

Three new *Tenthredo* species from Yunan
(Hymenoptera: Tenthredinidae)

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Three new *Tenthredo* species from Yunan (Hymenoptera: Tenthredinidae) – Three new *Tenthredo* species as *T. elongatissima* sp. n., *T. yunanensis* sp. n. and *T. cylindriciformis* sp. n. are described here-
under and compared to *T. appendicella* Malaise, 1945, *T. cyanata* Konow, 1898, *T. flatopleura* Singh et
Saini, 1987, *T. cretata* Konow, 1898 and *T. cylindrica* Rohwer, 1911.

INTRODUCTION

The fauna of Yunan – one of the largest southern provinces of China – is a special mixture of East Palearctic and Oriental elements, although Yunan belongs to the Oriental zoogeographical region.

Malaise's (1945) key is the most important comprehensive study on the Tenthredinidae fauna of this region. Since 1945 only a few papers have been published on this topic. The book by Gangrou *et al.* (1992) is the most significant study on the Tenthredinid pests of China – including Yunan – which contains few *Tenthredo* species. Many new species of the above mentioned genus were described, mainly from the neighbouring India (Muche 1982, 1983; Singh 1985; Singh *et al.* 1985a, 1985b; Singh et Saini 1986, 1987a, 1987b, 1987c, 1988a, 1988b, 1988c; Togashi 1987) and some further species from Bhutan and Nepal (Muche 1983, 1986).

Here we describe three new species of the genus *Tenthredo* as a contribution to the knowledge of this very diverse group of sawflies.

DESCRIPTION AND DISCUSSION OF SPECIES

***Tenthredo elongatissima* sp. n.**

Female. Head, antennae, thorax black. Body very slender and very elongated. Head strongly contracted behind the eyes, hind margin with carina and deeply emarginated.

Head with minute, black and dense pubescence. Labrum large, elongated, rounded apically. Base of labrum with a brown spot. Labrum and clypeus with long, white pubescence about 2 times longer than diameter of front ocellus. Clypeal emargination 0.5 times as deep as its median length. Basal half of mandibles white, palpi whitish brown. Vertex and temples shining, densely, finely and uniformly punctured with small shining interspaces as large as the diameter of a puncture. OOL : POL : OCL = 2.6 : 1.0 : 1.5. Length of antenna/length of costa = 4/3. Proportions of antennal segments: 3rd 41: 4th 47: 5th 44: 6th 36: 7th 29: 8th 28: 9th 27. Pronotum and propleuron moderately shining, densely and very finely punctured. Pronotum with smooth and shining hind margin. Mesonotum dull, extremely finely and densely punctured without shining interspaces. Mesonotum with sparse and very short white pubescence. Scutellum convex, blunt, moderately shining and moderately roughly but uniformly punctured. Hairs of scutellum about as long as the diameter of front ocellus. Mesoscutellar appendage roughly punctured, dull with shining longitudinal keel. Metascutellum convex, shining with very sporadic deep punctures. Mesopleuron dull, densely and moderately roughly punctured without interspaces, obtusely, subpyramidally raised. Mesopleuron with short, white, moderately dense pubescence. Mesosternum moderately deeply and densely punctured, moderately shining, without thorn. Cenchri white. Length of cenchrus/ distance of the 2 cenchri = 7/12. Coxae, trochanters black, fore femora whitish brown with black outer surface. Fore tibiae and tarsi whitish brown, middle and hind legs black. Fore and middle tibiae and tarsi with very short, white and dense pubescence. Hind tibiae and tarsi with short, dense and black pubescence. Inner hind tibial spur/basitarsus = 29/56. Claws deeply incised. Abdomen black, dorsal surface with strong bluish luster. First abdominal tergum finely granulated, the remaining abdominal terga with fine transverse surface sculpture. Wings yellowish hyaline, costa light brown, basal 2/3 of stigma piceous, apical 1/3 light brown, venation black. Length: 13.0 mm. Length of fore wing: 10.5 mm.

Holotype female: Yulongshan Nat. Res., 50 km North of Lijang, China, 24–29. VI. 1993, E. Jednek and O. Sausa leg. The holotype is deposited in the Hungarian Natural History Museum Budapest.

Tenthredo elongatissima sp. n. runs to *T. appendicella* Malaise, 1945 in Malaise's (1945) key. Differences: *T. appendicella* is smaller, not longer than 9.0 mm, sides of abdominal terga 1st–6th and 4th tergum are entirely white and abdomen without bluish metallic luster.

Tenthredo cyanata Konow, 1898 also resembles *T. elongatissima* either but *T. cyanata* is robust, not slender and elongate, wide margin of pronotum, tegulae, labrum and clypeus, coxae, trochanters, femora, first and middle tibiae are white, mesopleuron is very flat with sharp carina on its lower part.

Its closest relative is *T. flatopleura* Singh et Saini, 1987, but latter is much smaller than *T. elongatissima*, not longer than 10.0 mm, clypeus is slightly emarginated, clypeal emargination is about 0.3 times as long as its median length, 5–6th serrulae of the saw-sheath of *T. flatopleura* with 14 minute teeth, and the ones of *T. elongatissima* with 4–7 larger teeth as shown in Figs 1 and 2.

***Tenthredo yunanensis* sp. n.**

Female. Head predominantly black. White: inner orbits, outer orbits to the half height of the eyes but with a narrow white patch directing up to the temples, face below antennae, genae, clypeus, labrum, mandibles except their black apices and narrow strip along-

side the hind occipital carina. Head behind the eyes subparallel, hind margin slightly emarginated with occipital carina. OOL : POL : OCL = 2.7 : 1.0 : 2.4. Clypeal emargination trapezoid, 0.4 times as long as median length. Antenna mainly black, white: 6–7th segments entirely, lower parts of 8–9th segments, 5th segment dominantly but with basal black stripe and narrow apices of 1st and 3rd segments. Antenna/costa length proportion = 24/25. Proportions of the lengths of antennal segments: 3rd 39: 4th 25: 5th 20: 6th 16: 7th 15: 8th 15: 9th 15. Pronotum black with white hind margin, propleuron, prosternum and tegulae white. Mesonotum black, scutellum black with large elliptic white spot, mesoscutellar appendage white, postnotum black, metascutellum white. Head, mesonotum and mesopleuron with short, white, dense pubescence about 2/3 times as long as the diameter of front ocellus. Cenchri white. Length of a cenchrus/distance of the two cenchri = 8/17. Upper 2/3 of mesopleuron white, lower 1/3 black. Mesopleuron subpyramidally raised. Mesosternum black. Legs brownish white, femora and tibiae with a longitudinal black line, although this line only slightly developed on middle tibiae. Claws moderately deeply incised, apical tooth longer than subapical one. Ventral abdominal segments smudgy white, their basal part brown. First abdominal tergum black. Abdominal terga from 2nd to 5th gradually turning from black to reddish brown. 2nd tergum only with apical reddish-brown triangular patch, 5th tergum mainly reddish brown with two lateral black spots. 6–9th terga including ovipositor reddish brown. Wings yellowish hyaline, costa and stigma brown, venation black. Length: 11.5 mm. Length of fore wing: 9.5 mm.

Holotype female: Gaoligongshan Nat. Res., 100 km West of Baoschan, China, 14–21. VI. 1993, E. Jednek and O. Sausa leg. The holotype is deposited in the Hungarian Natural History Museum Budapest.

The new species runs to *Tenthredo cretata* Konow, 1898 in Malaise's (1945) key but latter has 2nd–5th abdominal segments entirely red, its mesopleuron is black with two white spots and apical abdominal segments (6–9th) are also black. *T. cretata* is a larger species 13.5–16.0 mm.

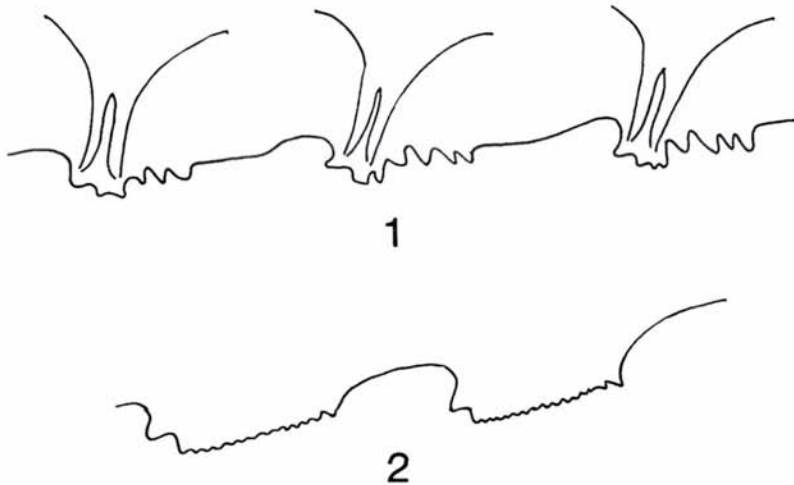


Fig. 1.: Basal 5–7th serrulae of *Tenthredo elongatissima* sp. n. (original)

Fig. 2.: Basal 5–6th serrulae of *Tenthredo flatopleura* Singh et Saini (after Singh et Saini 1987a)

Tenhtredo cylindriformis sp. n.

Female. Head mainly light brown. White: labrum, clypeus, scape, pedicely, palpi, narrow inner orbit, outer orbit, gena, head behind its hind occipital carina. Black: apices of mandibles, two corner-like patterns from the lateral ocelli turning back at the inner orbits to the occipital carina, supraantennal grooves and a little spot above antennae. Head and thorax densely covered with short yellowish pubescence, about 1/4 times as long as the diameter of front ocellus on the head and 2/3 times as long as the diameter of front ocellus on the mesonotum. Vertex and temples shining, moderately deeply and densely punctured with shining interspaces about as large as the diameter of a puncture. Head widened behind the eyes, hind margin moderately deeply emarginated with occipital carina. Clypeus roundly and shallowly emarginated, emargination about 0.2 times as long as median length. OOL : POL : OCL = 3.2 : 1.0 : 3.2. Antenna/costa = 53/75. Proportions of the lengths of antennal segments: 3rd 43: 4th 28: 5th 23: 6th 19: 7th 18: 8th 16: 9th 15. Pronotum, propleuron, prosternum, tegulae white, pronotum and propleuron with narrow black line. Front lobes of mesonotum light brown with black rectangular spot at their fore margin. Lateral mesonotal lobes brown, each with larger and smaller elliptic black spot. The larger spots cover the major part of lateral lobes. Lateral steep sides of mesonotal lobes white. Mesonotum extremely densely and finely punctured, nearly dull. Pronotum and propleuron punctured as mesonotum but little more shining. Mesopostnotum white with black spot below mesoscutellar appendage and with further two smaller spots around each cenchrus. Mesoscutellar appendage and metascutellum connected with white longitudinal keel. Scutellum, mesoscutellar appendage white, scutellum with black hind margin. Mesoscutellum pyramidally raised with longitudinal median keel, moderately roughly and moderately deeply punctured, shining, with interspaces about 1–3 times as large as a puncture. Pubescence of mesonotum long and white and about as long as the diameter of front ocellus. Mesoscutellar appendage shining, with 18 smaller or larger moderately deep punctures, some of them very large and connected to each other. Metascutellum brown, shining, with sporadic minute punctures. Cenchri light brownish white. Mesopleuron and mesosternum white with black line where connected with propleuron and prosternum. Two rectangular black spots join this line at the lower part of mesopleuron. In front of them, further little black spots at each hind angle of mesopleuron. Mesopleuron pyramidally raised, dull, with very shallow and undefined surface sculpture. Mesosternum dull, moderately deeply and densely wrinkled. Coxae, trochanters, femora, tibiae, tarsi white. Femora and tibiae with black line. Tarsal segments with black apical spots. Inner hind tibial spur/basitarsus = 32/55. Claws bifid, moderately deeply incised, subapical tooth little shorter. Wings yellowish hyaline, radial and cubital cells darker yellow. Costa and stigma light brown, venation, including subcosta, black. First four ventral abdominal segments light whitish brown, the others white. First abdominal tergum smooth and shining, white with basal black and brown stripe, divided in the middle but without triangular patch. Terga 2nd–9th with very fine and very dense surface sculpture. 2nd and 3rd abdominal segments narrower than the others (subg. Tenthredina). Second tergum brown with wider basal and narrower hind black stripe. 3rd and 9th abdominal terga white. 4–7th terga white, each with two lateral suffused, brown, subtriangular patch. 8th tergum dominantly white with narrow basal black line and with basal brown patches. Ovipositor white, rounded with light brown margin. Two apical terga covered with white hairs about as long as the diameter of front ocellus. Hypopygium emarginated as in Fig. 3. Length: 17.0 mm. Length of fore wing: 14.0 mm.

Holotype female: Guidong env., China, 26–31. V. 1994, E. Jednek and O. Sausa leg. The holotype is deposited in the Hungarian Natural History Museum Budapest.

The new species is a very close relative of *Tenthredo cylindrica* Rohwer, 1911 but latter has a H-shaped black pattern on the temples, black mesosternum and flat hypopygium as shown in Fig. 4.

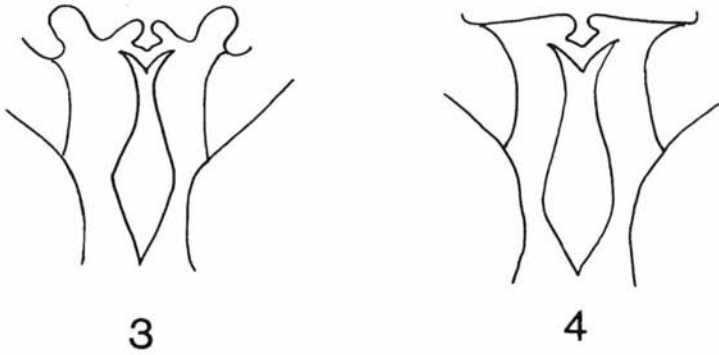


Fig. 3.: Hypopygium of *Tenthredo cylindriformis* sp.n. (original)

Fig. 4.: Hypopygium of *Tenthredo cylindrica* Rohwer (original)

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