Five new species of longicorn beetles from China (Coleoptera Cerambycidae)

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Nel presente lavoro vengono descritte le seguenti cinque nuove specie di cerambicidi, tutte appartenenti alla fauna cinese:

Prothema exclamationis proveniente dal Sichuan. Affine a P. signata (Pascoe) ed a P. coomani Pic, si distingue dalla prima per la fascia elitrale anteriore non estesa lungo il margine basale e più lungamente prolungata in addietro, dalla seconda per l'assenza di orlatura bianca alla base ed all'apice del pronoto, e per la fascia elitrale anteriore diritta e non scostata dalla sutura.

Niphona (s. str.) pluricristata proveniente dal Sichuan. Per la particolare scultura del pronoto, la presenza di rilievi con ciuffi di peli sulla base delle elitre e lo sviluppo dei lobi oculari posteriori questa specie è confondibile con la sola N. fasciculata Pic, dalla quale peraltro si distingue facilmente per le elitre fortemente attenuate in addietro e l'apice elitrale obliquamente anziché rettilineamente troncato.

Egesina (Cuphisia) digitata proveniente dal Sichuan. Simile per aspetto d'insieme a E. guerryi Pic, ma del tutto isolata anche all'interno del proprio sottogenere a causa della particolare struttura dei tarsi anteriori, i cui due articoli prossimali presentano una vistosa espansione digitiforme all'angolo apicale interno.

Asaperdina brunnea proveniente dallo Shaanxi. Affine ad A. regularis (Pic), se ne distingue per le antenne nettamente (circa di un terzo) più lunghe del corpo e per la punteggiatura delle parti superiori meno densa e più robusta. Da A. whiteheadi (Gressit) si distingue inoltre per la colorazione nera dei tegumenti di capo e protorace e per i tubercoli laterali del protorace smussati anziché acuminati; da A. sordida (Gressitt) si distingue infine per il primo articolo antennale visibilmente clavato e lungo appena la metà del terzo.

Thermistis sagittifera proveniente dal Sichuan. Affine a *T. nigromacula* Hua ed a *T. croceocincta* (Saunders); dalla prima si distingue per l'assenza di fasce gialle sul vertice e nella parte posteriore dei lati del protorace, e per la diversa forma dei disegni neri elitrali (due strette macchie trasverse subtriangolari anziché molto ampie ed arrotondate); dalla seconda per le antenne interamente nere anziché strettamente anellate di bianco, per i lobi oculari anteriori più corti delle guance nella \mathcal{Q} e per l'apice elitrale uniformemente arrotondato.

Oltre a ciò viene brevemente discussa la sistematica delle specie *Prothema coomani* Pic, di cui viene ristabilita la validità, e *P. similis* Gressitt & Rondon, considerata probabile sinonimo juniore di *P. cakli* Heyrovsky.

Parole chiave: Cerambycidae, nuove specie, Cina.

Pesarini C. & Sabbadini A., 2000 - Five new species of longicorn beetles from China (Coleoptera Cerambycidae). *Ann. Mus. civ. St. nat. Ferrara*, 2 (1999): 57-67.

The following new species of longicorn beetles are here described from China: *Prothema* exclamationis from Sichuan, related to *P. signata* (Pascoe) and *P. coomani* Pic; *Niphona* (s. str.) pluricristata from Sichuan, related to *N. fasciculata* Pic; *Egesina* (*Cuphisia*) digitata from Sichuan, quite apart from all other so far knowm species of the genus, even though superficially similar to *E. guerryi* (Pic); *Asaperdina brunnea* from Shaanxi, related to *A. regularis* (Pic); *Thermistis sagittifera* from Sichuan, related to *T. nigromacula* Hua and *T. croceocicncta* (Pascoe). The status of *Prothema coomani* Pic and *P. similis* Gressitt & Rondon is also discussed.

Key Words: Cerambycidae, new species, China.

Description of new species and taxonomic notes

Prothema exclamationis nov. sp.

Body and appendages black, underside covered with very thick white adpressed pubescence on abdomen, meso- and metasternum; prosternum and appendages with sparser white adpressed pubescence; upper surface glabrous but frons and scutellum, covered by a moderately dense and scarcely raised pubescence, and elytral markings, formed by dense whitish adpressed pubescence. Head behind the eyes dull, with vanishing sculpture. Antennae slightly longer than body, third anthennal joint half again as long as first and fourth, apical external angle of antennal joints from sixth to ninth bluntly expanded. Pronotum with rather shallow but very large and extremely dense punctures, elytral punctuation only slightly sparser, considerably dense also in the apical portion. Prothorax slightly broader than long, moderately rounded at sides, suddenly constricted just behind the narrow anterior collar. Elytra subparallel-sided, a little more than twice as long as conjointly broad, rounded at apex, sutural angle with an acute spine. Legs with no particular feature.

Overall length: 13,0 mm.

Holotypus ♀ (red label with indication of name and authors): China, Sichuan, Xin Gou

m 1600, 16.VII.1991, Ig. Giacomazzo, (printed label), preserved in the authors' collection (Milan).

This species is closely related to P. signata Pascoe, 1856, from which it can however be easily distinguished through the different disposition of the basal elytral band, which is almost straight, starting just behind scutellum and stretched along more than the basal third of suture, whereas in P. signata it is curved and covers the internal half of elytral basal margin and less than the basal fourth of sutural margin. With regard to the latter species, we must observe that the sinonymy proposed by GRESSITT & RONDON (1970) between this species and P. coomani Pic, 1934 seems to be unjustified. P. coomani differs from P. signata (as already wrote Pic in the original description) through the presence of a white marginal band both at basis and apex of pronotum, and the different disposition of the anterior elytral band, which remains well separated from both scutellum and suture, as in the specimen from Laos photographed by Gressitt & Rondon (fig. 23h), which must therefore be referred to P. coomani Pic, and not to P. signata Pascoe. The QQ of these species can however be separated as follows (♂♂ have uniformly black elytra in both P. signata, whose 3 had been described as P. funerea Pascoe, 1856, and P. coomani, therefore probably also in P. exclamationis n. sp.):

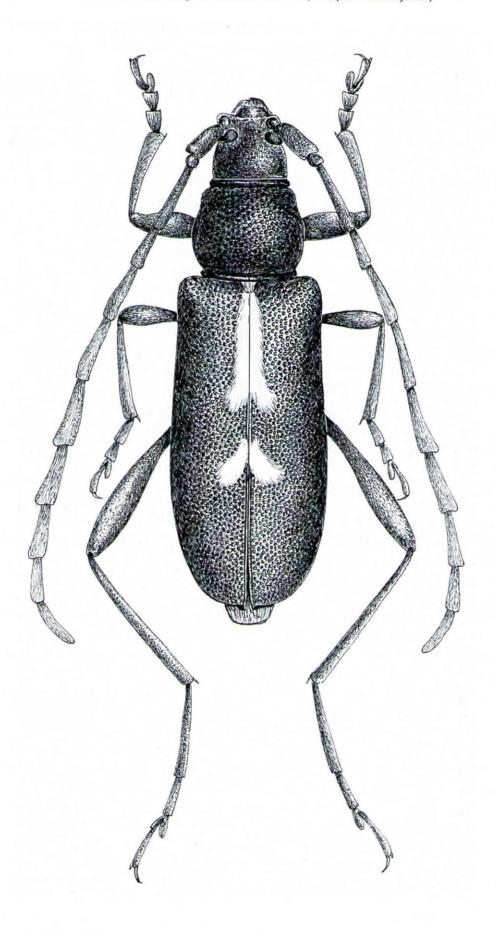


Fig. 1. Prothema exclamationis n. sp., Holotypus ♀

Prothema exclamationis n.sp.

Pale elytral markings white with moderate golden reflections.

Pronotum all black, without basal and apical marginal bands.

Basal elytral band almost straight, not touching elytral base and about three times as long as the distance that separates it from the posterior band.

Posterior elytral band limited to the central portion of elytra.

Pronotum with its maximum width slightly behind the middle, only slightly narrower apically than basally. Elytra a little more than three times as long as prothorax.

Prothema signata Pascoe

Pale elytral markings yellowish white with strong golden reflections.

Pronotum all black, without basal and apical marginal bands.

Basal elytral band curved from the elytral base, touching scutellum and suture and about as long as the distance that separates it from the posterior band. Posterior elytral band limited to the central portion of elytra.

Pronotum with its maximum width slightly behind the middle, only slightly narrower apically than basally. Elytra a little less than three times as long as prothorax.

Prothema coomani Pic

Pale elytral markings white with very feeble golden reflections.

Pronotum with basal and apical white marginal bands.

Basal elytral band curved from the elytral base, not reaching scutellum and suture and less than twice as long as the distance that separates it from the posterior band.

Posterior elytral band reaching the sides of elytra.

Pronotum with its maximum width in the posterior fourth, evidently narrower apically than basally.

Elytra much less than three times as long as prothorax.

A further observation about the work of Gressitt & Rondon concerns the species *P. similis* Gressitt & Rondon, 1970. This species is described in comparison with the quite different *P. aurata* Gahan, 1906 rather than with its surely closer relative *P. cakli* Heyrovsky, 1967 from North Vietnam, whose description fits almost perfectly *P. similis*; such circumstance allows the supposition that Gressit & Rondon did not know the work of Heyrovsky (1967), so that we consider *P. similis* as a likely junior synonym of *P. cakli*.

Niphona (s.str.) pluricristata nov. sp.

Body and appendages black, richly clothed with adpressed brownish and whitish pubescence, so that the overall colour appears brownish-grey, on elytra with darker spots formed by tufts of brown pubescence on more or less developed tubercles, and with a faint oblique whitish-grey band behind middle. The first five antennal

joints mottled with greyish and brown, the following brownish, with faint whitish basal and apical rings. Head massive, vertex at each side with two feeble longitudinal elevations, inferior eye-lobe as high as gena. Antennae short, reaching backwards only the beginning of the posterior one third of elytra. Prothorax massive, half again as broad as long, subparallel-sided, with blunt antero-superior and antero-lateral tubercles, dorsally with six large, vermiculated and strongly elevated longitudinal ridges, the two median ones separated from one another through a very deep and rather narrow depression, the two lateral ridges of each side of the disc partially fused together but separated from the median ones through a very deep and broad depression. Elytra about 2,4 times as long as broad, with their maximum breadth at humeri, moderately but distinctly tapering in their basal two thirds, more strongly in the apical third. Elytral punctuation strong but rather sparse. The base of each elytron, at the level of the lat-

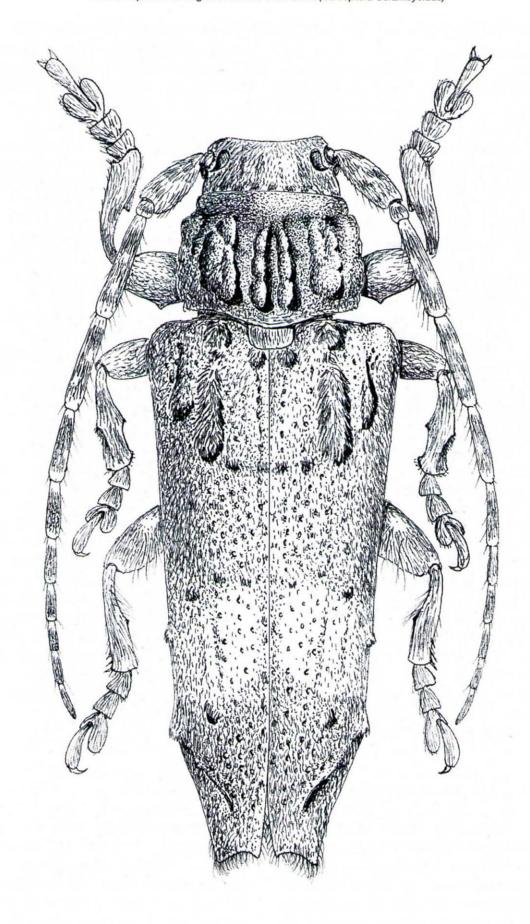


Fig. 2. Niphona (s. str.) pluricristata n. sp., Holotypus 3

eral pronotal ridges, with a tufted tubercle briefly followed by a very strong and high crest covered with a thick tuft of brown hairs, between this and the lateral margin with a smaller tufted crest; smaller tufted tubercles are also present immediately behind the scutellum, between the posterior margins of the strong basal crests and, more or less regularly arranged in oblique rows, on the posterior two thirds of elytra. Elytral apex obliquely and deeply excised, both sutural and external angles sharp, but not spined. Legs massive, front tibiae with very strong tooth-like projection near the middle of infero-external margin, middlle tibie with similar but less strong projection, hind femora with a tuft of long whitish hairs near the tip of the upper-internal surface.

Overall length: 17,9 mm.

Holotypus 3 (red label with indication of name and authors): China, Sichuan, Mt. Zhu Yu m 700, 5/14.V.1997 (printed label), local collector, preserved in the authors' collection (Milan).

This species resembles *N. fasciculata* (Pic, 1917) in the development of inferior eye-lobes, sculpture of pronotum and presence of strong crests covered with dark tufts of hairs on the basal portion of elytra, but, differently from this species, it has distinctly tapering elytra and obliquely excised, instead of transversely truncated, elytral apex.

Egesina (Cuphisia) digitata nov.sp.

Body black, posterior and anterior margin of prothorax brownish, elytra reddishbrown, irregularly spotted with black, antennae reddish with blackish scape, legs reddish with darker femora. Body and appendages with long raised pubescence, elytra with adpressed whitish pubescensce which forms a transverse band, not reaching suture, in the posterior third and with a tuft of black hairs wich covers a subbasal tubercle. Head slightly narrower than prothorax, with coarse and sparse punctuation, vertex slightly convex, eyes completely divided,

inferior eye lobes twice as high as gena. Antennae longer than body, reaching elytral apex with ninth joint, scape elongated and feebly clubbed, third joint one fourth longer than scape, the following joints regularly decreasing in length. All the antennal joints internally fringed with very long raised hairs. Prothorax as long as broad, slightly curved at sides, with a broad transverse depression near apex and a narrower one near base, prothoracic surface smooth and shining, with sparse and rather strong punctuation. Elytra with prominent shoulders, parallel-sided till apical fourth, conjointly rounded at tip. Each elytron near base with a strong subbasal tubercle in its internal third, behind this with a transverse depression in its basal one fourth. Femora rather massive, front tibiae slightly curved, middle and hind tibiae straight. Front tarsi with strong, almost digitiform process at the infero-internal apex of first and second joint.

Overall length: 5,8-6,3 mm.

Holotypus ♂ and Paratypus ♀ (red labels with indication of name and authors): China, Sichuan, Liziping env., 27.VI/3.VII. 1991, Ig. Kejval, (printed label), preserved in the authors' collection (Milan).

This species is easily characterized through the structure of the anterior tarsi. Through the presence of subbasal elytral tubercles (charcater of the subgenus *Cuphisia*) and the elytral markings, it might be superficially confused only with *E. (Cuphisia) guerryi* (Pic, 1926), which has however a much denser and laterally rugose punctuation on pronotum.

Asaperdina brunnea nov.sp.

Body black, with golden brown adpressed pubescence, relatively sparse on head, thorax and underside, denser on elytra, which appear therefore brownish, on scutellum and along the middle of pronotum, where it forms a vague and ill defined longitudinal band. Legs brownish with last tarsal joints reddish, antennae reddish with first joint brownish. A fairly long raised

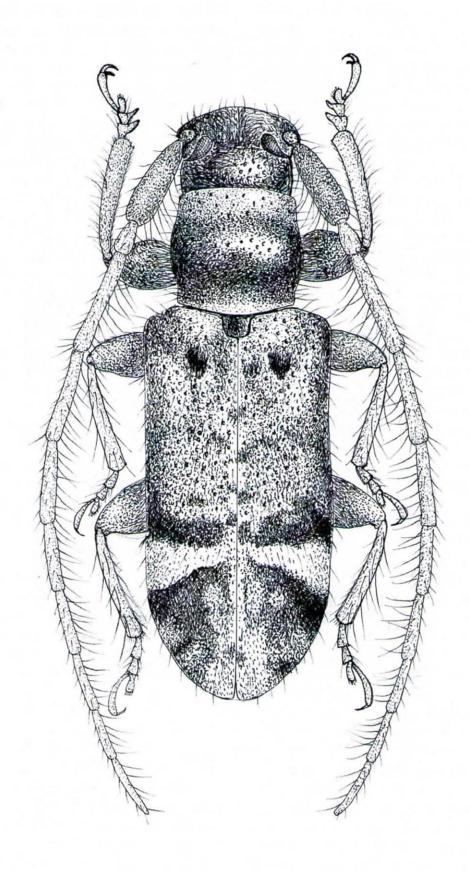


Fig. 3. Egesina (Cuphisia) digitata n. sp., Holotypus 🕉

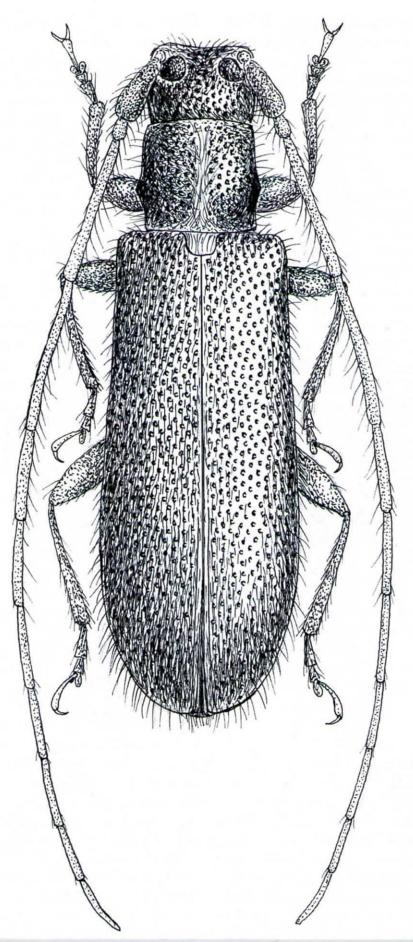


Fig. 4. Asaperdina brunnea n. sp., Holotypus ♀

pubescence is present on the upper parts of the body, on the first antennal joint and on the inner part of the following five antennal joints. Punctuation rather strong and moderately close on head, pronotum and most part of elytra, where the punctures are weaker and sparser, but still well marked, towards apex. Head slightly convex on occiput, slightly depressed on frons between the flattened antennal supports. Eyes coarsely faceted and deeply excised, inferior eye-lobe more than twice as high as gena. Antennae of one third longer than body, first antennal joint distinctly clubbed, less than half as long as third, this as long as fourth and almost twice as long as fifth. Prothorax as long as broad, almost parallel-sided, with very weak and obtuse lateral spine somewhat posteriorly to middle. Scutellum subparallelsided, transverse and broadly truncated at apex, elytra nearly twice as long as conjointly broad, very slightly and evenly widened to the beginning of posterior one third, subtruncate at apex. Legs slender, femora slightly clubbed.

Overall length: 7,3 mm.

Holotypus ♀ (red label with indication of name and authors): China, Shaanxi, Mt. Hue Shan, 17/22.VI.1991, Ig. Kejval, (printed label), preserved in the authors' collection (Milan).

This new species can be distinguished from the other so far known species of the genus as follows:

from A. regularis (Pic, 1923), which seems to be its closest relative, in having the antennae one third (rather than scarcely) longer than body, and the upper parts of the body with fairly strong and sparse, instead of very fine and close, punctuation;

from A. whiteheadi (Gressitt, 1940) through the black instead of reddish integument of head and prothorax, and through the shape of the lateral feeble prothoracic spine, widely obtuse instead of acute; from A. sordida (Gressitt, 1951) through the clubbed and much shorter antennal scape, which is less than half, instead of two-thirds as long as the third joint.

Thermistis sagittifera nov. sp.

Body black, covered by very thick adpressed, on different portions velvety black and yellow pubescence, integument of elytra under the yellow markings reddish brown, appendages black. Frons, pronotum and basal third of elytra with sparse erect hairs. Head black with large yellow spot on the whole frontal surface; inferior eye-lobes twice (3) or 0,85 times (\mathcal{P}) as long as gena measured from the inferior margin of eyes to the excision at the base of mandibles. Antenna uniformly black, slightly longer (♂) or slightly shorter (♀) than body. Prothorax half again broader than long, with strong and conical lateral spines; median portion of pronotum with a longitudinal smooth bump in the basal fourth; black hairs of pronotum rather sparse, not covering the very strong punctuation; intervals of the strong punctures convex and finely punctured. The yellow thick adpressed pubescence of prothorax covers the anterior two thirds of sides and prosternum, forming dorsally at each side a large spot extended from the dorsal surface of the lateral spines to the level of the internal margin of the eyes; basal portion of sides of pronotum with faint stripe formed by whitish grey, rather sparse adpressed pubescence. Scutellum widely rounded, in the middle portion with moderately thick adpressed whitish grey hairs. Elytra with prominent shoulders, uniformly rounded at apex, mainly covered with yellow densely adpressed pubescence, with black shoulders and with two relatively narrow transverse markings, formed by a pair of premedian and one of preapical slightly oblique black spots. Legs black, the inferior side of femora with sparse erect hairs and dense covering of adpressed yellow pubescence.

Overall length: 25,0 (♂)-30,5 (♀) mm.

Holotypus ♂ and paratypus ♀ (red labels with indication of name and authors): China, Sichuan, Daba Shan, 28.VI.1997, (printed label), local collector, preserved in the authors' collection (Milan).

The closest relatives of this new species seem to be *T. nigromacula* Hua, 1992 and *T. croceocincta* (Saunders, 1839); owing to its

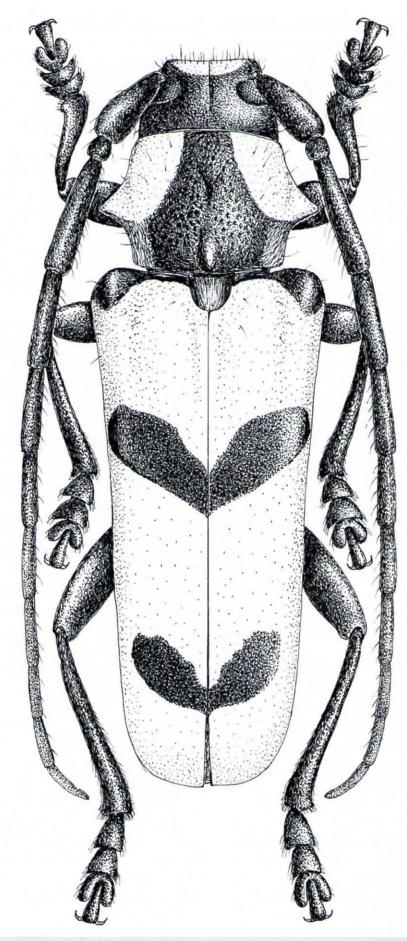


Fig. 5. Thermistis sagittifera n. sp., Holotypus 3

particularly widened elytral yellow pattern, it looks superficially like the Laotian subspecies *T. croceocincta reductesignata* Breuning, 1970 (but the yellow colour is

paler and less vivid). It can however be distinguished from the other so far known continental species of the genus through the following key:

Elytra with outer apical angles strongly and acutely spined. 30 mm. General sulphure on the sulphure of t	
 Elytra with outer apical angles obtuse, feebly spined or uniformly rounded Elytral pattern formed by a pair or subbasal discal, a pair of medio-latera medial and a pair of subapical reddish spots. 27 mm. Guangxi 	l2 al, a common
rubromacu	
Elytral pattern formed by broad, sometimes extremely widened yellow trans-	
 Antennae uniformly black. Elytra with outer apical angles uniformly rounded lobes shorter than gena in ♀♀ (measuring gena between eyes and the mandibular base) 	d. Inferior eye- e excision at
Antennae black with narrow whitish-grey annulations at apex and base Elytra with outer apical angles obtuse or feebly spined. Inferior eye-lobes than gena in ♀♀. 16-28 mm. Central and southern China, Vietnam, croceocincta (Sai	of each joint. slightly longer Laos, Assam
Lateral yellow bands of pronotum extended from base to apex but not lateral spines. Vertex with two yellow bands fused with the yellow fronto oration. Elytra with two very large common rounded black spots. 26-27,8	covering the o-clypeal col- 5 mm. Hunan
Lateral yellow band of pronotum limited to the anterior portion but covering spines. Vertex uniformly black. Elytra with two transverse common black formed by pairs of rather narrow and slightly olique spots. 25-30,5 mm. Sages	ing the lateral ack markings Sichuan

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