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Two new *Tenthredo* species from Bhutan (Hymenoptera: Tenthredinidae)

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HARIS, A.: Two new Tenthredo species from Bhutan (Hymenoptera: Tenthredinidae). Abstract: Tenthredo wangduensis spec. nov. and Tenthredo feijeni spec. nov. are described from Bhutan and compared to Tenthredo valvicepata Singh and Saini, 2005 and Tenthredo lissuana Malaise, 1945.

Keywords: Hymenoptera, Tenthredinidae, Tenthredo, new species, Bhutan

Introduction

The sawfly fauna of Bhutan is hardly known. So far, only few specialists studied them. Actually, this is the first paper studies exclusively the sawflies of Bhutan. Further sporadic data are published in papers of MUCHE 1983, HARIS 2000, MALAISE 1945 and SAINI 2006.

Methods and material

This small sawfly material collected by H. R. Feijen contains 2 new species which are described hereunder. Holotypes are deposited in the National Museum of Natural History, Leiden: Naturalis.

For identification MALAISE 1945 and SAINI 2006 were consulted and completed with high number of species-descriptions published in the latest 2 decades by Wei, Xiao and their research team.

Abbreviation: RMNH: Official abbreviation of Nationaal Natuurhistorisch Museum Naturalis, Leiden.

Description of the new species

Tenthredo wangduensis **spec. nov.** (Figs. 1, 2 and 4B)

Material.— Holotype, male. (RMNH: "Bhutan, Wangdue phodrang, Chela, 30. v. 2000, 3400 m, H. R. Feijen")

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Male. Ground colour of body bright ocker yellow. Scape ocker yellow with black dorsal side, pedicel black, dorsal side of antennal flagellum black, ventral side white. Head ocker yellow with large black spot reaching from hind margin of head down between antennae. Narrow hind margin of vertex, most of temples, inner and outer orbits, clypeus, labrum and first segment of maxillar palp remain ocker vellow. Lower outer and inner orbits, genae, apical half of supraantennal tubercles and palpi vellowish white. Thorax bright ocker yellow. Black: small middle, anterior spot on mesonotal middle lobes, longitudinal spot on mesonotal lateral lobe nearly covering entire lobe and small area between mesoscutellar appendage and metascutellum. Ocker colour of pronotum, tegula, hind arrow-shaped margin of mesonotal middle lobes, anterior margin of lateral lobes and mesoscutellum, mesoscutellar appendage somehow whitish. Cenchri yellowish white. Abdomen ocker yellow. Legs ocker yellow, fore femora, left anterior tibia with longitudinal black line (this line presents only on basal third of right tibia), fore femur with small apical black spot. Wings hyaline, costa, subcosta, stigma, veins 1A, 2A, cua and small fragment of Cu1 in front of cua on fore wing transparent yellow, other veins brownish black. Anall cell of hind wing with short petiole, nervellus reaches apex of anal cell. Head above including temples, vertex and fromtal area with very dense, moderately deep punctures, moderately shiny. Clypeus, labrum, supraclypeal area and lower inner orbits smooth and shiny. Outer orbits moderately densely punctured with shallow punctures, shiny. Clypeal emargination subtrapesiod and about 0.4x as deep as clypeal median length. Gena narrow, about 2/3x as wide as diameter of front ocellus. Suboccipital carina weel developed. Ratio of antennal segments: 15 : 12 : 37 : 30 : 29 : 21:18:19:18. OOL: POL: OCL: 9:2:6. Width : length of postocellar area: 17: 14. Supraantennal tubercles well developed and separated from frontal area. Mesonotal lobes, mesoscutellum, mesoscutellar appendage and metascutellum very densely granulated, hardly shiny. Mesopleuron shiny, with shallow, sporadic punctures. First and second abdominal tergites smooth and shiny, others with fine coriaceous surface sculpture. Ratio of hind tarsal segments: 55 : 27 : 21 : 15 : 20. Length of hind basitarsus : length of inner hind tibial spur: 55 : 35. Subapical tooth of claw hardly shorter than apical. Length: 11.0 mm.

In SAINI 2006, the new species runs to *Tenthredo valvicepata* Singh and Saii, 2005. However, *T. valvicepata* Singh and Saini has simple pale antenna, not bicolour and penis valve with spin-like long projection. In the key of MALAISE 1945 there is no any similar species.

Tenthredo feijeni **spec. nov.** (Figs. 3 and 4A)

Material.— Holotype, male. (RMNH: "Bhutan, Wangdue phodrang, Phobjika Valley, 27. v. 2000, 3000 m, H. R. Feijen")

Head shiny reddish brown with black frontal spot reaching hind margin of head, covering vertex, frontal area and partly temples. Not reaching inner orbits but projecting down between antennae. Mandibles whitish. Antenna dark yellow, apical 5 joints darkened, brownish yellow. Thorax black, pronotal margin and tegula white. Mesopleuron and mesepimeron shiny reddish brown with black margins around. Cenchri whitish. Coxae and trochanters black. Femora black above and reddish brown below. Tibiae and tarsi reddish brown. Middle and hind tibiae with apical brown ring. Abdomen black, segments (tergites and sternites) 2-5 white. Tergite 2 basally black. Apical sternites whit-



Fig. 1: Tenthredo wangduensis spec. nov. holotype (photo: Haris)



Fig. 2: Head of *Tenthredo wangduensis* spec. nov. (photo: Haris)



Fig. 3: *Tenthredo feijeni* spec. nov. (photo: Haris)



Fig. 4: Penis valve of *Tenthredo feijeni* spec. nov. (A) Fig. 5: Penis valve of *Tenthredo wangduensis* spec. nov. (B)

ish brown. Wings hyaline, costa, subcosta and stigma transparent yellow. Head finely, densely granulated, matt including vertex, temples and frontal area. Clypeus, labrum, supraclypeal area inner and outer orbits slightly and sporadically punctured with shallow punctures, shiny. Upper margin of clypeus moderately densely and moderately deeply punctured, shiny. Ratio of antennal segments: 14 : 9 : 38 : 28 : 25 : 22 : 18 : 18 : 17. OOL : POL : OCL: 4 : 14 : 12. Postocellar furrows missing, postocellar area invisible. Clypeal emargination deep and rounded, about half as deep as clypeal median length. Gena as wide as diameter of front ocellus. Supraantennal tubercles and frontal area confluent. Head with continuous postoccipital carina. Mesonotum, mesoscutellum, mesoscutellar appendage very densely and very finely granulated, matt. Mesopleuron and metapleuron sporadically punctured, shiny. Mesosternum moderately densely punctured with small, moderately deep, isolate punctures shiny. Mesoscutellum flat. Mesopleuron strongly and bluntly elevated. Mesopleuron without thorn. Abdominal tergites 1 and 2 smooth and shiny, others with fine coriaceous surface sculpture, shiny. Ratio of hind tarsal segments: 44: 21: 18: 10: 17 (without claw). Length of hind tarsus : length of inner hind tibial spur: 44 : 19. Subapical toooth of claw shorter and thicker than apical. Length: 9.0 mm

In MALAISE 1945 and SAINI 2006, this species runs to *Tenthredo lissuana* Malaise, 1945. *T. lissuana* Malaise has tergites 3-4 reddish brown and abdomen never black with white transverse band. In *T. lissuana* the dark spot of the head is divided in three longitudinal band on frontal area but it is not so in the new species. Penis valve of the 2 species is also different, penis valve of *T. lissuana* is very narrow, the lobe of the penis valve is hardly wider than its stem.

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References

- HARIS A. 2000: New Oriental Sawflies (Hymenoptera: Tenthredinidae). Somogyi Múzeum Közleményei, Kaposvár 14: 297-305.
- MALAISE R. 1945: Tenthredinoidea of South-Eastern Asia with a general zoogeographical review. Opuscula Entomologica, Lund Suppl. 4: 1-288.
- MUCHE W. H. 1983: Die von Herrn Dr. W. Wittmer in Indien und Bhutan gesammelten Blattwespen, mit Beschreibung von sechs neuen Arten der Tenthredinidae (Hymenoptera, Symphyta). - Reichenbachia, Zeitschrift für entomologische Taxonomie. Herausgeber Staatliches Museum für Tierkunde Dresden, Dresden 21 (29): 167-180.
- SAINI M. S. 2006: Subfamily Tenthredininae. Genus Tenthredo. In: Indian Sawflies Biodiversity. Keys, Catalogue & Illustrations. - Bishen Singh Mahendra Pal Singh, Dehra Dun 2: [1-8], 1-234

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