

## New Nematinae species from Mongolia (Hymenoptera: Tenthredinidae)

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HARIS, A.: *New Nematinae species from Mongolia (Hymenoptera: Tenthredinidae)*.

**Abstract:** Three new Nematinae species are described from Mongolia: *Pachynematus mongolovagus* spec. nov., *Pristiphora rubrocaudata* spec. nov. and *Amauronematus mongoloviduatus* spec. nov. and compared to *Pachynematus declinatus* (Förster, 1854), *P. obductus* (Hartig, 1837), *P. vagus* (Fabricius, 1781), *Pristiphora bensoni* Lindqvist, 1953 and *Amauronematus viduatus* (Zetterstedt, 1838).

**Keywords:** Nematinae, Hymenoptera, Tenthredinidae, new species, Mongolia

### Introduction

This is my third contribution to the knowledge of the Nematinae fauna of Mongolia. In my first paper (HARIS 2002), I gave descriptions of 15 new species and listed other 51 species new for the Mongolian fauna. This was the first report on the Mongolian Nematinae species. In 2003, I provided descriptions of further three species based on Dr. Zoltán Kaszab's expeditions which were taken between 1963 and 1968 (HARIS 2003). Now, the known number of Nematinae species reported from Mongolia amounts 72. This is about 40% of the estimated species-richness of the country. The mountains of Mongolia is abundant in endemic Nematinae species, about 30% of the known species are endemic.

### Description of new species

#### *Pachynematus (Pachynematus) mongolovagus* sp. nov.

**Holotype:** female, Mongolia, Orkhon, Urti nurun, 26. 06. 1997 leg.: Hogd T. C. The holotype is deposited in the Hymenoptera collection of the American Museum of Natural History, New York.

**Female.** Head black. Clypeus, mandibles and labrum yellowish brown, clypeus with dark brown anterior margin. Palpi yellow. Antenna dark brown, flagellar segments ventrally yellowish brown. Thorax black, pronotum, tegulae yellow, cenchri brownish white. Mesopleuron yellowish brown. Abdominal tergites dark brown, tergites 4-8 with narrow yellowish anterior margins. Tergites 9, 10 and sternites yellow. Legs nearly entirely yellow but tibial apices and last segment of hind tarsus brown. Ovipositor black with brownish yellow basal part. Wings hyaline, venation dark brown, stigma, costa and

subcosta yellow. Frontal, ocellar area and upper inner orbits uniformly, moderately deeply punctured, moderately shiny. Punctures on temples and vertex small and not uniform, rather shiny. Mesonotal lobes with small, rather sparse, uniform and shallow punctures, moderately shiny. Mesoscutellum, mesoscutellar appendage and metascutellum with sparse small sporadic punctures, shiny. Tergites 1-5 with fine surface granulation, moderately shiny, other tergites with fine undefined surface sculpture, shiny. Mesopleuron smooth and shiny. Head and thorax sparsely covered with whitish pubescence about 2/3× as long as diameter of front ocellus. Hind margin of head smooth (without carina), postocellar furrows deep, straight and parallel. Clypeus widely, roundly emarginated. Clypeal emargination about 1/3× as deep as clypeal median length. Ratio of antennal segments: 6 : 2 : 20 : 19 : 17 : 15 : other segments missing. Gena as long as diameter of anterior ocellus. Head contracted behind eyes. Pentagonal frontal area flat, hardly marked. OOL : POL : OCL: 7 : 10 : 5. Longest diameter of eye: length of 3rd antennal segment: 23 : 20. Length of ovipositor : length of hind tibia: 27 : 50. Length of hind basitarsus : length of inner hind tibial spur : apical width of hind tibia: 16 : 9 : 6. Claws with minute inner tooth. Sawsheath blunt, cerci overprojecting apex of sawsheath (Fig. 1). Length: 6.1 mm.

The new species is related to *Pachynematus vagus* (Fabricius, 1781). However, *P. vagus* has black mesopleuron, apex of sawsheath acute and cerci never overprojecting the apex of the sawsheath. The new species has the mesopleuron yellowish brown, sawsheath blunt as it figured in Fig. 1 and cerci overprojecting the apex of the sawsheath.

The following species have abdominal sternites white and relatively long inner hind tibial spur (*vagus-obductus* group).

1. Sawsheath acute, cerci never overprojecting sawsheath. Mesopleuron always black. Legs entirely yellow .....
2. Sawsheath blunt, cerci variable, in one species overprojecting sawsheath. Colour of legs and mesopleuron variable. (If legs entirely yellow, sawsheath in dorsal view small, cerci long overprojecting the apex of sawsheath. If cerci shorter or equal with sawsheath than at least apex of hind femur black or dark coloured) .....
- 4.

3. Clypeus white, deeply emarginated. Larger, 8.0 mm. Rare. (Central Russia, West, East and North Europe, Tien Shan and Kamtchatka). ..... *P. declinatus* (Förster, 1854)  
 – Clypeus dark, slightly emarginated. Length: 7.0 mm. Sporadic. (Europe, Russia, Kola Peninsula, Caucasus, Tien Shan, Kamtchatka, Sakhalin, Balkans, Asia Minor, Mongolia and North America) .....  
 ..... *P. vagus* (Fabricius, 1781)
4. Stigma black, brown or bicolor and at least apex of hind femur black. Cerci shorter than sawsheath. Mesopleuron black ..... 5.  
 – Legs and stigma entirely yellow. Cerci longer than sawsheath, clearly overprojecting. Mesopleuron yellow. Larger: 6.1 mm. (Mongolia) .....  
 ..... *P. mongolovagus* sp. n.
5. Clypeus like entire head black (but clypeal anterior margin sometimes white), thorax black, only corners of pronotum may be white. Stigma black or dark brown. Hind tarsus shorter than hind tibia. Small species: 4.0-5.5 mm. Sporadic. (Europe, Russia, Kola Peninsula, Caucasus, Tien Shan, Kamtchatka, Balkans, Asia Minor and North America) .....  
 ..... *P. obductus* (Hartig, 1837)  
 – Clypeus and infraocular area white. Pronotum and tegula white. Postocellar area behind eyes with ochraceous band. Stigma bicolor: brown with light brown upper margin. Hind tarsus as long as hind tibia. Larger: 5.6-5.9 mm (Japan). .....  
 ..... *P. hayachinensis* Haris and Zsolnai, 2007

*Pristiphora (Pristiphora) rubrocaudata* sp. nov.

*Holotype*: female, Mongolia, Central aimak, Bugijn az achujim Geb. Bogdo ul, 36 km SW. from Ulan Baator, 1850 m, 10. 06. 1968, exp. Dr. Kaszab. The holotype is deposited in the Hymenoptera collection of the Hungarian Natural History Museum, Budapest.

*Female*. Body black. Labrum, mandibles reddish. Palpi whitish. Base and apex of sawsheath reddish. Coxae, trochanters, basal third of fore femur, most of middle femur, hind femur entirely brownish black. Tibiae, anterior and middle tarsi whitish. Hind tibia with wide brown apical ring. Hind basitarsus white with brown apex, other tarsal segments of hind tarsus and last tarsal segment of fore and middle tarsi brown. Wings subhyaline, costa, subcosta and stigma yellow. Frontal, ocellar area and upper halves of inner orbits finely, uniformly and moderately deeply punctured. Temples and vertex with moderately sparse minute punctures, shiny. Pronotum with dense, moderately deep punctures, bluntly shiny. Mesonotal lobes with small, dense and uniform punctures, moderately shiny. Mesoscutellum smooth and shiny. Mesoscutellar appendage and postsuctellum with sporadic punctures, moderately shiny. Mesopleuron smooth and shiny. Abdominal tergites with very fine granulated surface sculpture, moderately shiny. Head and thorax sparsely covered with short white pubes-

cence about half as long as diameter of front ocellus. Ratio of antennal segments: 5 : 4 : 21 : 21 : 19 : 18 : 17 : 16 : 19. OOL : POL : OCL: 12 : 16 : 9. Anterior margin of clypeus truncate. Gena as long as diameter of front ocellus. Head behind eyes gently contracted (subparallel). Hind margin of head smooth (without carina). Pentagonal frontal area not carinated, slightly sunken. Length of hind basitarsus : length of hind tibial spur : apical width of hind tibia: 13 : 7 : 9. Length of ovipositor : length of hind tibia: 57 : 80. Claw with inner tooth that is sometimes very short, sometimes longer about 3/4x as long as apical tooth but never bifid. Apex of sawsheath in dorsal view wide, apical width of sawsheath in dorsal view : apical width of hind tibia: 5 : 3. Sawsheath deeply emarginated. Apical hairs of sawsheath whitish, dense and strongly directed inwards (Fig. 2). Length: 4.9 mm.

The new species is closely related to *Pristiphora bensoni* Lindqvist, 1953. The new species larger and the reddish colour of the basal and apical part of the sawsheath clearly differs it from *Pristiphora bensoni* (Lindqvist, 1953).

*Amauronematus (Brachycoluma) mongoloviduatus* sp. nov.

*Holotype*: male: Mongolia, Chovd aimak, 3 km N. of Somon Uenc, Tal Uenc gol, 1450 m, 02-03. 07. 1966, exp. Dr. Z. Kaszab. The holotype is deposited in the Hymenoptera collection of the Hungarian Natural History Museum, Budapest.

*Male*. Body elongated. Head straw coloured including mouthparts with large black frontal spot covering vertex (but not temples), ocellar area and inner upper orbital area (although narrow inner orbits remain pale) projecting down right above antennae. Antenna yellow, dorsal part of scape and pedicel black, dorsal part of antennal segment 3 and 4 dark brown other segments dorsally yellowish brown (somehow darker than below). Thorax black, yellow: pronotum dominantly (except black anterior line), narrow posterior margin of mesonotal lateral lobes and upper anterior mesopleural fleck. Cenchri greyish white, narrow and elongated. Legs yellow, middle and hind coxae with basal black spot. Wings hyaline, costa, subcosta and stigma yellow, venation yellowish brown. Abdomen yellow. Abdominal tergites 1-5 black. Tergites 6-8 with gradually smaller black horizontal strips. Head and thorax covered with sparse and whitish pubescence. Ratios of antennal segments: 3 : 3 : 16 : 15 : 14 : 12 : 11 : 10 : 11. Last antennal segment very flattened. Longest diameter of eye: length of 3rd antennal segment: 21 : 16. Antenna about as long as head and thorax combined including propodeum. Clypeus roundly emarginated. Clypeal emarginaton about 0.4x as deep as clypeal median length. Head strongly contracted behind eyes. Gena narrow, about 1/3x as long as diameter of front ocellus. Head without hind carina. Pentagonal frontal area carinated and deeply sunken. Frontal area, temples and vertex with coriaceous surface sculpture, moderately dense on frontal area rather sparse on tem-

ples and vertex, shiny. Mesonotal lobes with moderately deep and moderately dense punctures, moderately shiny. Mesoscutellum, mesoscutellar appendage and metascutellum with deep, moderately dense punctures, slightly shiny. Mesopleuron, mesosternum, metasternum, metapleuron and katepimeron smooth and shiny. Abdominal tergites 1-3 with fine coriaceous sculpture, moderately shiny. This sculpture gradually disappear from other tergites, these tergites more or less smooth and shiny, last tergite smooth and shiny. Last abdominal tergite with narrow and rounded apical projection. Hind tibial spur short. Length of inner hind tibial spur : apical width of hind tibia: 7 : 11. Hind tibial spurs equal in length. Penis valve in Fig. 3. Length: 5.9 mm.

The new species runs to *Amauronematus viduatus* (Zetterstedt, 1838) in Zhelochovtsev's key (ZHELOCHOVTSEV 1988). Differences: the new species extensively yellow especially on abdominal sternites. Furthermore, apical projection of penis valve long, significantly longer (Fig. 3) than that of *A. viduatus* (Zetterstedt, 1838) but much shorter than that of the *abnormis-cornutus* group. The new species is also resembles in colour to *Amauronematus leucolenus* (Brischke, 1883), however the strikingly different penis valves clearly differentiate the 2 species. Recently Liston described a new species, namely *A. spaethi* Liston, 2005 from Corsica and placed it into the *viduatus* group (LISTON 2005). The male of *A. spaethi* is unknown.

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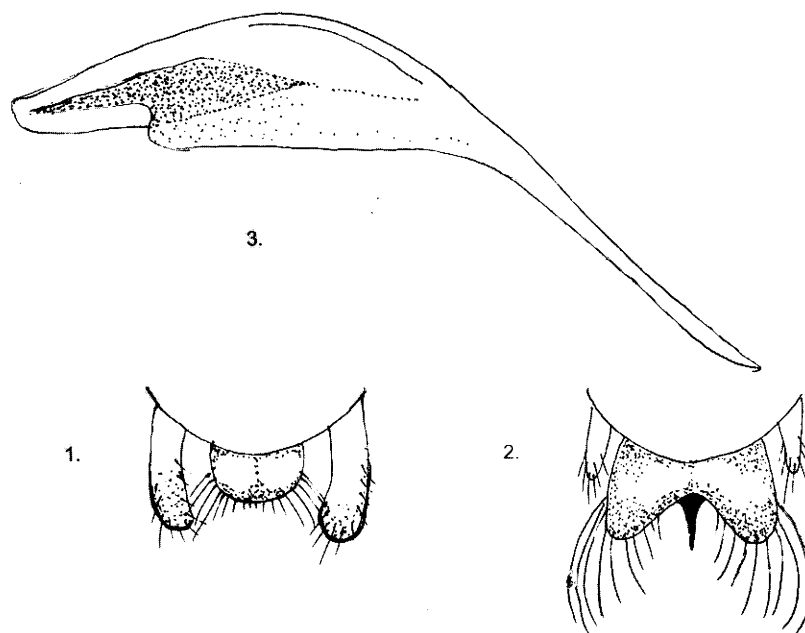


Fig. 1: Sawsheath of *Pachynematus mongolovagus* sp. n. in dorsal view.  
Fig. 2: Sawsheath of *Pristiphora rubrocaudata* sp. n. in dorsal view.  
Fig. 3: Penis valve of *Amauronematus mongoloviduatus* sp. n.



Fig. 4: *Amauronematus mongoloviduatus* sp. n. (photo: Haris)

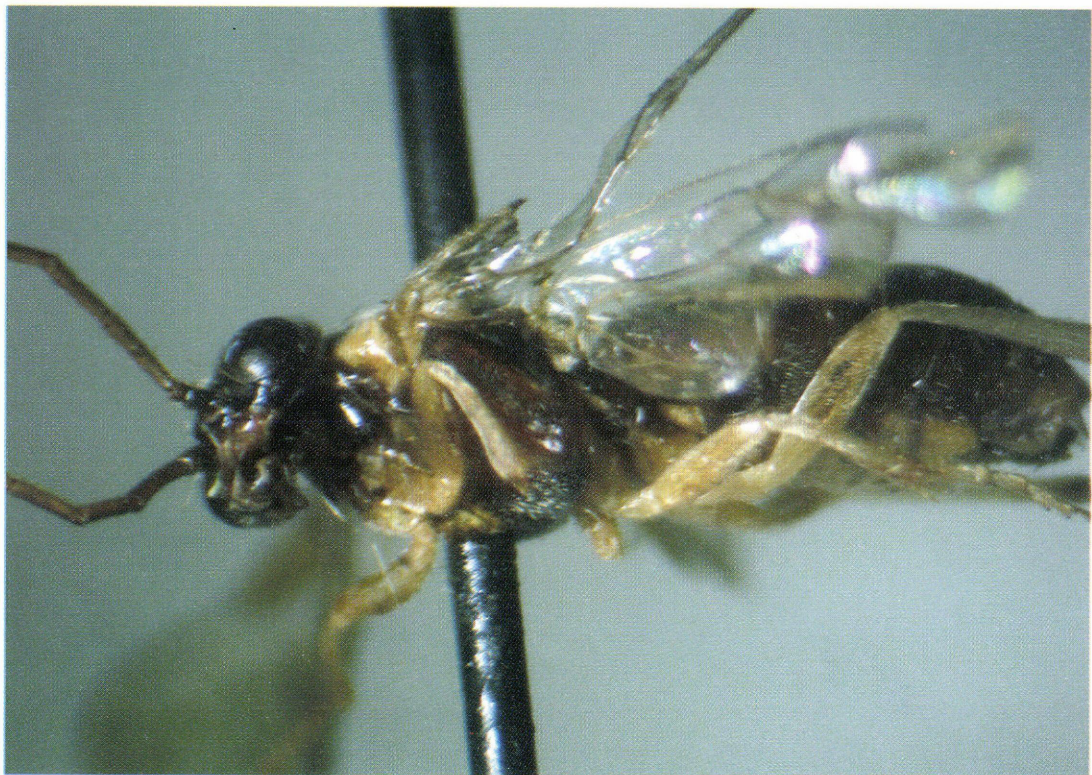


Fig. 5: *Pachynematus mongolovagus* sp. n. (photo: Haris)