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Six New Species of *Tenthredo* LINN. from the Western Himalayas

(Insecta, Hymenoptera, Symphyta, Tenthredinidae)

With 29 Figures

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Abstract. Six new species of *Tenthredo* are reported from India, i. e. *T. narkandai*, *T. petiolata*, *T. malaisei*, *T. choptai*, *T. trenchata* and *T. yuasai*. Apart from illustrating the genitalia, the new species have been distinguished from already reported related congeners. The population variation, if any, has also been discussed.

Introduction

MALAISE's (1945) comprehensive study on southeast Asian *Tenthredo* brought together all of the previously scattered work on this genus and is still the most exhaustive study available. He added 18 new species to the Indian fauna. The only additional works since MALAISE are that by MUCHÉ (1982, 1983) who described an additional three species from India. In this paper, one of a series of papers on Indian *Tenthredo*, six new species are described. The terminology follows that of ROSS (1937, 1945) and MALAISE (1945). Holotypes and paratypes will be deposited in the IARI, PUSA National Collection, New Delhi, India.

Tenthredo narkandai sp. n. (Figs. 1, 2, 8, 14, 19, 24)

Female Average length, 12.6 mm. Body pale to sordid green, black are: antenna except inner side of scape; mandible tip; median fovea; spot on lateral side of frontal area reaching hypothetical hind margin of head and connected with inner eye margin through narrow stalk; furrow separating supraantennal tubercle from frontal ridge; narrow stripe encircling each ocellus; most of posterior side of head except spot behind postocellar area; medial transverse stripe on pronotum; seams of mesonotum; mesonotal middle lobe except V-shaped margin and lateral lobe except roughly J-shaped spot; metanotum except spot lateral to cenchrus; hind margin of metapostnotum; oblique band from anterodorsal angle of mesepisternum to mesosternal thorn; propodeum except deflexed sides and posterior margin; broad subtriangular spot along anterior margins of terga 2-8 and narrow basal margin of 9; stripe along trochanters, femora, pro- and mesotibiae and tarsi posteriorly; two stripes on metacoxa; metatibia and tarsus entirely. Forewing uniformly subinfuscated, hind one clear, costa and stigma pale brown, venation dark brown to black.

Antenna slightly compressed, 2.0x head width, segments 3 and 4 in ratio 5:4; clypeus (Fig. 1) roundly emarginate upto $1/6$ of its medial length; labrum broader than long in ratio 3:2, slightly broadening towards distal end with deflexed and roundly pointed anterior margin; malar space 1.5x diameter of lateral ocellus; LID IDMO EL = 2.0 3.2 2.4; OOL POL OCL = 4.4 1.0 3.8; frontal area below level of eyes; supraantennal tubercle distinctly raised and separated from similar frontal ridge by deep furrow; median fovea narrow and faintly carinate; circumcellular furrow deep, inter- and postocellar ones indistinct; lateral furrow narrow and sunken; postocellar area flat, broader than long in ratio 5:4; head distinctly narrowing behind eyes; ITD ICD = 2.9 1.0; mesoscutellum pyramidly raised

with acute apex; appendage faintly carinate; mesepisternum obtusely raised with compressed apex, bluntly carinate along mesosternal border; mesosternum having short and flattened thorns; apical tooth of claw (Fig. 8) longer than subapical; metabasitarsus shorter than following 3 joints combined; metafemur shorter than tibia.

Head minutely and shallowly punctured with faint microsculpture; mesonotum and scutellum punctured like head, but more densely; appendage with minute punctures; metanotum and scutellum with few shallow punctures; mesepisternum and sternum minutely wrinkled with sebaceous lustre; abdomen faintly microstriated.

Lancet (Fig. 24) with 23 serrulae, each serrula having single lobe-like anterior and 11–14 irregular posterior subbasal teeth.

Male Average length, 11.8 mm. Similar to female except: black spots of abdomen less distinct; metatibia with green stripe anteriorly; clypeus more narrowly incised (Fig. 2). Penis valve (Fig. 14) and gonoforceps (Fig. 19).

Holotype Female, Himachal Pradesh, Narkanda, 2080 m, 25. 5. 1984. — **Paratypes** 11 ♀♀, 13 ♂♂, with same data as holotype. 2 ♀♀, 1 ♂, Uttar Pradesh, Chopta, 3000 m, 15.–16. 6. 1985.

Population variation Narrow black stripe along posterior margins of meso- and metascutelli.

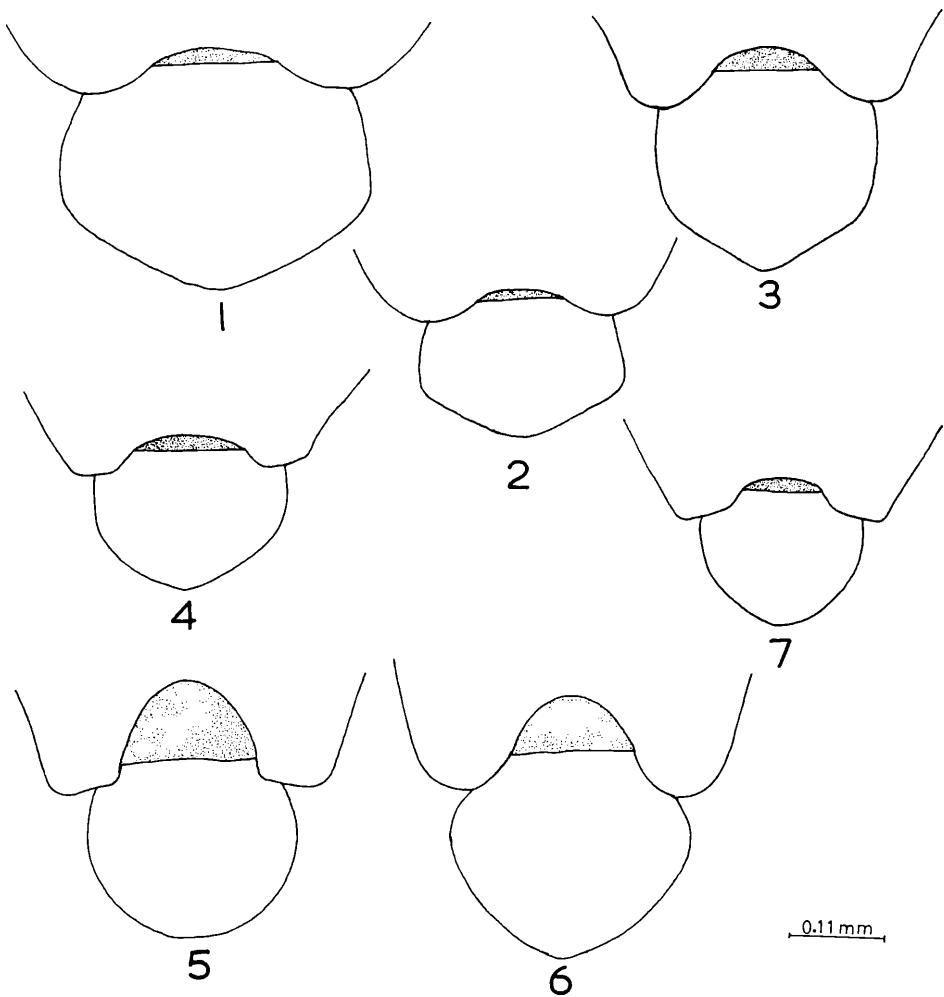
Remarks This new species shows similarity with *T. insulicola* TAKEUCHI, 1927 and *T. pseudoprasina* MALAISE, 1945. However, it can be distinguished from both of them on account of possessing flagellum entirely black, frontal spot narrowly touching eye margin, mesosternum pale green, abdomen pale with black markings on upperside, antenna longer than head and thorax combined, clypeus without longitudinal furrow and head distinctly narrowing behind eyes. In *T. insulicola* frontal spot broadly touches eye margin, mesosternum is black, upperside of abdomen is uniformly black with bluish tinge and clypeus has distinct longitudinal furrow. In *T. pseudoprasina* underside of flagellum is pale, antenna is distinctly shorter than head and thorax combined and head is not narrowing behind eyes.

Etymology The species name is based on its type locality

***Tenthredo petiolata* sp. n. (Figs. 3, 9, 15, 20, 25)**

Female Average length, 13.9 mm. Body fulvous to reddish yellow, pale are: basal half of mandible; nebulous spot on labrum; supraclypeal area; narrow stripe along lower half of inner orbit; tip of supraantennal tubercle; bulge of frontal ridge except narrow transverse band; spot on lower hind orbit; dorsal and ventral angles and narrow lateral margin of pronotum; small spot on mesonotal lateral lobe near apex of middle lobe; depressed area lateral to meso- and metascutelli; metapostnotum except narrow posterior margin; mesepimeron and large spot near pleural suture on episternum; metapleuron; medial spot on propodeum; lateral spots on all terga; medial spot on sterna 6 and 7. Black are flagellum; extreme tip of mandible; stripe along supraclypeal furrow; narrow stripe encircling supraantennal pit; spot in front of median ocellus; medial transverse stripe on pronotum without reaching lateral aspect; seams of mesonotum; most of metanotum and scutellum; posterior margin of metapostnotum; narrow stripe along each pleural suture; longitudinal lateral band on propodeum; proximal angles of coxae and stripe on frontside of metacoxa; posterior spots on trochanters; stripe on profemur, apical $\frac{3}{4}$ of mesofemur, metafemur, pro- and mesotibiae, posteriorly; inner and outer stripes along basal $\frac{1}{4}$ of metatibia. All tarsal joints infumated towards tips. Wings yellowish hyaline, fore one subinfuscated towards apex without sharp limit, costa and stigma reddish brown, venation brown to black.

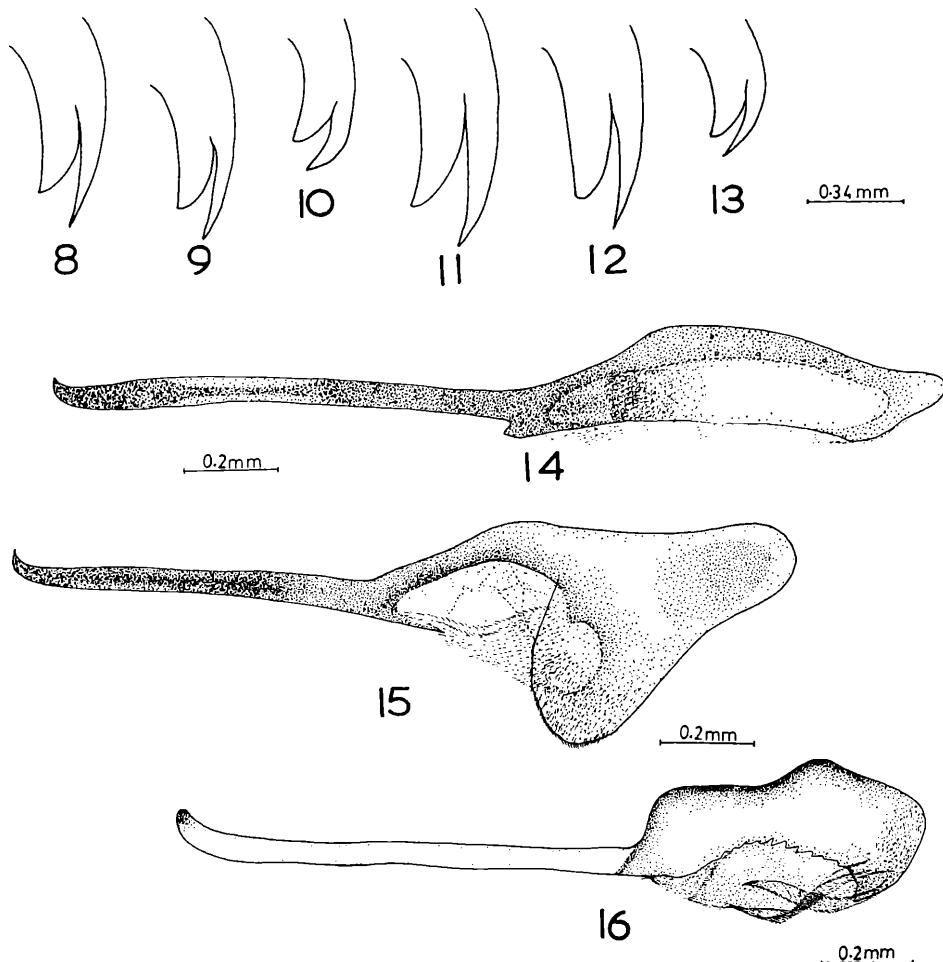
Antenna distinctly incrassate before apex, 1.5x head width, segments 3 and 4 in ratio 2:1 clypeus (Fig. 3) roundly incised upto $\frac{1}{5}$ of its medial length; labrum as long as broad with subacuminate anterior margin; malar space 0.8x diameter of lateral ocellus; LID IDMO EL = 2.0 3.8 3.6; OOL POL OCL = 3.0 1.0 2.2; frontal area slightly below level of



Figs. 1-7 Clypeus. 1: *T. narkandai* sp. n. (♀) - 2: *T. narkandai* sp. n. (♂) - 3: *T. petiolata* sp. n. - 4: *T. malaisei* sp. n. - 5: *T. choptai* sp. n. - 6: *T. trenchata* sp. n. - 7: *T. yuasai* sp. n.

eyes; supraantennal tubercle moderately raised and confluent with similar frontal ridge; median fovea shallow with faint longitudinal carina; circum-, inter- and postocellar furrows clear; lateral furrow deep, slightly diverging posteriorly; postocellar area subconvex, broader than long in ratio 8:5; head slightly narrowing behind eyes; ITD ICD = 2.5:1.0; mesoscutellum subgibbose; appendage bluntly carinate; mesepisternum obtusely raised without acute apex or carina; mesosternum lacking thorns; apical tooth of claw (Fig. 9) longer than subapical; metabasitarsus shorter than following 3 joints combined; metafemur as long as tibia.

Head faintly and minutely wrinkled with fine and scattered punctures, more dense on hind orbit; mesonotum with deep and irregularly scattered punctures of varying size, triangular apex of middle lobe impunctate; mesoscutellum shallowly punctured on anterior slope, with deep punctures on posterior; appendage polished; metanotum and scutellum impunctate; mesepisternum minutely punctured and having large, deep and isolated punctures along convexity; mesosternum punctulate; propodeum polished, remaining terga minutely punctured.



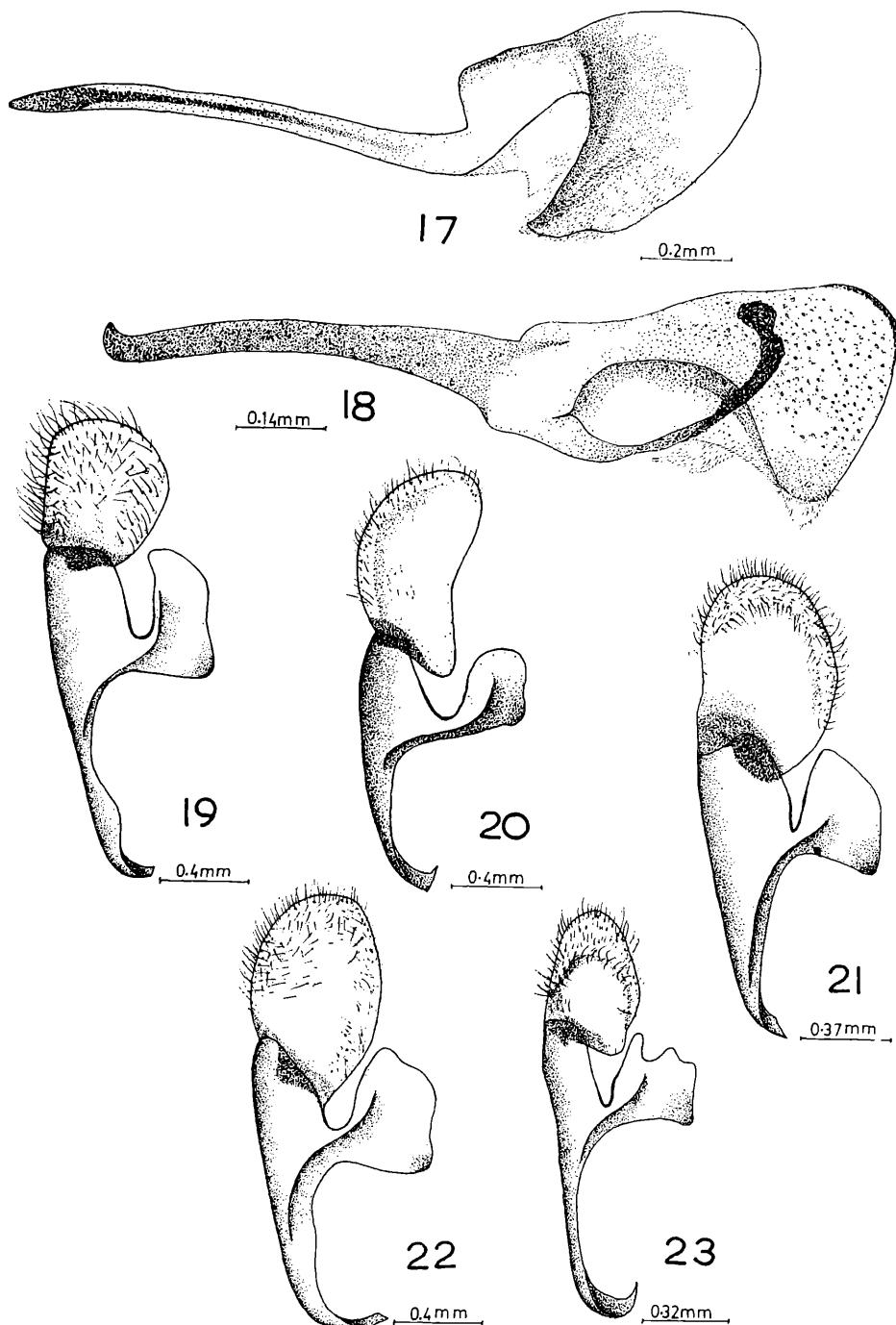
Figs. 8–13. Tarsal claw. 8: *T. narkandai* sp. n. — 9: *T. petiolata* sp. n. — 10: *T. malaisei* sp. n. — 11: *T. choptai* sp. n. — 12: *T. trenchata* sp. n. — 13: *T. yuasai* sp. n. — Figs. 14–16. Penis valve. 14: *T. narkandai* sp. n. — 15: *T. petiolata* sp. n. — 16: *T. choptai* sp. n.

Lancet (Fig. 25) with 25 serrulae, each serrula is shallow having 2 anterior and upto 12 posterior subbasal teeth.

Male Average length, 11.8 mm. Similar to female except: pale colour more distinct and also covers face below antenna, inner and hind orbits, temple, lateral spot on postocellar area, sagittate apex of mesonotal middle lobe, anterior slope of mesoscutellum, most of metanotum, pleura and sterna entirely except narrow stripes along pleural sutures; median fovea black and connected through narrow stripe with spot lateral to frontal ridge; metascutellum without black. Penis valve (Fig. 15) and gonoforceps (Fig. 20).

Holotype Female, Uttar Pradesh, Mandal, 2300 m, 13. 6. 1983. — **Paratypes** 20 ♀♀ and 28 ♂♂, with same data as holotype. 1 ♂, Himachal Pradesh, Kasol, 2000 m, 28. 5. 1984.

Population variation Each mesonotal lobe with large black spot, more prominent in male; most of mesosternum black; black lateral spots on abdominal terga (faint or distinct); meso- and metascutelli entirely pale.



Figs. 17-18. Penis valve, 17: *T. trenchata* sp. n. - 18: *T. yuasai* sp. n. - Figs. 19-23. Gono-forceps. 19: *T. narkandai* sp. n. - 20: *T. petiolata* sp. n. - 21: *T. choptai* sp. n. - 22: *T. trenchata* sp. n. - 23: *T. yuasai* sp. n.

R e m a r k s This new species is closely related to *T. matsumurai* TAKEUCHI, 1932. But it can be set aside from the latter on account of possessing black flagellum, less yellow on meso- and metanotum, legs striped with black, antenna thicker and stouter, clypeus shallowly emarginate, head distinctly punctured and mesepisternum with mixture of minute and deep punctures. In *T. matsumurai* flagellum is reddish brown, most of meso- and metanotum is yellow, legs are pale orange without black, antenna is comparatively weak, clypeus is deeply emarginate and head and mesepisternum are polished.

E t y m o l o g y The species name pertains to its abdomen which has an inclination towards petiolate condition.

***Tenthredo malaisei* sp. n. (Figs. 4, 10, 26)**

F e m a l e Length, 8.2 mm. Body black, yellowish are mandible except tip; labrum and clypeus; spot at tip of supraantennal tubercle; lower hind orbit; dorsal and ventral angles and narrow posterior margin of pronotum; tegula; lateral spot on appendage; medial spot on metapostnotum; seam and narrow hind margin of propodeum; deflexed sides of all terga and irregular spots on sterna. Legs reddish yellow, black are: proximal angles of pro- and mesocoxae; metacoxa except tip; distal half of metatibia and tarsus entirely. Pro- and mesotibiae and tarsal joints infuscated towards tips. Forewing light yellowish hyaline, hind one clear, stigma and venation dark brown.

Antenna faintly compressed, 3.0x head width, segment 3 slightly shorter than 4; clypeus (Fig. 4) roundly incised upto of its medial length; labrum broader than long in ratio 4:3, with roundly pointed anterior margin; malar space equal to diameter of lateral ocellus; LID IDMO EL = 2.0 3.4 3.4; OOL POL OCL = 3.3 1.0 2.0; frontal area slightly below level of eyes; supraantennal tubercle moderately raised and confluent with similar frontal ridge; median fovea shallow circum-, inter- and postocellar furrows shallow but distinct; lateral furrow narrow and deep; postocellar area slightly raised, broader than long in ratio 7:4; head narrowing behind eyes; ITD ICD = 2.7 1.0; mesoscutellum roundly raised; appendage carinate; mesepisternum distinctly raised with short carina at apex; mesosternum lacking thorns but distinctly cornered; apical tooth of claw (Fig. 10) longer than subapical; metabasitarsus shorter than following 3 joints combined; metafemur longer than tibia.

Head and mesonotum shining with minute and shallow punctures; mesoscutellum with large, shallow and widely separated punctures; appendage wrinkled; metanotum and scutellum impunctate; mesepisternum rugose, more so along convexity; mesosternum punctulate; propodeum polished, remaining terga faintly microstriated.

Lancet (Fig. 26) with 21 serrulae, each serrula is deep and lobe-like, having 3-4 irregular anterior and about 3 distinct posterior subbasal teeth.

M a l e Unknown.

H o l o t y p e Female, Himachal Pradesh, Kalatop, 2550 m, 25. 1984. — Paratype: No.

R e m a r k s This new species exhibits definite relationship with *T. appendicella* MALAISE, 1945. However, it is easily differentiated from the latter on account of possessing black scape and pedicel, yellowish spot at tip of supraantennal tubercle, ventral angle of pronotum and deflexed sides of terga, distal half of metatibia and entire tarsus black, apical tooth of claw longer than subapical and lancet with 21 serrulae. In *T. appendicella* scape and pedicel are reddish yellow (in female), tip of supraantennal tubercle, ventral angle of pronotum and deflexed sides of terga are black, metatibia and tarsus are reddish yellow, apical tooth of claw is shorter than subapical and lancet has 26 serrulae.

E t y m o l o g y This species has been named in honour of the late Dr. R. MALAISE for his invaluable work on sawflies, particularly of southeast Asia.

***Tenthredo choptai* sp. n. (Figs. 11, 16, 21, 27)**

Female Average length, 12.1 mm. Antenna reddish brown except scape, pedicel and outerside of segment 3 which are black. Body black, pale yellowish are mandible except apex; face below antenna leaving narrow stripe along base of labrum; broad lower half and narrow upper half of inner orbit; lower $\frac{2}{3}$ of hind orbit; very narrow stripe along head carina; pronotum except irregular medial transverse stripe; tegula; spot lateral to mesoscutellum on mesonotal lateral lobe; broad lateral spots on meso- and metascutelli and ridges lateral to them; appendage; spot on metanotum lateral to scutellum; metapostnotum except narrow hind margin; mesopleuron except stripe along pleural suture and broad oblique band along convexity; metapleuron except stripe along pleural suture; mesosternum; deflexed sides and stripe along hind margins without reaching lateral aspect on terga 1-6; all sterna. Legs yellowish, black are posterior stripe along mesocoxa, all trochanters and femora; two stripes on metacoxa. Tip of abdomen from middle of segment 7, metafemur, all tibiae and pro- and mesotarsi, reddish brown. Wings yellowish hyaline, fore one subinfumated towards apex, costa and stigma fulvous, venation brown to black. Antenna comparatively weak, filiform, 2.4x head width, segments 3 and 4 in ratio 5:4; clypeus (Fig. 5) roundly to subsquarely incised upto $\frac{1}{2}$ of its medial length with truncate lateral teeth; labrum broader than long in ratio 6:5, with rounded anterior margin; malar space 2.5x diameter of lateral ocellus; LID IDMO EL = 2.0 2.8 2.3; OOL POL OCL = 3.7 1.0 2.4; frontal area below level of eyes; supraantennal tubercle distinctly raised, sloping back and merging into insignificant frontal ridge; median fovea broad with pit between supraantennal tubercles; circumocellar furrow absent, inter- and postocellar ones sharp; lateral furrow deep and slightly diverging posteriorly; postocellar area subconvex with faint indication of longitudinal carina, broader than long in ratio 5:3 at maximum width; head narrowing behind eyes; ITD ICD = 3.5 1.0; mesoscutellum moderately raised with faint longitudinal carina; appendage carinate; mesepisternum obtusely raised with short carina at apex; mesosternum having small but distinct thorns; apical tooth of claw (Fig. 11) longer than subapical; metabasitarsus shorter than following 3 joints combined; metafemur as long as tibia.

Head densely and strongly punctured with faint microsculpture, hind orbit shining with minute punctures; mesonotum and scutellum densely and minutely punctured; appendage, metanotum and scutellum with shallow but distinct punctures; mesepisternum having dense and shallow punctures alongwith sebaceous lustre; mesosternum distinctly punctulate; abdomen strongly microstriated.

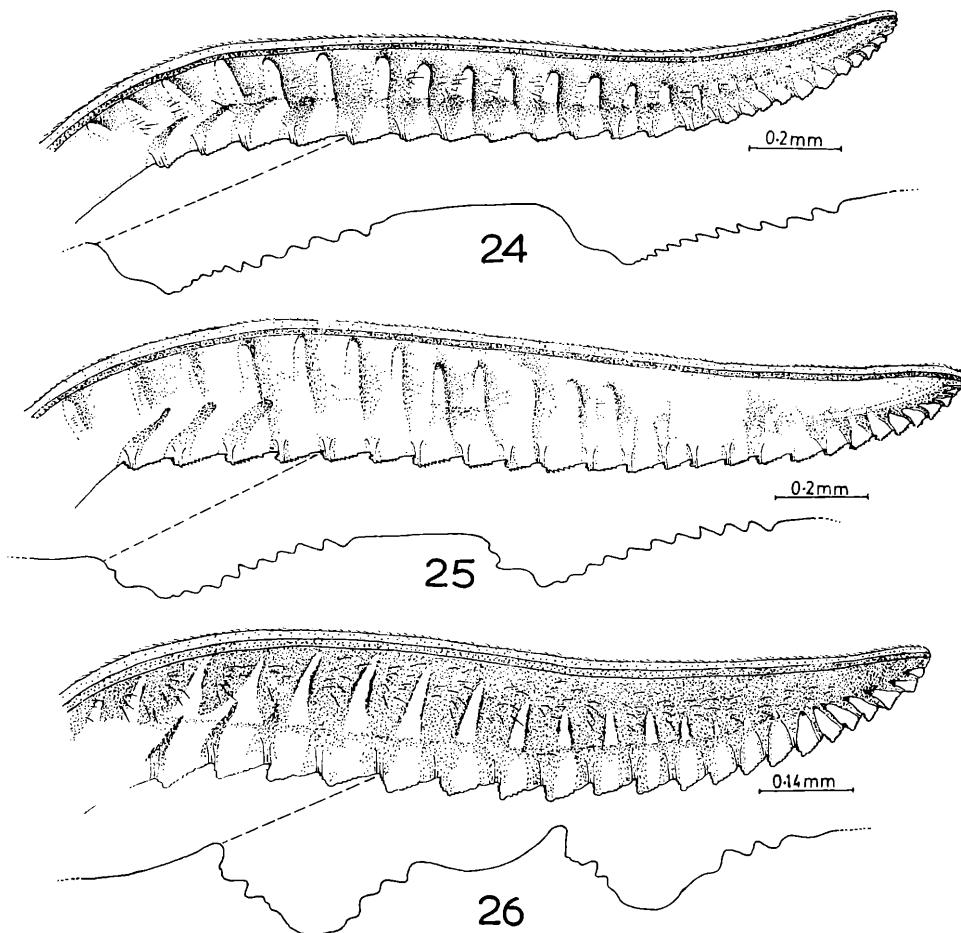
Lancet (Fig. 27) with 22 serrulae, each serrula having single anterior and 2-3 small and 5-6 distinct posterior subbasal teeth.

Male Average length, 10.8 mm. Similar to female except complete black stripe along supraclypeal furrow; abdominal terga 2-6 fulvous except narrow black stripe along base. Penis valve (Fig. 16) and gonoforceps (Fig. 21).

Holotype Female, Uttar Pradesh, Chopta, 3000 m, 14.6.1983. — **Paratypes** 9♀, 1♂, with same data as holotype. 2♂, Himachal Pradesh, Shoja, 2500 m, 25.5.1984.

Remarks This new species is a distant relative of *T. cyanocephala* MALAISE, 1945. However, it is distinguished from the latter on account of having body without metallic lustre, mesopleuron and sternum yellowish except oblique band, apex of forewing faintly subinfumated and mesoscutellum moderately raised without acute apex. In *T. cyanocephala* head and thorax have distinct metallic lustre, mesopleuron and sternum are entirely black, apex of forewing is strongly infuscated with distinct limit and mesoscutellum is acutely pyramidal.

Etymology The species name has been taken from its type locality.

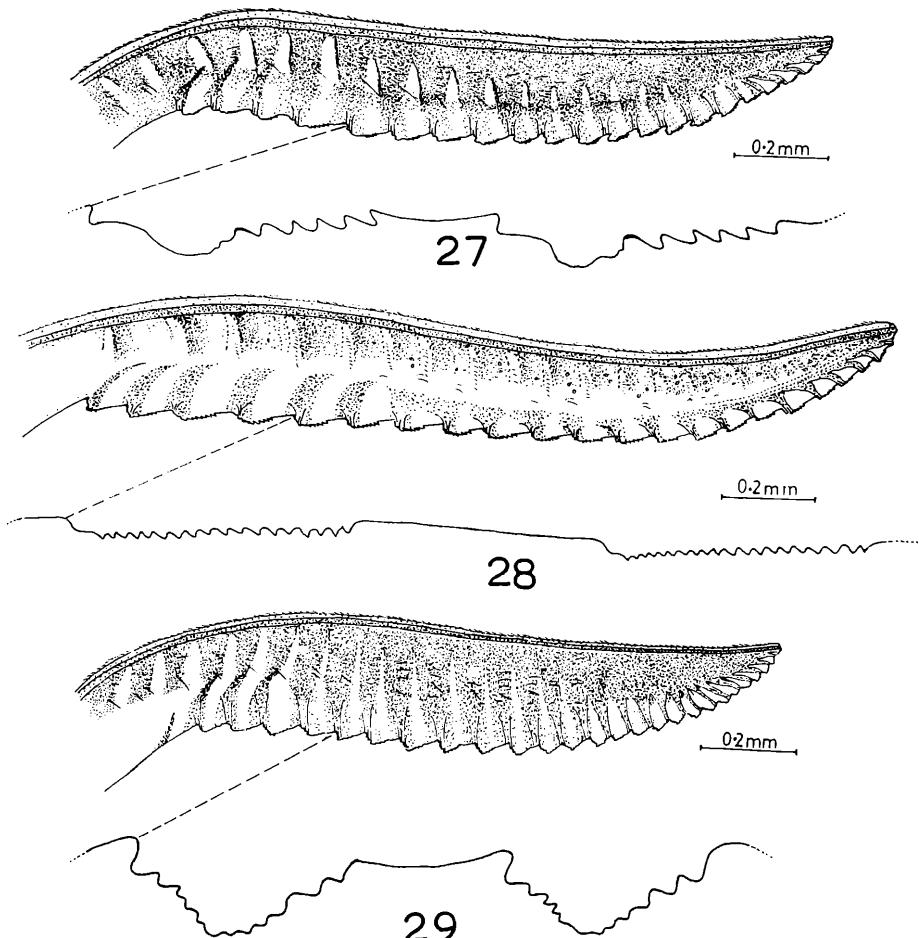


Figs. 24–26. Lancet. 24 *T. narkandai* sp. n. — 25: *T. petiolata* sp. n. — 26: *T. malaisei* sp. n.

***Tenthredo trenchata* sp. n. (Figs. 6, 12, 17, 22, 28)**

F e m a l e Average length, 14.5 mm. Head yellowish, black are: antenna; mandible tip; broad frontal spot anteriorly covering median fovea leaving extreme tip of supraantennal tubercle, laterally reaching (without touching) eye margin and posteriorly reaching hypothetical hind margin of head; postocellar area; broad spot on upper hind orbit narrowly connected with frontal spot; most of posterior side of head. Thorax black, yellowish are: dorsal angle and posterior margin of pronotum; tegula; meso- and metascutelli except spots on posterior slopes; appendage; metapostnotum; one spot each on anterior and posterior aspects of mesepisternal convexity and its posteroventral angle; metepisternum. Abdomen and legs yellowish to fulvous, black are: lateral irregular spots on terga 1–6; terga 7–9 entirely; posterior stripe along trochanters, distal $\frac{3}{4}$ of profemur, meso- and metafemora and distal $\frac{1}{3}$ of metatibia; two stripes on mesocoxa; metacoxa entirely. Forewing yellowish hyaline, its apex distinctly infuscated without reaching stigma, hindwing clear, costa and stigma fulvous, venation dark brown to black.

Antenna filiform, 2.7x head width, segments 3 and 4 in ratio 6:5; clypeus (Fig. 6) roundly incised up to $\frac{1}{2}$ of its medial length; labrum broader than long in ratio 6:5 with roundly pointed anterior margin; malar space 1.6x diameter of lateral ocellus; LID IDMO EL = 2.0 2.8 2.4; OOL POL OCL = 4.2 1.0 3.1; frontal area below level of eyes; supra-



Figs. 27–29. Lancet. 27 *T. choptai* sp. n. – 28: *T. trenchata* sp. n. – 29: *T. yuasai* sp. n.

antennal tubercle distinctly raised, sloping back and merging into insignificant frontal ridge; median fovea broad, carinate in anterior half; circumocellar furrow indistinct, inter- and postocellar ones clear; lateral furrow sharp, excurred; postocellar area with faint indication of longitudinal carina, broader than long in ratio 3:2 at maximum width; head slightly narrowing behind eyes; ITD ICD = 3.3 1.0; mesoscutellum slightly raised; appendage carinate; mesepisternum distinctly elevated with short carina at apex; mesosternum having short and blunt thorns; apical tooth of claw (Fig. 12) longer than subapical; metabasitarsus shorter than following 3 joints combined; metafemur slightly longer than tibia.

Head distinctly microsculptured and densely covered with large punctures which are confluent in frontal region and minute on hind orbit; mesonotum and scutellum densely and minutely punctured alongwith microsculpture; appendage having large, shallow and confluent punctures; metanotum and scutellum with few shallow punctures; mesepisternum rugose, more so along convexity; mesosternum punctulate and with faint microsculpture; abdomen uniformly microstriated with some scattered punctures.

Lancet (Fig. 28) with 23 serrulae, each serrula is flat, having single anterior and innumerable small posterior subbasal teeth.

Male Length, 13.8 mm. Similar to female except fulvous spot on ventral angle of pronotum; most of mesosternum and terga 2–5 except small lateral spot along basal margin, fulvous; black posterior stripe along profemur complete. Penis valve (Fig. 17) and gono-forceps (Fig. 22).

Holotype Female, Uttar Pradesh, Mandal, 2300 m, 20. 6. 1983. — **Paratypes** 4 ♀♀, with same data as holotype. 1 ♂, Himachal Pradesh, Ahla, 2000 m, 13. 7. 1984.

Remarks This new species joins the group having forewing with distinctly infuscated apex and comes close to *T. genitalis* MALAISE, 1945 and *T. fuscoterminata* MARLATT, 1898. However, it is differentiated from both of them on account of having black tip of abdomen, reddish yellow metatarsus, clear apex of hindwing, roundly incised clypeus, roundly raised mesoscutellum and mesepisternum without flattened apex. In *T. genitalis* tip of abdomen is not black, metatarsus is black, apex of hindwing is distinctly infuscated and mesoscutellum is acutely triangular. In *T. fuscoterminata* bottom of clypeal incision is truncate, mesepisternum has flattened apex and mesoscutellum is acutely pyramidal.

Etymology The species name pertains to deep trench-like clypeal incision.

***Tenthredo yuasai* sp. n. (Figs. 7, 13, 18, 23, 29)**

Female Average length, 9.5 mm. Body black, pale to sordid yellow are mandible except tip; face below antenna; lower half of hind orbit; supraantennal tubercle; triangular spot on temple touching eye; dorsal angle and anterolateral margin of pronotum; tegula; meso- and metascutelli; appendage; broad stripe along pleurosternal boundary; small medial and large lateral spot along hind margins of terga 2–8; tip of abdomen; irregular spots on sterna 4 and 7. Legs yellowish except spot at base of meso- and metafemora and outer stripe on metacoxa, black. Tips of pro- and mesotarsal joints and metatarsus entirely, reddish brown. Wings clear, stigma and venation dark brown.

Antenna compressed in apical half, 3.0x head width, segments 3 and 4 in ratio 4:5; clypeus (Fig. 7) roundly incised upto $\frac{1}{3}$ of its medial length; labrum broader than long in ratio 7:6 with roundly pointed anterior margin; malar space equal to diameter of lateral ocellus. LID IDMO EL = 2.0 3.3 2.8; OOL POL OCL = 3.0 1.0 2.3; frontal area flat, below level of eyes; supraantennal tubercle raised, sloping back and merging into insignificant frontal ridge; median fovea shallow; circum-, inter- and postocellar furrows wanting; lateral furrow fine and distinct with deep pit at anterior and posterior ends; postocellar area subconvex, broader than long in ratio 3:2; head distinctly narrowing behind eyes; ITD ICD = 3.0 1.0; mesoscutellum pulvinate; appendage slightly carinate; mesepisternum obtusely raised with short carina at apex; mesosternum lacking thorns; apical tooth of claw (Fig. 13) slightly longer than subapical; metabasitarsus longer than following 3, but distinctly shorter than remaining 4 joints combined; metafemur as long as tibia.

Head, mesonotum, scutellum and appendage polished; metanotum and scutellum with few shallow punctures; mesepisternum having minute, scattered punctures with rugose apex; mesosternum punctulate; abdomen faintly microstriated.

Lancet (Fig. 29) with 26 serrulae, each serrula is deep and triangular, having 4–5 anterior and 5–6 posterior subbasal teeth.

Male Average length, 7.5 mm. Similar to female except mesosternum pale with sebaceous lustre; black stripe on metatrochanter and distal end of femur. Penis valve (Fig. 18) and gono-forceps (Fig. 23).

Holotype Female, Uttar Pradesh, Mandal, 2300 m, 13. 6. 1983. — **Paratypes** 5 ♀♀, 4 ♂♂, with same data as holotype. 2 ♀♀, Uttar Pradesh, Gobinddham, 3000 m, 20. 6. 1983. 1 ♂, Himachal Pradesh, Kasol, 2000 m, 30. 5. 1984.

Population variation All terga with yellowish hind margins.

Remarks This new species depicts some similarity with *T. sauteri* (ROHWER, 1916). However, it is set aside from the latter on account of having inner orbit not pale yellow, spot on temple not touching lower hind orbit, black mesonotal middle lobe, pro- and

mesotibiae and tarsi and metatibia without black, metacoxa with black stripe, metatarsus reddish brown and interocellar furrow absent. In *T. sauteri* inner orbit is pale yellow, spot on temple touches lower hind orbit, apex of mesonotal middle lobe is pale, pro- and mesotibial and tarsi and metatibia have black posterior stripe, metacoxa is entirely yellowish, metatarsus is yellow and interocellar furrow is sharp.

Etymology This species has been named in honour of the late Dr. H. YUASA for his outstanding contribution towards taxonomy of symphytan larvae.

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Abbreviations

EL — cyc length; ICD — intercencnchri distance; IDMO — interocular distance at level of median ocellus; ITD — intertegular distance; LID — lower interocular distance; OCL — ocello-occipital line; OOL — oculo-ocellar line; POL — postocellar line.

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