Baoshan/ Pref., Gaoligong Shan, 33 km SE/ Tengchong, 2100-2200 m, 24°51'22" N/ 98°45'36" E, decid. forest, litter, wood/ fungi sifted, 31.v.2007, M. Schülke", (MSBC, ZSPC).

Description. Length of body 1.6-1.7 mm, in holotype 1.6 mm; length of body parts in holotype: head 0.2 mm, pronotum 0.5 mm, elytra 0.9 mm, antenna 0.4 mm. Maximum width of head 0.5 mm, pronotum 0.9 mm, elytra 0.9 mm.

Habitus as in Fig. 25, dorsum shining, sparsely unobtrusively pubescent with short setae, black with pronotal base and lateral margins lighter, legs yellow-reddish, tarsi and antennomeres I-II yellow, antennomeres III-VI infusate, antennomeres VII-XI brown. Ventral surface dark chestnut. Clypeus transversely strigose, rest of dorsum lacking strigosity.

Head. Eyes normally developed, ratio of width of front between eyes : eye = 8.5. Ratio of width of antennomeres VII-XI (antennomere VII equal 1): 1.0 - 0.8 - 1.4 - 1.2 - 1.4. Antennomere XI 1.7 times as long as antennomere X. Punctuation distinct, punctures separated by 5-6 times their diameter.

Pronotum. Base straight; posterior angles acute, closely rounded in dorsal view; very slightly obtuse, almost rectangular, closely rounded in lateral view. Sides evenly curved from base to anterior angles in both dorsal and lateral views. Punctuation much finer and sparser than on head; with scattered larger punctures interposed.

Elytra. Punctuation more distinctive than on head and pronotum. Two rows of punctures placed along the suture; punctures separated by 2-4 times their diameter. Also discal punctures tending to become seriate. Discal punctures more sparsely distributed. Punctures getting smaller and sparser toward base, apex and lateral sides of elytra. Lateral channels widened all along the elytral margins except at humeral and apical parts of elytra. Widened lateral margin visible simultaneously in dorsal view. Sutural striae not developed.

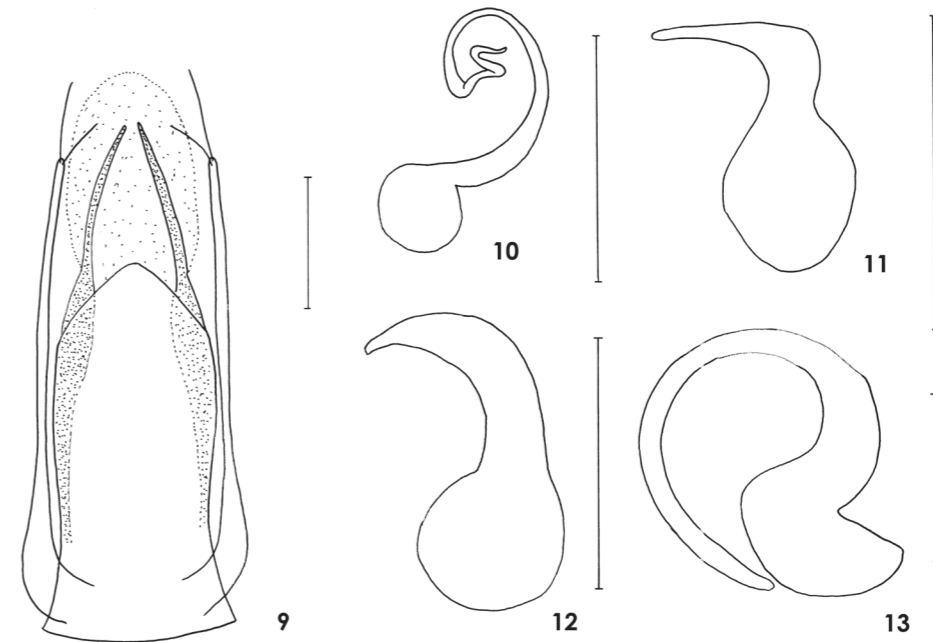
Legs. Anterior tarsomeres I-III very slightly widened in male, slender in female.

Genitalia. Aedeagus as in Fig. 3, spermatheca as in Fig. 12.

Variation. Except of size of body there was not detected distinct variability in the type series.

Differential diagnosis. *Colenisia seriepunctata* sp. nov. is most similar to *C. fragilis* sp. nov. and *C. insolita* sp. nov., to *C. polita* Daffner, 1991 from India and *C. glabella* Daffner, 1988 from Taiwan by dorsal surface lacking microsculpture. From all the mentioned species it differs by its larger size and by the presence of discal rows of elytral punctures. It also differs in the aedeagus exhibiting a pointed median lobe and by the specific shape of endophallus.

Name derivation. The name of the new species devotes on the seriate punctures on elytra.



Figs 9-13. Fig. 9: aedeagus dorsal; Figs 10-13: spermatheca. 9- *Colenisia stanislavi* sp. nov.; 10- *Colenisia fragilis* sp. nov.; 11- *C. insolita* sp. nov.; 12- *C. seriepunctata* sp. nov.; 13- *C. yunnanica* sp. nov. Scale = 0.1 mm.

Colenisia yunnanica sp. nov.

(Figs 4, 13, 26)

Type material. Holotype (♂): "CHINA: Yunnan [CH07-16], Baoshan Pref., mountain range/ 14 km E Tengchong, 1850 m/ 25°00'28" N, 98°38'07" E/ second. mixed forest, litter sifted/1.vi.2007, leg A.Pütz" (SMZD). Paratypes (1 ♂, 2 ♀♀): the same locality data (SMZD, ZSPC).

Description. Length of body 1.0-1.1 mm, in holotype 1.1 mm; length of body parts in holotype: head 0.1 mm, pronotum 0.3 mm, elytra 0.7 mm, antenna 0.3 mm. Maximum width of head 0.4 mm, pronotum 0.6 mm, elytra 0.7 mm.

Habitus as in Fig. 26. Dorsum shining, sparsely unobtrusively pubescent with short setae, black with pronotal hind angles and elytral apex lighter, legs reddish, tarsi and antennomeres I-VI yellow, antennomeres VII-XI dark brown. Ventral surface dark chestnut. Head with strigose clypeus, pronotum lacking strigosity, posterior two-third of elytra covered by transverse strigosity.

Head. Eyes rather large, ratio of width of front between eyes : eye = 5.5. Ratio of width of antennomeres VII-XI (antennomere VII equal 1): 1.0 - 0.8 - 1.2 - 1.2 - 1.2. Antennomere XI 2.7 times as long as antennomere X. Punctuation very fine, punctures extremely small, sparse, separated by 8-10 or more times their diameter.

Pronotum. Base straight; posterior angles acute, closely rounded in dorsal view; slightly obtuse widely rounded in lateral view. Sides evenly curved from base to anterior angles in dorsal view; straight in lateral view. Puncturation similar to that on head.

Elytra. Puncturation fine similar to that on head and pronotum; along suture and near base punctures larger. Transverse strigosity developed on posterior two thirds of elytra sparse, separated by about 0.02-0.03 mm. Lateral channel very slightly widened all along the elytral margins except basal quarter and apical part of elytra. Lateral margin not visible simultaneously in dorsal view. Sutural striae not developed.

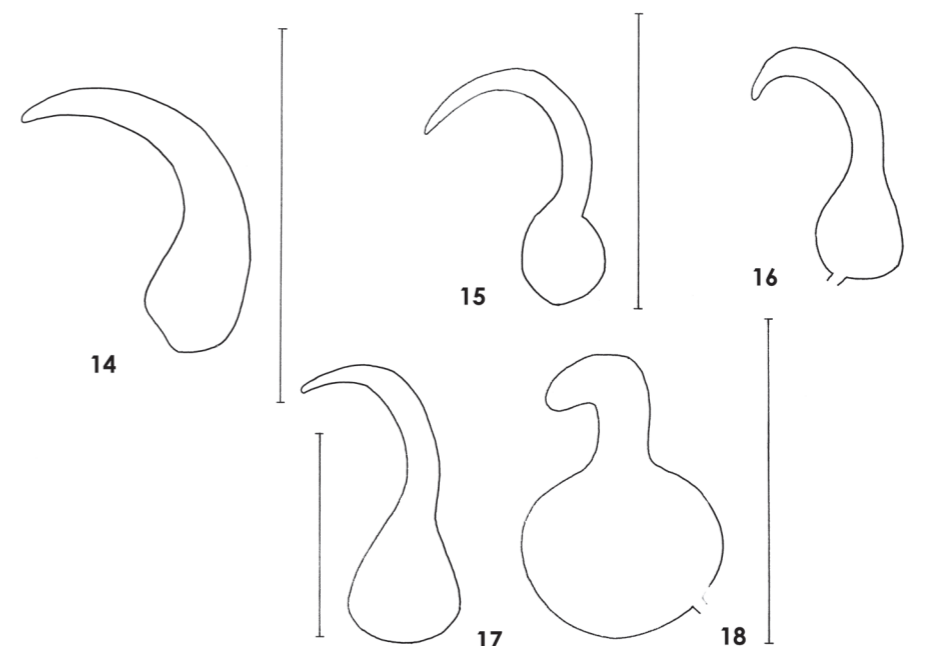
Legs. Anterior tarsomeres I-III very slightly widened in male, slender in female.

Genitalia. Aedeagus as in Fig. 4, spermatheca as in Fig. 13.

Variation. The type series grades from black to brown-black specimens.

Differential diagnosis. *Colenisia yunnanica* sp. nov. belongs to an informal group of species characterised by partly strigosed elytra (*C. compacta* Angelini et Švec, 1998; *C. punctatula* Daffner, 1991 from India, *C. pygmaea* (Portevin, 1905) from India, Taiwan and Vietnam; *C. topali* Daffner, 1988 from Taiwan and Vietnam; *C. marginella* Daffner, 1991 from India; *C. ceylanica* (Hlisnikovský, 1972) from Sri Lanka and *C. semistrigata* Daffner, 1991 from India). In general appearance it is most similar to *C. compacta* by its sparsely punctate dorsum and sparsely strigose elytra. *C. compacta* differs by lighter coloured dorsum, that is chestnut brown with antennomeres I-VI yellow and antennomeres VII-XI light red brown, while dorsum of *C. yunnanica* is black, antennomeres VII-XI are dark brown, both species also differ by the size of eyes - ratio of width of front between eyes : eye = 5.5 in the new species, while the same is 4.0 in *C. compacta*. *C. yunnanica* also differs by length of parameres that are a little longer than the median lobe of aedeagus while in *C. compacta* they are a little shorter than median lobe. Also sclerites of the internal sac shows specific characters - the two basal sclerites are long, slightly curved well separated from each other basally in *C. yunnanica*, while C-shaped basal sclerites in *C. compacta* (aedeagus as in Fig. 7 in Angelini & Švec 1998) form two pairs - the lateral ones are convergent, touching each other basally resembling the letter U, the median sclerites are approaching resembling the letter X. *C. yunnanica* differs by smaller size of body (1.0-1.1 mm) from *C. marginella* (length of body 1.3-1.4 mm) and *C. ceylanica* (1.4-1.6 mm). From the both species and from *C. pygmaea* the new species differs by straight pronotal base that is obliquely tapered to posterior pronotal angles in the three compared species.

C. yunnanica differs from *C. punctatula*, *C. topali*, *C. semistrigata* and *C. pygmaea* also by elytra covered by transverse strigosity on apical two-thirds of the elytra while the elytral strigosity in *Colenisia punctatula* and *C. semistrigata* is distinct only on sides and apex of elytra, in *C. topali* and *C. pygmaea* only apex of elytra is covered by strigosity. From *C. punctatula*, *C. ceylanica*, *C. marginella* and *C. semistrigata* the new species differs by much sparser dorsal puncturation of dorsum - elytral punctures are separated by approximately 4 times their diameter in *C. punctatula*, two times their diameter in *C. ceylanica*, *C. marginella* and *C. semistrigata*. *C. yunnanica* differs from *C. pygmaea*, *C. topali*, *C. marginella* and *C. ceylanica* by the shape of median lobe that is evenly roundly tapered toward broadly rounded top, while the median lobe is angulate before the top or terminates in shortly rounded tip in the



Figs 14-18: spermatheca. 14- *Colenisia gracilis* sp. nov.; 15- *C. dilatata* sp. nov.; 16- *C. fortipes* sp. nov.; 17- *C. cooteri* sp. nov.; 18- *C. stanislavi* sp. nov. Scale = 0.1 mm.

species compared. From all the known *Colenisia* species *C. yunnanica* differ by possessing a quite unusual ring-shaped spermatheca.

Name derivation. The name of the new species is derived from the country of location of capture, Yunnan Province.

***Colenisia gracilis* sp. nov.**

(Figs 5, 14, 27)

Material examined. Holotype (♂), "CHINA: Yunnan, Lincang Pref./ Laobie Shan, Wei Bo Shan pass/ 24°08'16" N 99°42'53" E, 2375 m/creek valley, devastated second./ decid. forest, litter & moss sifted/ 8.ix.2009, leg. M. Schülke [CH09-35]" (MSBC). Paratypes (1 ♂, 3 ♀♀): the same data (MSBC, ZSPC); (1 ♂): "China: Yunnan, Dali Bai Aut. Pref., Wuliang Shan, 11 km SW Weishan/ 25°08'46.7" N, 100°14'14.1" E/ 2520 m, pine forest, litter &/ dead wood sifted, 14.ix.2009/ leg. M. Schülke [CH09-52]" (ZSPC); (1 ♂): "China: Yunnan [CH07-19]/ Dehong Dai Aut. Pref., mountain/ range, 31 km E Luxi, 2280 m/ 24°29'31" N, 98°52'58" E, second/ pine forest with old decid. trees, litter sifted, 3.vi.2007, A. Pütz", (SMZD).

Description. Length 1.3-1.5 mm, in holotype 1.4 mm; length of body parts in holotype: head 0.2 mm, pronotum 0.4 mm, elytra 0.8 mm, antenna 0.4 mm. Maximum width of head 0.5 mm, pronotum 0.8 mm, elytra 0.8 mm.

Habitus as in Fig. 27, dorsum shining, sparsely unobtrusively pubescent with short setae, dark brown, legs and antennomeres I-VI yellow, antennomeres VII-XI yellow-brown, legs reddish. Ventral surface yellow-brown with darker trochanters, margins of coxae and longitudinal carina on mesoventrite. Entire dorsum transversely strigose.

Head. Eyes normally developed, ratio of width of front between eyes : eye = 9. Ratio of width of antennomeres VII-XI (antennomere VII equal 1): 1.0 - 0.8 - 1.4 - 1.6 - 1.4. Antennomere XI two times as long as antennomere X. Puncturation very fine, unobtrusive, irregularly distributed, punctures separated by about 4 or more times their diameter. Rather densely and distinctly strigose. Strigosities predominantly transverse, sporadically connected, in some places especially near eyes, orientated obliquely or even cranio-caudally.

Pronotum. Base straight; posterior angles acute, rounded in dorsal view; very slightly obtuse, almost rectangular closely rounded in lateral view. Sides evenly curved from base to anterior angles in dorsal view, straight in lateral view. Puncturation similar to that on head, but punctures separated by about 4-10 or more times their diameter. The strigosity transverse, in density similar to, but less evident than that on head.

Elytra. Distinctly, rather densely and strongly punctured. Puncturation much stronger than that on head and pronotum; punctures separated by about 3-4 times their diameter, irregularly distributed. Transverse strigosity developed on entire dorsal surface of elytra; rather densely arranged, separated by about 0.01-0.02 mm. Lateral channel widened all along the elytral margins. Lateral margins visible simultaneously in dorsal view except of apical part of elytra. Sutural striae developed, confined to apical third of the elytra.

Legs. Anterior tarsomeres I-II distinctly dilated in male, slender in female. Meso- and meta-tarsi slim.

Genitalia. Aedeagus as in Fig. 5, spermatheca as in Fig. 14.

Variation. The dorsum of one of the paratypes is very dark - brown-black coloured with reddish legs and antennomeres I-VI.

Differential diagnosis. *Colenisia gracilis* sp. nov. is similar to *C. ovalis* Daffner, 1988 in the size and shape of body, and by its rather densely punctured elytra, widened elytral lateral channel and notably by the shape of the median lobe of the aedeagus. It differs by dark brown colour of dorsum that is red-brown in *C. ovalis*, by the presence of elytral sutural striae and by parameres that are distinctly shorter than median lobe while parameres are approximately as long as the median lobe in *C. ovalis*. Also the shape of the spermatheca differ being sickle-shaped in *C. gracilis* while in *C. ovalis* resembling a letter C.

Name derivation. The name of the species *Colenisia gracilis* sp. nov. draws the attention to the slender nature of the aedeagus.

***Colenisia dilatata* sp. nov.**

(Figs 6, 15, 28)

Material examined. Holotype (♂), "CHINA: Yunnan [CH07-35]/Dali Bai Auton. Pref. Wuliang/ Shan, 9 km SW Weishan, 2450-/2500 m, 25°10'14"N, W slope/ 100°14'22" E, oaks and pines/ sifted, 13.vi.2007, leg. A. Pütz", (SMZD). Paratypes (2 ♂♂, 1 ♀): the same data (SMZD, ZSPC).

Description. Length 1.6-2.0 mm, in holotype 1.6 mm; length of body parts in holotype: head 0.2 mm, pronotum 0.5 mm, elytra 0.9 mm, antenna 0.5 mm. Maximum width of head 0.5 mm, pronotum 0.9 mm, elytra 1.0 mm.

Habitus as in Fig. 28, dorsum shining, sparsely unobtrusively pubescent with short setae, light chestnut with clypeus and adjacent part of front lighter, legs and antennomeres I-VI and VIII yellow, antennomeres VII, X, XI brown. Ventral surface yellow-red-brown with darker trochanters, margins of coxae and longitudinal carina on mesoventrite. Entire dorsum transversely microstrigose.

Head. Eyes rather small, ratio of width of front between eyes : eye = 9. Ratio of width of antennomeres VII-XI (antennomere VII equal 1): 1.0 - 0.8 - 1.7 - 1.7 - 1.5. Antennomere XI 1.4 times as long as antennomere X. Puncturation fine, moderately dense, punctures separated by about 3-4 times their diameter. Several larger punctures disseminated among the basic puncturation. Very densely and distinctly strigose. Strigosities predominantly transverse, sporadically connected, in some places, especially near eyes, oriented obliquely or even cranio-caudally.

Pronotum. Base straight before posterior angles slightly but distinctly emarginate and obliquely tapered to posterior angles; those acute, very closely rounded in dorsal view; rectangular very closely rounded in lateral view. Sides evenly curved from base to anterior angles both in dorsal and lateral view. Puncturation finer and less regular than that on head, punctures separated by about 3 or more times their diameter. Several larger punctures disseminated among the basic puncturation. The strigosity transverse, in density similar but less expressed than on head.

Elytra. Distinctly, densely and strongly punctured. Puncturation much stronger than that on head and pronotum; punctures separated by about 1-3 times their diameter, sometimes tend to become seriate in irregular, feeble expressed rows. Traces of punctured rows evanescent toward base; near base elytra irregularly punctured. Intervals with punctures equal in size and strength to those in rows. The most clearly impressed punctures located near suture. Transverse strigosity developed on entire dorsal surface of elytra; sparsely arranged, separated by about 0.02-0.03 mm. Lateral channels distinctly widened all along the elytral length. Lateral margins visible simultaneously in dorsal view. Sutural striae developed, confined to apical half of elytra.

Legs. Anterior tarsomeres I-III distinctly widened in male, slender in female. All male tarsi stout, conically tapered apically.

Genitalia. Aedeagus as in Fig. 6, spermatheca as in Fig. 15.

Variation. The seriate punctures occur also on basal part of elytra in some paratypes.

Differential diagnosis. *Colenisia dilatata* sp. nov. is most similar to *C. fortipes* sp. nov. by the size of body, lightly coloured dorsum, the type of dorsal strigosity, by emarginate pronotal base before posterior angles of pronotum and by stout, conically tapered male tarsi distally. It differs by elytral intervals covered by punctures of equal size and intensity as punctures arranged in feeble, irregular elytral rows. Both species can also be differentiated by the shape of aedeagus. The parameres are dilated and obliquely truncate apically in *C. dilatata* while the parameres in *C. fortipes* are slim. The shape of spermatheca is similar in both species.

Name derivation. The name of the new species points to the dilated apical part of the parameres.

***Colenisia fortipes* sp. nov.**
(Figs 7, 16, 29)

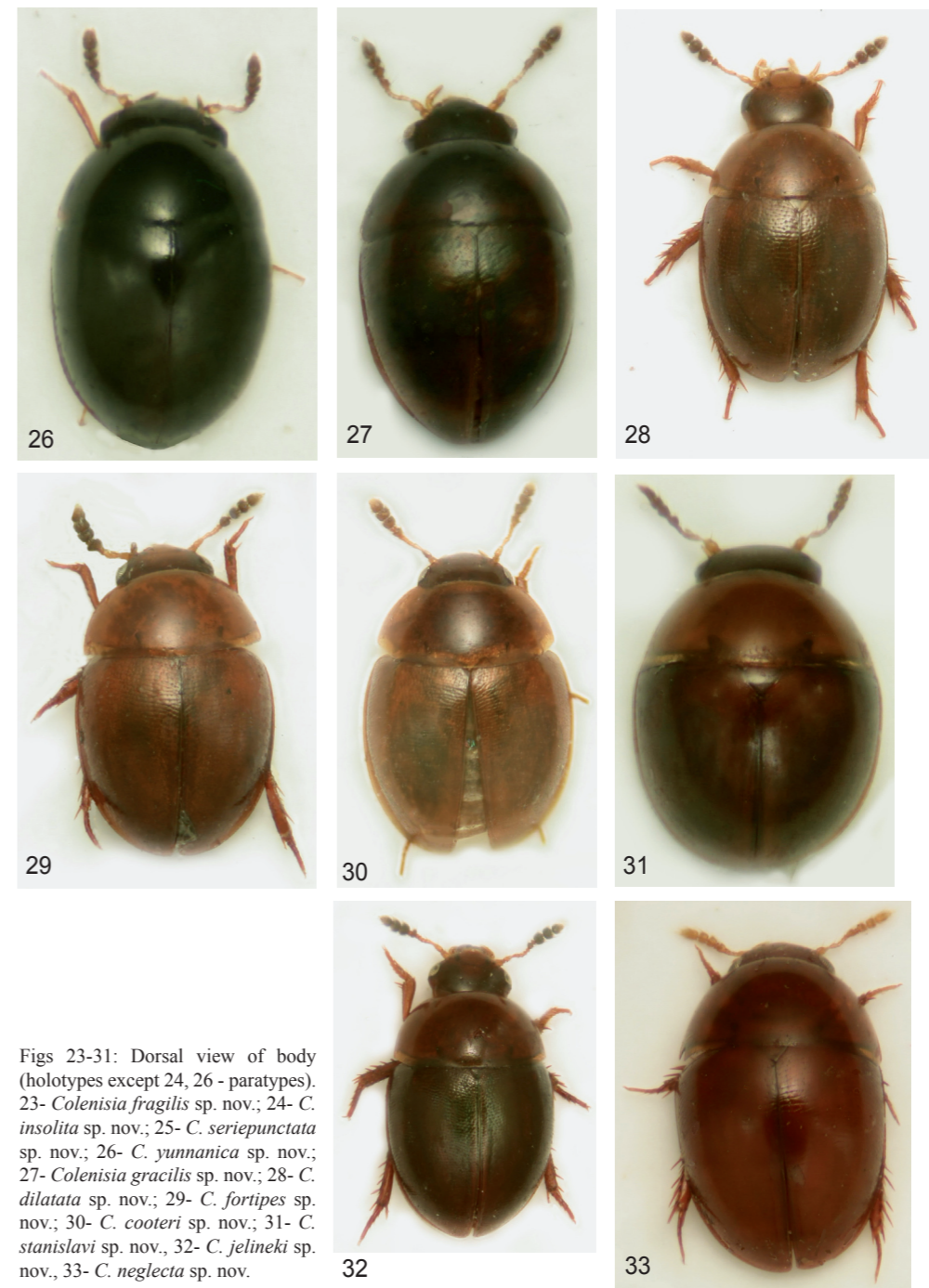
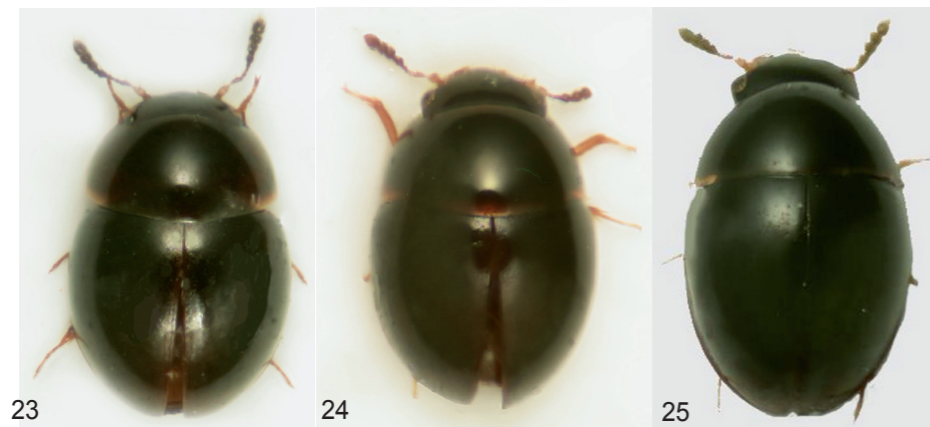
Material examined. Holotype (♂): "CHINA (Yunnan)/ Baoshan Pref., Gaoligong/ Shan, 33 km SE Tengchong/ 24°51'22"N, 98°45'36" E/ 2100-2200 m (prim. decid. forest, pitfall trap)/ 31.v.-4.vi.2007, D.W. Wrase [14C]", (NKME). Paratypes (1 ♂): same data as holotype (ZSPC); (1 ♀): "CHINA: Yunnan [CH07-11F], Baoshan/ Pref., Gaoligong Shan, nr. Xiaoheishan/ N.R., 35 km SE Tengchong, 2100 m/ 24°50'16" N 98°45'43" E, decid. forest/ traps, 31.v.-4.vi. 2007, M. Schülke", (MSBC).

Description. Length 1.8-2.1 mm, in holotype 1.8 mm; length of body parts in holotype: head 0.2 mm, pronotum 0.5 mm, elytra 1.1 mm, antenna 0.5 mm. Maximum width of head 0.6 mm, pronotum 1.0 mm, elytra 1.1 mm.

Habitus as in Fig. 29, dorsum shining, sparsely unobtrusively pubescent with short setae, yellow-red; antennomeres I-VI and VIII yellow, antennomeres VII, IX-XI brown, legs reddish. Ventral surface yellow-red with darker trochanters, margins of coxae and longitudinal carina on mesoventrite. Entire dorsum transversely microstrigose.

Head. Eyes rather large, ratio of width of front between eyes : eye = 6.0. Ratio of width of antennomeres VII-XI (antennomere VII equal 1): 1.0 - 0.6 - 1.1 - 1.4 - 1.3. Antennomere XI twice as long as antennomere X. Puncturation very fine, unobtrusive, irregularly distributed, punctures small, separated by about 10 or more times their diameter. Densely and distinctly strigose. Strigosity predominantly transverse, sporadically connected.

Pronotum. Base straight; slightly emarginate before acute posterior angles; those closely rounded in dorsal view; obtuse closely rounded in lateral view. Sides evenly curved from base to anterior angles both in dorsal and lateral view. Puncturation similar to that on head, punctures separated by about 10 or more times their diameter. Some larger punctures sporadically interposed. The strigosity transverse, sporadically connected, in density similar to those on head but less clearly impressed.



Figs 23-31: Dorsal view of body (holotypes except 24, 26 - paratypes). 23- *Colenisia fragilis* sp. nov.; 24- *C. insolita* sp. nov.; 25- *C. seriepunctata* sp. nov.; 26- *C. yunnanica* sp. nov.; 27- *Colenisia gracilis* sp. nov.; 28- *C. dilatata* sp. nov.; 29- *C. fortipes* sp. nov.; 30- *C. cooteri* sp. nov.; 31- *C. stanislavi* sp. nov.; 32- *C. jelineki* sp. nov., 33- *C. neglecta* sp. nov.

Elytra. Finely punctured. Punctures distinctly larger and stronger than those on pronotum, separated by about 2-3 times their diameter longitudinally, 8-10 times their diameter transversely; tending to seriate. The punctured rows feebly expressed. Intervals punctured finely with small punctures separated by about 4-5 times their diameter. Transverse strigosities developed on entire dorsal surface of elytra; sparsely arranged, separated by about 0.02-0.04 mm. Lateral channel widened all along the elytral margins. Lateral margins visible simultaneously in dorsal view. Sutural striae developed, confined to apical two-thirds of elytra.

Legs. Anterior tarsomeres I-II distinctly widened in male, slender in female. Meso- and metatarsi of male thick, conically tapered apically.

Genitalia. Aedeagus as in Fig. 7 spermatheca as in Fig. 16.

Variation. The female paratype with elytral rows better expressed than those in the holotype.

Differential diagnosis. *Colenisia fortipes* sp. nov. is most similar to *Colenisia dilatata* sp. nov. by the size of body, lightly coloured dorsum, the type of dorsal strigosity, by emarginate pronotal base before posterior angles of pronotum and by stout, conically tapered male tarsi. It differs by elytral intervals that are finely punctured with small punctures while elytral intervals in *C. dilatata* are covered by punctures of equal size and intensity as punctures arranged in feeble, irregular elytral rows. Both species can also be differentiated by the shape of aedeagus. The parameres in *C. fortipes* are slim in contrast to the parameres in *C. dilatata* which are dilated and obliquely truncate apically. The shape of spermatheca is similar in both species.

***Colenisia cooteri* sp. nov.**

(Figs 8, 17, 30)

Type material. Holotype (♂): "CHINA: W Hubei/ Deshennongia Shan/ 21.vi.2001, 2500-3000 m/ 30°05' N 110°03' E/ Leg. Jaroslav Turna", (JCHC). Paratypes (2 ♂♂, 4 ♀♀): the same locality data as the holotype (1 ♂, 3 ♀♀ JCHC, rest ZSPC); (1 ♂): "CHINA: Beijing Distr./ Xiaobngmen, cca 1160 m/ N 39°57.68' E 115° 26.34'/ 9.-12.vi.2004, FI trap/ Leg J. Cooter", (JCHC); (4 ♂♂, 5 ♀♀): "CHINA: Beijing Distr./ Xiaobngmen, cca 1150 m/ 9.-12.vi.2004, FI trap/ ca N 39°58' E 115° 25'/ Leg J. Cooter/Flight interception/ trap in abandoned/ walnut orchard", (3 ♂♂, 4 ♀♀ JCHC, rest ZSPC); (3 ♂♂): "CHINA: Beijing Reg. cca 1150 m./ Xiaobngmen, 9.-12.vi.2004/ N 39°58.074' E 115° 25.882'/ F.I. Trap walnut/ poplar woodland/ Leg J. Cooter", (2 ♂♂ JCHC, rest ZSPC).

Description. Length 1.7-2.2 mm, in holotype 2.0 mm; length of body parts in holotype: head 0.2 mm, pronotum 0.6 mm, elytra 1.2 mm, antenna 0.6 mm. Maximum width of head 0.6 mm, pronotum 1.1 mm, elytra 1.4 mm.

Habitus as in Fig. 30, dorsum shining, sparsely unobtrusively pubescent with short setae, yellow-brown with head and pronotal disc light brown, legs and antennomeres I-VI yellowish, antennomeres VII-XI light brown. Ventral surface yellow-brown with darker trochanteres, margins of coxae and longitudinal carina on mesoventrite. Entire dorsum transversely strigose.

Head. Eyes small, ratio of width of front between eyes : eye = 11.5. Ratio of width of antennomeres VII-XI (antennomere VII equal 1.0): 1.0 - 0.7 - 1.2 - 1.3 - 1.2. Antennomere XI 1.5 times as long as antennomere X. Puncturation very fine, sparse and irregular, punctures separated by about 4-10 or more times their diameter with several larger punctures interposed.

Very densely and distinctly transversely strigose. Strigosities sometimes connected, oblique or even cranio-caudally oriented near eyes.

Pronotum. Base straight toward posterior angles obliquely tapered; posterior angles obtuse, very closely rounded in dorsal view; obtuse very closely rounded in lateral view. Sides evenly curved from base to anterior angles both in dorsal and lateral view. Puncturation more regular than that on head, punctures separated by about 8-10 times their diameter. Several larger punctures interposed among the basic puncturation. Transversely strigose. The strigosity denser and finer than on head.

Elytra. Puncturation stronger than that on head and pronotum; irregularly distributed, separated by about 3-4 times their diameter. Transverse strigosities developed on entire dorsal surface of elytra; sparsely arranged, separated by about 0.02 mm. Lateral channel very distinctly widened all along the elytral margins. Lateral margin visible simultaneously in dorsal view. Sutural striae developed, present in apical half of elytral.

Legs. Anterior tarsomeres I-III slightly but distinctly widened in male, slender in female.

Genitalia. Aedeagus as in Fig. 8, spermatheca as in Fig. 17.

Variation. The type series grades from yellow to yellow-brown specimens; predominantly with darker head and pronotal disc.

Differential diagnosis. *Colenisia cooteri* sp. nov. is most similar to *C. miyatakei* Hisamatsu, 1957 from continental China, Taiwan, Thailand, Vietnam and Japan. It differs by larger body, darkened antennal club, by parameres that are stout and not distinctly longer than median lobe in contrast to much longer parameres in *C. miyatakei*. Also the shape of endophallus shows specific character in the new species different from other species of the genus. The basal part of the spermatheca is similar to that in *C. miyatakei* while the proximal part is much more slender and longer.

Name derivation. The new species is dedicated to well known specialist in Leiodidae and my friend Jonathan Cooter.

***Colenisia stanislavi* sp. nov.**

(Figs 9, 18, 31)

Type material. Holotype (♂): "Taiwan: Taipei County, Beitou/ Township (Shipai metro/ station), Mt. Samau (S)// Gudao Hiking Trail/ 3.i.2009, old forest litter, leg. S./Vit" (NHMG). Paratypes (2 ♂♂, 3 ♀♀): the same locality data (NHMG, ZSPC).

Description. Length 1.0-1.2 mm, in holotype 1.1 mm; length of body parts in holotype: head 0.1 mm, pronotum 0.3 mm, elytra 0.7 mm, antenna 0.3 mm. Maximum width of head 0.4 mm, pronotum 0.7 mm, elytra 0.8 mm.

Habitus as in Fig. 31. Dorsum slightly shining, sparsely unobtrusively pubescent with short setae, lightly chestnut, legs and antennomeres I-VI yellow, antennomeres VII-XI light yellow-brown. Ventral surface yellow-red with darker mesoventral carina and margin of metaventral process. Entire dorsum finely transversely strigose.

Head. Eyes normally developed, ratio of width of front between eyes : eye = 7.0. Microsculpture fine but distinct, consisting of very dense predominantly transverse strigosity. Ratio of width of antennomeres VII-XI (antennomere VII equal 1): 1.0 - 0.5 - 1.3 - 1.3 - 1.4. Antennomere XI twice as long as antennomere X. Puncturation very fine, punctures very small, sparse, separated by 10 or more times their diameter.

Pronotum. Base straight; posterior angles acute, with pointed tip in dorsal view; rectangular with pointed tip in lateral view. Sides evenly curved from base to anterior angles in dorsal view, very slightly rounded in lateral view. Transverse strigosity finer, less distinct than that on head. Puncturation similar to that on head. Punctures very fine, small and sparse.

Elytra. Surface densely transversely strigose; strigosity approximately 3 times sparser than on pronotum, separated by about 0.01 mm. Puncturation similar to that on head and pronotum, punctures irregularly arranged in strigosity. Lateral channel of elytra very narrowly widened, simultaneously visible all along the elytral length in dorsal view. Sutural striae absent.

Legs. Anterior tarsomeres I-III very slightly widened in male, slender in female.

Genitalia. Aedeagus as in Fig. 9 spermatheca as in Fig. 18.

Variation. The type series grades from unicolorous chestnut coloured specimens to specimens with pronotum or even head lighter.

Differential diagnosis. *Colenisia stanislavi* sp. nov. is similar to *C. johanni* Daffner, 1988 in exhibiting entirely strigose dorsum, lacking sutural striae, in size and colour of body and by the shape of spermatheca. It differs from *C. johanni* by larger eyes (ratio of width of front between eyes:width of eye exceed 10 in *C. johanni*) and by the shape of aedeagus having parameres much longer than median lobe, while the parameres are shorter than median lobe in *C. johanni*. The shape of aedeagus and spermatheca of the new species resembles those in *C. miyatakei* (Hisamatsu, 1957). *C. stanislavi* differs by dark antennal club while entire antenna are light in *C. miyatakei*; it differs also by denser microstrigose elytra and by lack of the sutural striae. The parameres of the aedeagus in the new species are bisetose, while the parameres in *C. miyatakei* terminate with a seta and an appendix. Basal part of spermatheca is globose in the new species while the same is transversely oblong-oval in *C. miyatakei*.

Name derivation. The new species is named after his collector, Stanislav Vít.

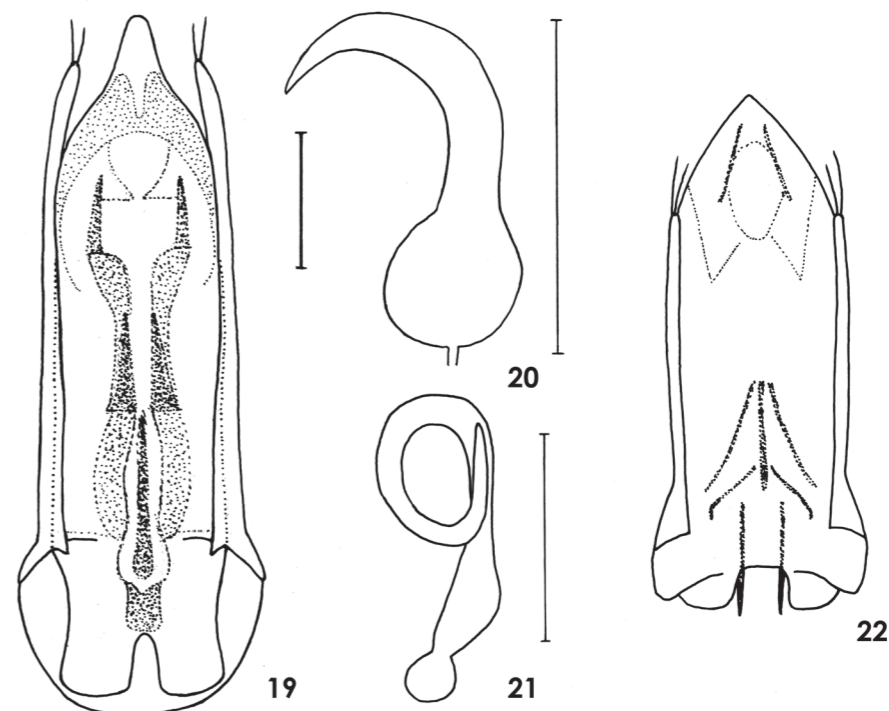
***Colenisia jelineki* sp. nov.**

(Figs 19, 20, 32)

Type material. Holotype (♂): "CHINA: Yunnan, Lincang Pref., Xue/ Shan, 11 km ENE Lincang, 2510 m/ 23°55'01"N 100°11'17.5" E, second./ pine forest with Rhodod., small cleft with/ water, litter&mushrooms sifted/ 10.ix.2009, leg. M. Schülke [CH09-39]", (MSBC). Paratypes (1♂, 1♀), the same data, (MSBC, ZSPC).

Description. Length 1.7-2.1 mm, in holotype 2.1 mm; length of body parts in holotype: head 0.4 mm, pronotum 0.6 mm, elytra 1.1 mm, antenna 0.4 mm. Maximum width of head 0.6 mm, pronotum 1.1 mm, elytra 1.2 mm.

Habitus as in Fig. 32. Dorsum slightly shining, sparsely unobtrusively pubescent with short setae, chestnut with lighter pronotum, tarsi light chestnut, antennomeres I-IV and VIII



Figs 19-22. Fig. 19, 22: aedeagus dorsal; Figs 20, 21: spermatheca. 19, 20- *Colenisia jelineki* sp. nov.; 21, 22- *C. neglecta* sp. nov. Scale = 0.1 mm.

yellow-red, antennomeres VII and IX-XI dark brown. Ventral surface reddish with darker mesoventral carina and margin of metaventral process. Entire dorsum transversely strigose.

Head. Eyes normally developed, ratio of width of front between eyes : eye = 8.0. Microsculpture well expressed, consisting of dense distinct predominantly transverse strigosity connected each other in some places. Ratio of width of antennomeres VII-XI (antennomere VII equal 1): 1.0 - 0.9 - 1.7 - 1.7 - 1.4. Antennomere XI 1.5 as long as antennomere X. Puncturation fine, punctures small separated by about 3-5 times their diameter on front and clypeus, lacking on vertex.

Pronotum. Base straight; oblique toward obtuse shortly rounded posterior angles in dorsal view; posterior angles obtuse with shortly rounded tip in lateral view. Sides evenly curved from base to anterior angles both in dorsal and lateral view. Transverse micro-sculpture similar but finer denser and less distinct than that on head. Puncturation sparse, irregular, punctures fine small, separated by about 5-8 times their diameter. Several larger punctures disseminated.

Elytra. Surface transversely strigose; strigosity approximately 4 times sparser than on pronotum, separated by about 0.01 mm. Punctures much more stronger and larger than on pronotum, predominantly irregularly arranged, tending to become seriate in some places,

separated by about 1 times their diameter longitudinally, by 2 times their diameter from lateral neighbours. Lateral channel of elytra narrowly widened, simultaneously visible all along the elytral length in dorsal view. Sutural striae present at apical two thirds of elytra.

Legs. Anterior tarsomeres I-IV distinctly widened, all tarsi stout, conically narrowed apically in male, slender in female.

Genitalia. Aedeagus as in Fig. 19 spermatheca as in Fig. 20.

Variation. The type series vary in the body length only.

Differential diagnosis. *Colenisia jelineki* sp. nov. is similar to *C. dilatata* sp. nov. in exhibiting entirely strigose dorsum, presence of sutural striae, in colour of body, in stout male tarsi, densely punctured elytra and in the shape of spermatheca. From *C. dilatata* it differs by smaller elytral puncturation, by approximately two times denser strigosity separated by about 0.01 mm and by slim parameres.

Name derivation. The new species is dedicated to Josef Jelínek, friend of mine and of Jonathan Cooter, the well known Czech specialist in the family Nitidulidae.

***Colenisia neglecta* sp. nov.**
(Figs 21, 22, 33)

Type material. Holotype (♂): "Thailand bor./ Chiang dao/ 24.v.-4.vi. 1995/ M. Snižek lgt.". Paratypes (1♂, 1♀): the same locality data (all ZSPC).

Description. Length 1.5-1.6 mm, in holotype 1.5 mm; length of body parts in holotype: head 0.2 mm, pronotum 0.5 mm, elytra 0.8 mm, antenna 0.4 mm. Maximum width of head 0.5 mm, pronotum 0.9 mm, elytra 1.0 mm.

Habitus as in Fig. 33. Dorsum slightly shining, sparsely unobtrusively pubescent with short setae, yellow red, tarsi and antennae yellow. Ventral surface yellow-red with darker mesoventral carina and margin of metaventral process. Entire dorsum finely transversely strigose.

Head. Eyes large, ratio of width of front between eyes : eye = 4.8. Microsculpture well expressed, consisting of dense predominantly transverse strigosity connected to each other in some places. Ratio of width of antennomeres VII-XI (antennomere VII equal 1): 1.0 - 1.0 - 1.2 - 1.2 - 1.2. Antennomere XI twice as long as antennomere X. Puncturation very fine, punctures very small, extremely sparse.

Pronotum. Base straight; posterior angles acute, with pointed tip in dorsal view; slightly acute with rounded tip in lateral view. Sides evenly curved from base to anterior angles in dorsal view, very slightly rounded in lateral view. Transverse micro-sculpture similar, but finer, less distinct than that on head. Puncturation sparse, irregular, punctures very small, transversely oblong, separated by about 6-10 or more their diameter.

Elytra. Surface sparsely transversely strigose; strigosity approximately 3 times sparser than on pronotum, separated by about 0,02 mm. Punctures much more stronger and larger than on pronotum, arranged in rows, separated by about 2-3 times their diameter longitudinally, by

6-8 times their diameter from lateral neighbours. Small punctures very sparsely distributed in row intervals. Lateral channel of elytra very narrowly widened, simultaneously visible all along the elytral length in dorsal view. Sutural striae present at apical half of elytra.

Legs. Anterior tarsomeres I-III very slightly widened in male, slender in female.

Genitalia. Aedeagus as in Fig. 22 spermatheca as in Fig. 21.

Variation. The type series vary in the body length only.

Differential diagnosis. *Colenisia neglecta* sp. nov. is similar to *C. similata* Angelini & Švec, 1994 and *C. luteicornis* (Hisnikovský, 1972) in exhibiting entirely strigose dorsum, presence of sutural striae, in colour of body, to *C. similata* also in the presence of elytral rows of punctures, to *C. luteicornis* also in the shape of aedeagus and spermatheca. From *C. similata* it differs by smaller and sparser elytral puncturation, by entirely light antennae, smaller body and by the shape of spermatheca having smaller basal part and ring-shaped distal part in contrast to large subglobose basal part and simply bent distal part of spermatheca in *C. similata*. *C. neglecta* differs from *C. luteicornis* by sparser elytral strigosity with strigosities separated by about 0.02 mm in contrast to 0.01 mm in *C. luteicornis*. It differs also by larger elytral punctures arranged in rows while elytral punctures are small and irregularly distributed in *C. luteicornis*. The median lobe of aedeagus is simply pointed apically in *C. neglecta* while the same ends in an unobtrusive nipple in *C. luteicornis*. The distal part of spermatheca is ring-shaped in *C. neglecta* in contrast to more-times twisted distal part resembling a bundle in *C. luteicornis*.

Name derivation. The name of the new species pointed on the fact, that the new species was neglected in the previous studies not being recognized as a new to science.

Remark. Due to the similarity of both species I mistake *C. neglecta* for *C. luteicornis* in the earlier work. Therefore it is necessary to omit the record of *C. luteicornis* from Thailand (Švec 1996).

FAUNISTIC RECORDS AND NOTES ON THE VARIABILITY

Colenisia miyatakei (Hisamatsu, 1957)

Colenis miyatakei Hisamatsu 1957: 1.

Material examined. NE Thailand, 19.-22.iv./ 1991 Chiang Mai prov./ Doi Suthep, S. Bílý leg., 1 ♂, (ZSPC); China: Yunnan [CH07-14A], Baoshan/ Pref., Gaoligong Shan, 33 km SE/ Tengchong, 2100-2200 m, 24°51'22" N/ 98°45'36" E, decid. forest, litter, wood/ fungi sifted, 4.vi.2007, M. Schülke, 1 ♂, (ZSPC); China: Yunnan, Baoshan Pref., Gao-/ligong Shan, W pass, 35 km SE/ Tengchong, 2100 m, 24°50'18" N/ 98°45'43" E, devast. prim. decid. forest/ litter, wood mushroom sifted, 25.viii./ 2009, leg. M. Schülke [CH09-06], 1 ♂, (MSBC); China: Yunnan, Baoshan Pref., Gao-/ligong Shan, 65 km NNE Tengchong/ 1750 m, 25°35'20" N, 98°40'21" E/ sec. mixed forest, overgrown stone debris, litter & moss sifted/ 27.viii.2009, leg. M. Schülke [CH09-10], 1 spec., (MSBC); CHINA: Yunnan, Lincang Pref./ Laobie Shan, Wei Bo Shan pass/ 24°08'16" N 99°42'53" E, 2375 m/ creek valley, devastated second./ decid. forest, litter & moss sifted/ 8.ix.2009, leg. M. Schülke [CH09-35], 2 ♀♀, 1 spec. sex indet, (MSBC);

CHINA: Yunnan, Lincang Pref./ Bangma Shan, E pass, 17 km NW/ Lincang, 23°57'31" N, 99°56'13"E/ 2040 m, secondary pine forest, litter/ dead wood & mushrooms sifted/ 9.ix.2009, leg. M. Schülke [CH09-36], 2 spec., (MSBC); CHINA: Yunnan, Lincang Dali Pref./ Wuliang Shan, old pass road, N pass/ 24°45'16.4" N, 100°29'50.3"E, 2350/ m forest remnant & tea plantation/ litter, mushrooms, grass sifted, 16. ix. 2009, leg. M. Schülke [CH09-55], 3 ♂♂, 2 spec. sex indet, (MSBC, ZSPC); CHINA: S-Gansu [CH12-13]/ Mts. 36 km SE Longnan/ 33°13'03" N, 105°14'55"E, 2080 m/ N-slope with mixed pine and birch/ forest, litter and mushrooms sifted/ 4.viii.2012, leg. M. Schülke, 1 ♀, 1 spec. sex indet, (ZSPC).

Distribution: Vietnam, Japan. New to Thailand and China (Yunnan, Gansu).

Colenisia johanni Daffner, 1988

Colenisia johanni Daffner 1988: 38.

Material examined. Taiwan: Taipei County, Beitou/ Township (Shipai metro/ station), Mt. Samau (S)/ Tian Mu// Gudao Hiking Trail, 3.i.2009/ upper layer of forest litter, leg. S.Vit, 2 ♂♂, (MNHG, ZSPC); Taiwan: Taoyuan County/ Township DaSi, area Shihmen/ reservoir// after Bay Hill side, deep gully/ litter, 25.ii.2010. leg. S.Vit, 3 ♂♂, 8 ♀♀, (NHMG, ZSPC).

First recorded findings since the original description.

Notes on the variability. Size of the examined specimens varies between 1.1-1.3 mm (according to the original description 1.3-1.5 mm), colour of the dorsum varies from lightly red-brown to chestnut coloured specimens. In some specimens head is a little darker than the rest of dorsum.

Colenisia ovalis Daffner, 1988

Colenisia ovalis Daffner 1988: 40.

Material examined. Taiwan: Chayi County, Alishan/ Natural Scenic Area, Road 18/ km 84// 220 m, 7.i.2009, sifting forest/ litter leg. S. Vit.; 1 ♂, (NHMG).

First recorded finding since the original description.

Colenisia pygmaea (Portevin, 1905)

Liocolenis pygmaea Portevin 1905: 422.

Material examined. Taiwan: Taoyuan County/ Township DaSi, area Shihmen/ reservoir// after Bay Hill side, deep gully/ litter, 25.ii.2010. leg. S.Vit, 3 ♂♂, (MNHG, ZSPC); Taiwan: Taipei/ County, Beitou/ Township (Jiantan/ metro station)// Jiantan Shan Hiking/ Traill, 2.i.2009 dead/ tree trunk and bark/ S.Vit lgt., ♂, (NHMG).

Notes on the variability. According Daffner who revised the genus *Colenisia* from South-East of Asia and Sumatra (1988) the head of the species lacking microsculpture but fine and sparse puncturation. Head of the examined specimen from Taiwan is strongly punctured with anterior part microsculptured by transverse strigosities. Size of the examined specimens varies between 1.0-1.3 mm; according to Daffner (1988) it is 0.85-1.0 mm.

Colenisia schuelkei Švec, 2012

Colenisia schuelkei Švec 2012: 435.

Material examined: China: Jiangxi Province/ Wuyi Shan, Haungganshan/ N 27°83' E 117°76', 2100 m/Mixed litter, 5.vi.2001/ Leg. J. Cooter + P. Hlaváč, 3 ♀♀, (JCHC).

Distribution. China (Yunnan, Jiangxi). New to Jiangxi province.

ACKNOWLEDGEMENTS. I wish to express my sincere thanks to my entomological friends and colleagues especially Jonathan Cooter (Hereford, England), Michael Schülke (Berlin, Germany), Stanislav Vít (Geneva, Switzerland), Matthias Hartmann (Naturkunde Museum, Erfurt, Germany) and Olaf Jäger (State Museum of Zoology, Dresden, Germany), for providing me with the valuable *Colenisia* material collected recently in continental China, Thailand and Taiwan. I would like to thank to my friend Jonathan Cooter also for the critical reviewing of the manuscript.

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Received: 27.2.2013

Accepted: 10.4.2013

