

# New species of the genus *Mycomya* (Diptera, Mycetophilidae) from Finland

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Descriptions and drawings of the male genitalia are given for 11 new species, *Mycomya storai* sp. n., *M. spinicoxa* sp. n., *M. pseudocurvata* sp. n., *M. kaurii* sp. n., *M. fennica* sp. n., *M. confusa* sp. n., *M. hiisi* sp. n., *M. subarctica* sp. n., *M. karelica* sp. n., *M. denmax* sp. n. and *M. kuusamoensis* sp. n. The females of these species are still unknown.

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The types of the 11 new species of the genus *Mycomya* described below are deposited in the Zoological Museum of the University of Helsinki. The females of these species are still unknown. The author is at present preparing a revision of the Fennoscandian *Mycomya* and the species described here will also be discussed in detail in this connection.

## *Mycomya storai* sp. n.

A species with mid-coxal spurs and conspicuous wing markings. The male genitalia show no close similarities to the other species.

Male. — Wing length ca. 4.7 mm. Head brown, face, palps and other mouthparts yellowish. Three basal joints of antennae yellow, following joints brownish. Third joint twice as long as wide, following joints shorter. Mesonotum yellow with three separate, dusted stripes; middle stripe divided by very narrow yellow line. Pleurae brownish. Scutellum brownish with four bristles. Postnotum brownish, bare. Small cell and apex of wing somewhat darkened. Sc ending in  $r_1$  and bearing macrotrichia. Small cell very short. Base of cubital fork distinctly before base of stem of median fork. Halteres pale. Coxae yellow, hind coxae with brown spot on outer side. Middle coxae with long spurs. Spurs with only one apical tooth. Front metatarsi shorter

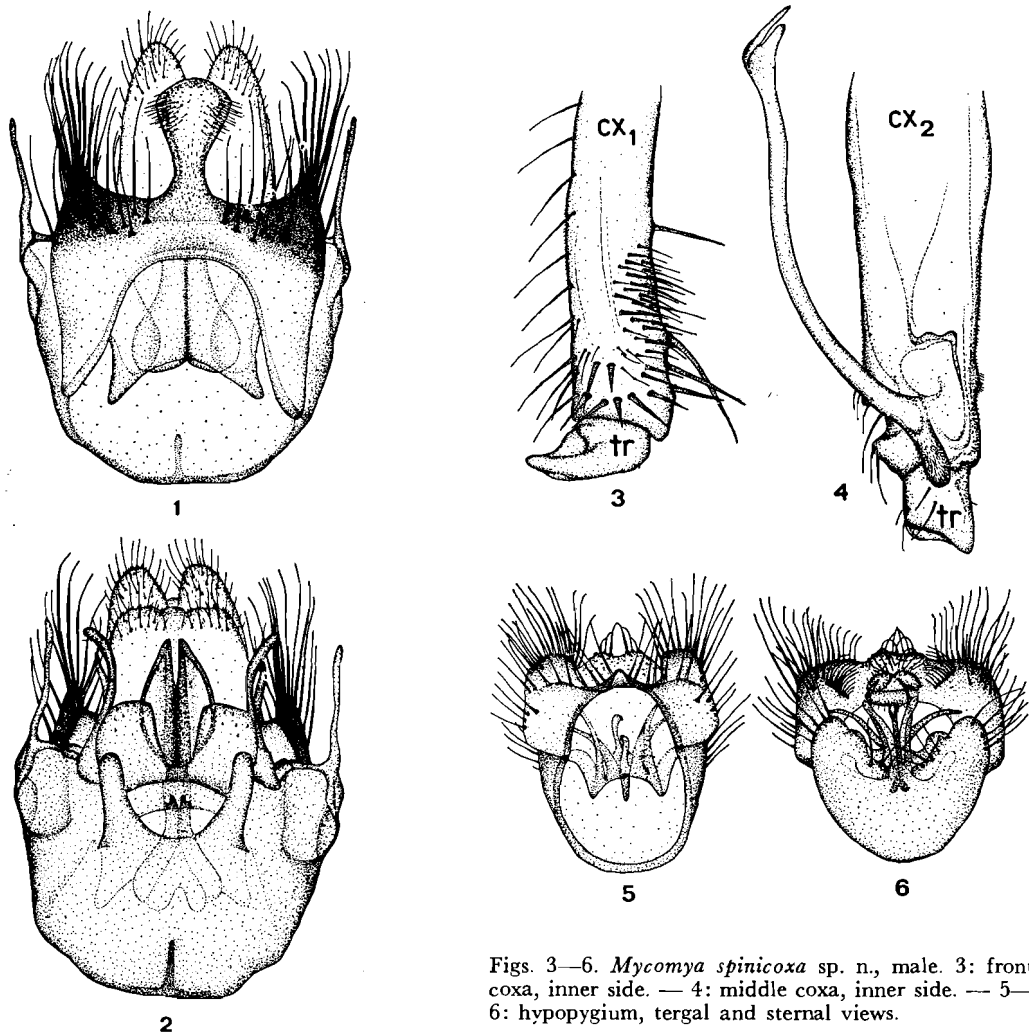
than tibiae. Abdomen yellow, tergites with distinct brown spots at base. Hypopygium (Figs. 1–2) brownish.

Holotype, male (pinned specimen), Finland: KP: Pietarsaari 18. VIII 1956 (R. Storå).

## *Mycomya spinicoxa* sp. n.

The males of this fairly light-coloured species have two very uncommon characters: the front coxae have a dense brush of spines, not fine setae as in the *M. ornata* group; the middle coxae have long spurs with a curved, flattened apex. The male hypopygium shows some resemblance to that in *M. levis* (Dziedzicki, 1885).

Male. — Wing length 4.2–4.7 mm. Head brown, face and mouthparts yellowish. Antennae brownish, three basal joints yellow. Third joint three times as long as wide. Mesonotum yellowish, stripes brownish, obscure. Pleurae yellowish-brownish. Scutellum yellowish with two bristles. Postnotum brownish, postnotal bristles usually present. Wings hyaline. Sc ending in  $r_1$  and bearing macrotrichia in distal part. Base of stem of median fork distinctly before base of cubital fork. Halteres pale. Coxae yellow. Front coxae with dense brush of spines (Fig. 3). Middle coxae with long spur (Fig. 4). Front metatarsi as long as tibiae. Abdomen yellowish-brownish. Hypopygium (Figs. 5–6) yellow.



Figs. 3—6. *Mycomya spinicoxa* sp. n., male. 3: front coxa, inner side. — 4: middle coxa, inner side. — 5—6: hypopygium, tergal and sternal views.

Figs. 1—2. *Mycomya storai* sp. n., male hypopygium, tergal and sternal views.

Holotype, male, Finland: Ks: Kuusamo, Juuma, Jäkälävuoma 21. VIII 1964 (R. Tuomikoski & K. Mikkola).

Paratypes: Ks: Kuusamo, Kiutaköngäs 19—24. VII 1967 1 ♂ (R. Tuomikoski); V: Vihtijärvi 27. VIII 1963 1 ♂ (R. Tuomikoski).

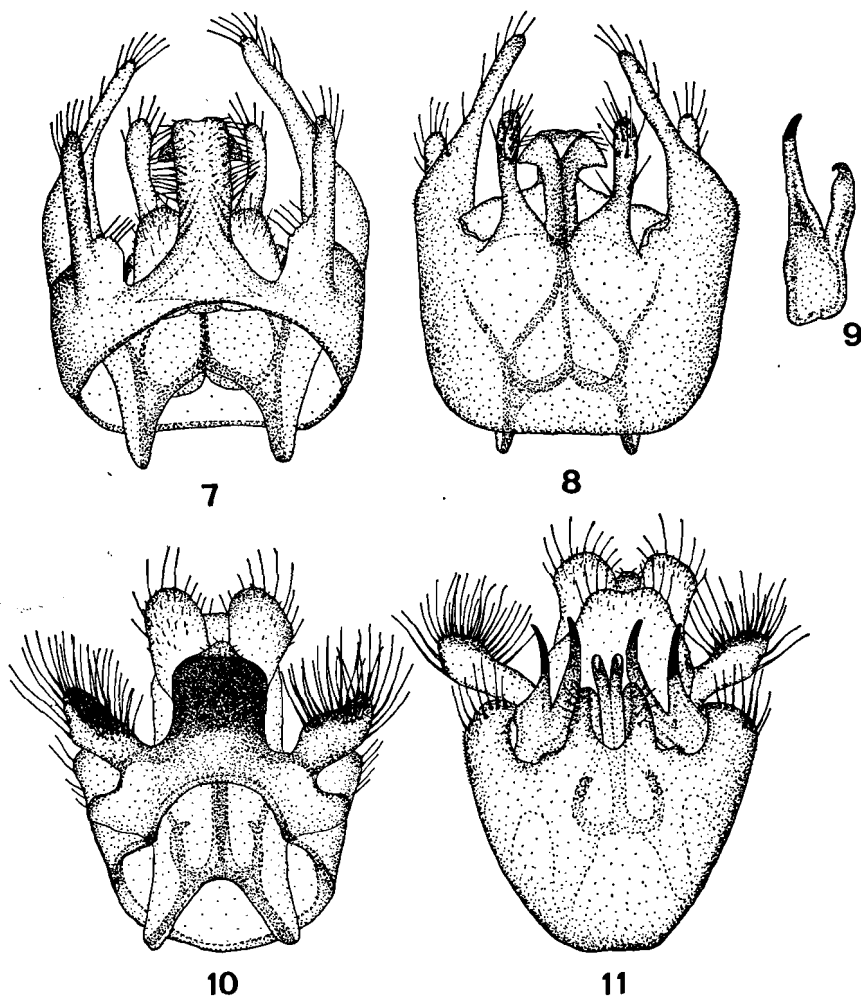
*Mycomya pseudocurvata*, sp. n.

This species belongs to the group with the long mid-coxal spurs. The tergal portion of the male genitalia resembles only slightly that of *M. curvata* Fisher, 1937.

Male. — Wing length ca. 4.3 mm. Head

brown, face and mouthparts yellow. Antennae yellowish, third joint three times as long as wide. Mesonotum yellowish with three obscure, brownish stripes. Pleurae yellowish. Scutellum yellowish with two bristles. Postnotum yellowish, bare. Wings hyaline. Sc reaching or almost reaching costa and bearing macrotrichia in distal part. Base of cubital fork slightly before base of stem of median fork. Halteres pale. Coxae yellow. Mid-coxal spurs long with two apical teeth. Front metatarsi longer than tibiae. Abdomen yellowish-brownish, apical margins of tergites yellow. Hypopygium (Figs. 7—9) yellow.

Holotype, male, Finland: V: Vihtijärvi 7. VII 1962 (R. Tuomikoski).



Figs. 7—11. Male hypopygium. 7—9: *Mycomya pseudocurvata* sp. n. 7—8: tergal and sternal views. — 9: stylus 10—11: *M. kaurii* sp. n., tergal and sternal views.

*Mycomya kaurii* sp. n.

This fairly dark species also belongs to the group with the mid-coxal spurs but differs distinctly from the other species in the male genitalia, e.g. in the shape of the processus.

Male. — Wing length 4.5—4.7 mm, body somewhat shorter. Head brown, only mouthparts and base of antennae yellow. Third joint of antennae ca. three times as long as wide. Mesonotum yellow with three brown stripes. Pleurae brownish. Scutellum yellow with four bristles. Postnotum brownish, bare. Wings hyaline. Sc ending in  $r_1$  and bearing macrotrichia. Base of cubital fork distinctly before base of stem of median fork. Halteres pale. Coxae yellow. Middle

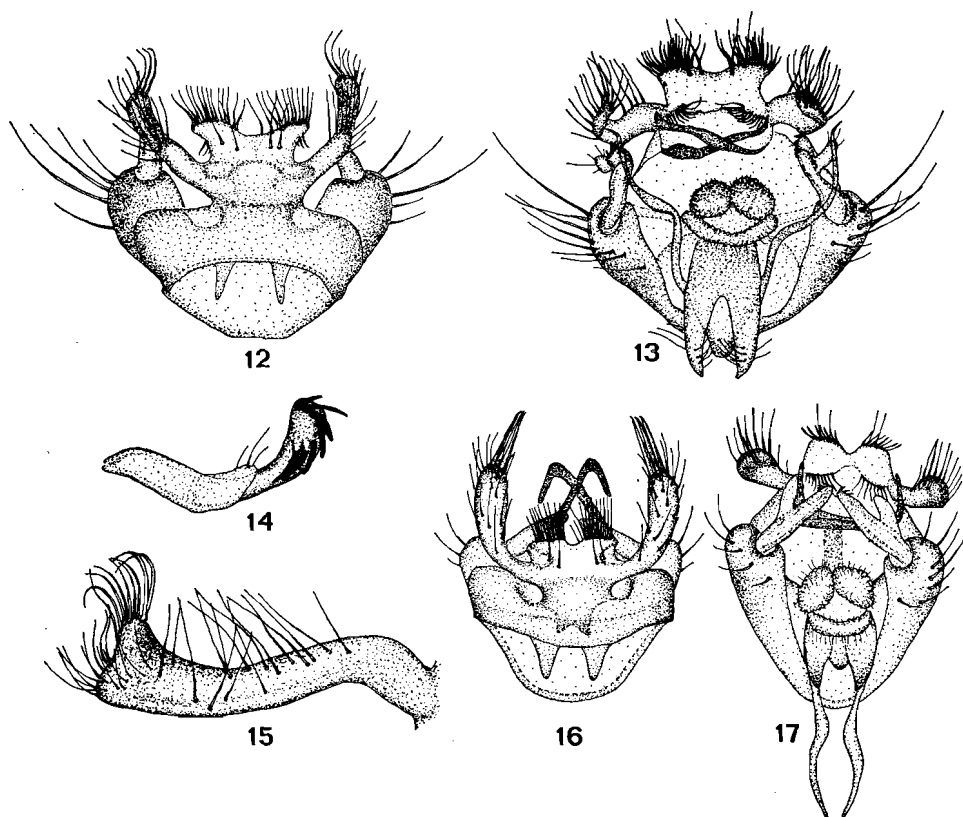
coxae with long spurs. Front metatarsi longer than tibiae. Abdomen brown with narrow, yellow apical margins on tergites 2—5, tergites 6 and 7 entirely brown. Hypopygium (Figs. 10—11) brownish, processus dark.

Holotype, male, Finland: U: Kirkkonummi, Värans 13—14. VIII 1963 (Kauri Mikkola).

Paratype: ♂, same data as for holotype (K. Mikkola). The specimens were collected at a light on a pine bog.

*Mycomya fennica* sp. n.

This dark species belongs to the *M. trilineata* group and is close to *M. fusca* (Meigen, 1818), and *M. trilineata* (Zetterstedt, 1838) but differs from these in several details of the male genitalia-



Figs. 12—17. Male hypopygium. 12—15: *Mycomya fennica* sp. n. 12—13: tergal and sternal views. — 14: stylus. — 15: tergal appendage. 16—17: *M. confusa* sp. n., tergal and sternal views.

lia, e.g. in the shape of the tergal appendages and the stylus.

Male. — Wing length 3.5—3.8 mm. Head brown, face yellowish, palps and other mouthparts yellow. Antennae yellowish-brownish, third joint more than three times as long as wide. Mesonotum brown with three dark brown, obscure stripes. Pleurae brownish. Scutellum brownish with four bristles. Postnotum brownish, bare. Wings hyaline. Sc ending in  $r_1$  and bearing macrotrichia in distal part. Small cell short. Base of stem of median fork distinctly before base of cubital fork. M and cu bare. Halteres pale. Coxae yellowish without spurs. Front metatarsi shorter than tibiae. Abdomen and hypopygium (Figs. 12—15) brownish.

Holotype, male, Finland: U. Kirkkonummi, Värans 31. VIII 1963 (K. Mikkola).

Paratypes: 1 ♂, same data and 1 ♂, same locality 20. VIII 1963 (K. Mikkola).

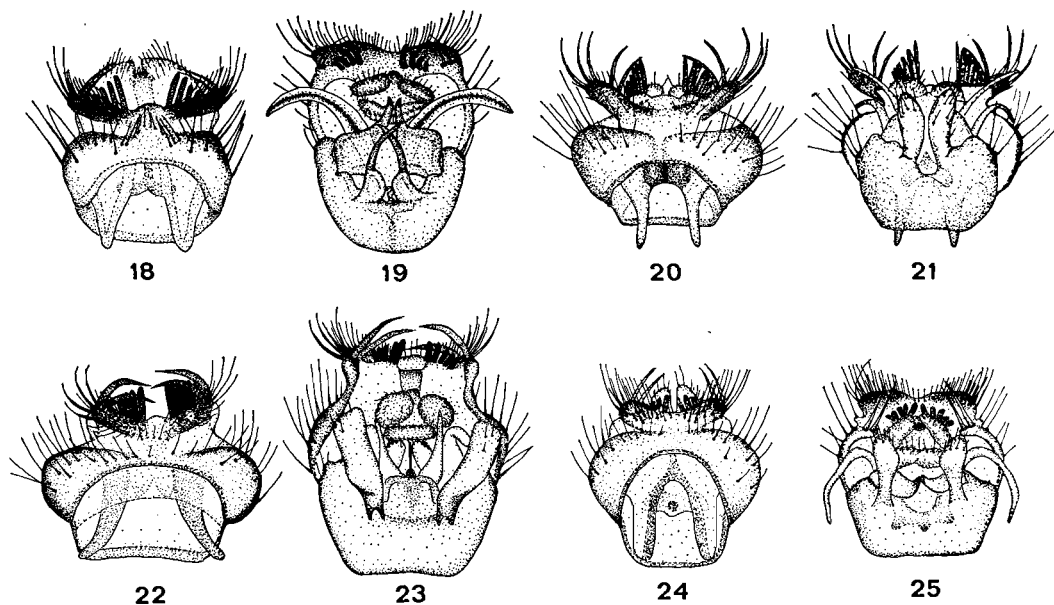
All the specimens were captured at a light on the same bog as the specimens of *M. kaurii*.

#### *Mycomya confusa* sp. n.

A species close to *M. trilineata* and *M. fusca* but somewhat darker and differing in characters of the male genitalia, e.g. the flattened spines at the apex of the tergal appendages are almost straight (see also MIKOLAJCZYK 1967).

Male. — Wing length 3.8—4.1 mm. Head brown, face, mouthparts and antennae yellowish-brownish. Third joint of antennae more than four times as long as wide. Mesonotum brown with three obscure stripes. Pleurae brownish. Scutellum brownish with four bristles. Postnotum brownish, bare. Wings hyaline. Sc ending in  $r_1$  and bearing macrotrichia. Base of stem of median fork distinctly before base of cubital fork. Halteres pale. Coxae yellowish without spurs. Front metatarsi shorter than tibiae. Abdomen brownish. Hypopygium (Fig. 16—17) yellowish.

Holotype, male, Finland: Ks: Kuusamo, Iivaara 20.



Figs. 18—25. Male hypopygium, tergal and sternal views. 18—19: *Mycomya hiisi* sp. n. 20—21: *M. subarctica* sp. n. 22—23: *M. karelica* sp. n. 24—25: *M. pseudoapicalis* Landrock.

VIII 1964 (R. Tuomikoski & K. Mikkola).

Paratypes: 4 ♂♂, same data as for holotype (R. Tuomikoski & K. Mikkola); Ks: Kuusamo, Kiutaköngäs 21. VIII 1964 1 ♂ and Kuusamo, Juuma, Jäkälävuoma 21. VIII 1964 1 ♂ (R. Tuomikoski & K. Mikkola).

*Mycomya hiisi* sp. n.

This and the following four species belong to the difficult *M. ornata* group, in which the males have a dense brush-like patch of fine setae on the front coxae. Differences between the species are most evident in the male hypopygium (see EDWARDS 1941). The most useful diagnostic character of the present species is the shape of the submedian processes of the sternite.

Male. — Wing length 4.2—4.8 mm. Head brownish, face and mouthparts yellow. Antennae yellowish, basally paler. Third joint of antennae ca. three times as long as wide. Mesonotum yellow, somewhat dusted before scutellum, with three brown stripes. Pleurae yellow with lower parts slightly darkened. Scutellum yellow with four bristles. Postnotum with bristles, yellowish, lower half brownish. Wings hyaline. Sc ending in costa, with macrotrichia. Base of cubital fork almost below base of stem of median fork. Halteres pale. Coxae yellow. Front coxae with brush of fine setae towards inner side at tip. Middle

coxae without spurs. Front metatarsi as long as tibiae. Abdomen brownish, narrow apical margins of tergites 1—5 yellow, tergites 6 and 7 entirely brown, Hypopygium (Figs. 18—19) yellowish.

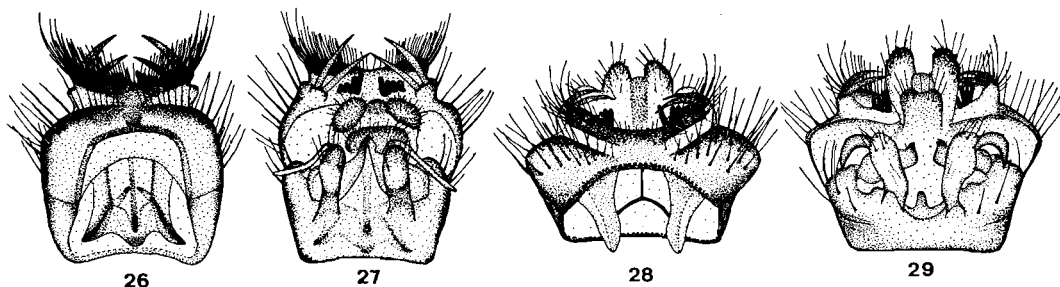
Holotype, male, Finland: U: Tenhola, Skogby 24.IX 1965 (A. V. V. Mikkola).

Paratypes: V: Vihtijärvi 3. VIII 1963 1 ♂ and 27. VIII 1963 1 ♂ (R. Tuomikoski); ES: Utti 9. VIII 1965 1 ♂ (K. Mikkola); Kn: Sotkamo 13. VIII 1962 1 ♂ — slightly darker than that described above (A. V. V. Mikkola).

*Mycomya subarctica* sp. n.

A dark rather small species of the *M. ornata* group, differing from the other species in the wing venation and several features of the male genitalia.

Male. — Wing length 3.8—4.2 mm. Head brown, face and antennae brownish, mouthparts yellow. Third joint of antennae about three times as long as wide. Mesonotum brownish with three brown stripes. Pleurae and postnotum brownish-brown. Scutellum paler with four bristles. Postnotum with two to three bristles. Wings hyaline. Sc ending in  $r_1$ , with few or no macrotrichia. Base of cubital fork almost below base of stem of median fork. Halteres pale. Coxae yellow. Front coxae with dense brush of setae. Front metatarsi slightly shorter than tibiae. Abdomen



Figs. 26—29. Male hypopygium, tergal and sternal views. 26—27: *Mycomya denmax* sp. n. 28—29: *M. kuusamoensis* sp. n.

and hypopygium (Figs. 20—21) brownish.

Holotype, male, Finland: PP: Rovaniemi, Pisavaara 20. VIII 1964 (R. Tuomikoski).

Paratypes: 2 ♂♂, same data as for holotype (R. Tuomikoski); Ks: Kuusamo, Juuma, Jäkälävuoma 21. VIII 1964 10 ♂♂, Kiutaköngäs 21. VIII 1964 6 ♂♂, Iivaara 20. VIII 1964 3 ♂♂ (R. Tuomikoski & K. Mikkola).

#### *Mycomya karelica* sp. n.

A light-coloured species close to *M. pseudoapicalis* Landrock, 1925 and the following two species. The parameres (see EDWARDS 1941) of the male hypopygium are flattened at the apex, somewhat like those of *M. fuscata* (Winnertz, 1863), the styli have three teeth.

Male. — Wing length 4.1—5.1 mm (holotype: 4.1 mm). Head brownish, face and mouthparts yellow. Antennae yellowish-brownish, third joint more than three times as long as wide. Mesonotum yellowish with three brown stripes. Pleurae yellowish. Scutellum yellow with four bristles. Postnotum yellowish-brownish with three bristles. Wings hyaline. Sc hardly reaching costa, with macrotrichia. Base of cubital fork below base of stem of median fork. Halteres pale. Coxae yellow. Front coxae with dense brush of fine setae. Middle coxae without spurs. Hind coxae yellow or with obscure brownish spot on outer side. Front metatarsi as long as tibiae. Abdominal tergites 1—5 yellow with brownish basal spot, tergites 6 and 7 brownish. Hypopygium (Figs. 22—23) yellow.

Holotype, male, Finland: PK: Pielisjärvi, Koli 5. VII 1965 (R. Tuomikoski).

Paratypes: 2 ♂♂, same data as for holotype (R. Tuomikoski).

The male hypopygium of *M. pseudoapicalis* is shown in Figs. 24—25 (see also DZIEDZICKI

1885: pl. 6. Figs. 22—25: *M. apicalis* Winn.). *M. pseudoapicalis* is a rather small, light species, in coloration slightly resembling *M. tenuis* (Walker, 1856) = *M. apicalis* (Winnertz, 1863).

#### *Mycomya denmax* sp. n.

This species is also close to *M. pseudoapicalis* but is distinctly larger and darker.

Male. — Wing length 5.0—5.3 mm. Head brown, face yellowish, mouthparts yellow. Antennae yellowish, third joint almost three times as long as wide. Mesonotum yellow with three stripes, middle stripe divided by narrow yellow line. Pleurae yellow with brown spots. Scutellum yellow with four bristles. Postnotum brownish with bristles. Wings hyaline. Sc ending in costa, with macrotrichia. Base of cubital fork almost below base of stem of median fork. Halteres pale. Coxae yellow, hind coxae usually with brown spots on outer side. Front coxae with dense brush of fine setae. Middle coxae without spurs. Front metatarsi as long as tibiae. Abdominal tergites 1—5 yellow with large, brown basal spots, tergites 6 and 7 brown. Hypopygium (Figs. 26—27) brownish.

Holotype, male, Finland: V: Bromarv, Framnäs 24. VII 1966 (K. Mikkola).

Paratypes: U: Tammisaari, Gullö 16—28. IX 1967 1 ♂ (K. Mikkola); V: Vihtijärvi 24. VIII 1962 1 ♂, 15. VIII 1962 1 ♂ (R. Tuomikoski); ES: Utti 9. VIII 1965 1 ♂ (K. Mikkola).

#### *Mycomya kuusamoensis* sp. n.

A darker species very close to *M. denmax* but differing in having the subcostal vein bare and the male hypopygium broader.

Male. — Wing length 4.9—5.1 mm. Head

brown, only mouthparts yellowish. Third joint of antennae more than three times as long as wide. Mesonotum yellowish with three brown stripes. Pleurae brownish. Scutellum yellowish with four bristles. Postnotum brownish, with bristles. Wings hyaline. Sc ending in costa and without macrotrichia. Base of cubital fork almost below base of stem of median fork. Halteres pale.

Front coxae yellow, middle and hind coxae brownish on outer side. Front coxae with dense brush of fine setae. Middle coxae without spurs. Front metatarsi as long as tibiae. Abdomen and hypopygium (Figs. 28—29) brownish.

Holotype, male, Finland: Ks: Kuusamo, Iivaara 20. VIII 1964 (R. Tuomikoski & K. Mikkola).

Paratypes: 2 ♂♂, same data as for holotype (R. Tuomikoski & K. Mikkola).

### References

DZIEDZICKI, H. 1885. II. Przyczynek do fauny owadów dwuskrzydłych. Rodzaje nowe: Hertwigia, nov. Gen.; Eurycera nov. Gen. i gatunki rodzajów Boletina, Sciophila. — Pam. Fizyj. 5 (3), 164—194.

EDWARDS, F. W. 1941. Notes on British fungus-gnats

(Dipt., Mycetophilidae). — Ent. Monthly Mag. 77, 21—32.

MIKOŁAJCZYK, W. 1967. Mycetophilidae (Diptera) doliny Nidy. — Fragm. Faun. 14 (2), 17—43.

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