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Original scientific paper

**GENERA NEOASCIA WILLISTON 1886 AND SPHEGINA MEIGEN
1822 (DIPTERA: SYRPHIDAE) IN YUGOSLAVIA AND DESCRIPTION
OF SPECIES SPHEGINA SUBLATIFRONS SP. NOVA**

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Vujic, A. (1990): *Genera Neoascia Williston 1886 and Sphegina Meign 1822 (Diptera: Syrphidae) in Yugoslavia and description of species Sphegina sublatifrons sp. nova.* — Bulletin of Natural History Museum, Belgrade, B 45, 77—93.

The review of 7 species of genus *Neoascia* Will. includes the key, illustrations of male genitalia and male and female abdomens. Species *Neoascia meticulosa* (Scopoli, 1763) and *Neoascia unifasciata* (Strobl, 1898) are registered in Yugoslavia for the first time.

Key and illustrations of male genitalia and abdomen and of female head profile are given for 8 species of genus *Sphegina* Mg. Species *Sphegina sublatifrons* sp. nova is separated as a good one from the group of species *Sphegina latifrons* Egger 1865. Species *Sphegina montana* Becker 1921 and *Sphegina latifrons* Egger 1865 are registered in Yugoslavia for the first time.

INTRODUCTION

Detailed faunistical researches of hoverflies in Yugoslavia during the recent years have discovered a number of species of two morphological similar genera *Sphegina* Mg. and *Neoascia* Will. We have gathered the data in order to clear up taxonomic problems related to these genera. The analysis has been done with the materials belonging to the collection of the Institute of Biology, Novi Sad and collection of the Natural History Museum, Belgrade.

RESULTS, DISCUSSION, CONCLUSIONS
CHARACTERISTICS OF GENUS *NEOASCIA* WILLISTON 1886

Species belonging to this genus are very small (4—7 mm) with narrow abdomen at base and swollen hind femora. They distinguish

from a very similar genus *Sphegina* Mg., among other things, by wing structure. With genus *Neoascia* the median vein at the wing tip bends at the right angle and meets with vein $r\ 4 + 5$ (Fig. 1a), while with genus *Sphegina* the angle is usually sharp (Fig. 1b).

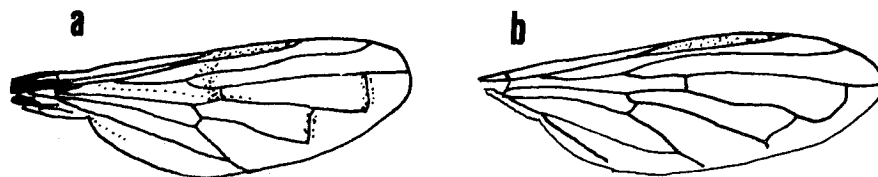


Fig. 1. — Wing: *a* — *Neoascia podagrica*, *b* — *Sphegina eoa*
Krilo:

Larvae of this genus live in water and feed on decaying organic material. According to Štaketberg (1955), 13 species were registered in Palearctic, but the number has increased up to now. Relatively nonspecific development conditions for genus *Neoascia* have not caused a high degree speciation. The main distribution of this genus is in deciduous forest zone of Palearctic, specially in marshy areas.

DIAGNOSIS OF GENUS

Small flies with narrow abdomen and swollen hind femora. Eyes widely separated in both males and females. Face in profile with lower part projecting forwards. Antennal third segment usually elongated; arista bare. Thorax and scutellum with brassy shine and short hairs. Hind femora broadened with short thorns behind. Hind tibiae slightly arched. Wing structure in fig. 1a. Male and female abdomen appearance in fig. 3.

The genus is separated into two sub-genera according to the structure of metapleurae (Fig. 2):

— metapleurae behind the hind coxae form a continuous bridge of chitin (Fig. 2a).

sub-genus *Neoascia* Will.

— metapleurae behind the hind coxae widely separated (Fig. 2b).

sub-genus *Neoasciella* Stackelberg, 1965

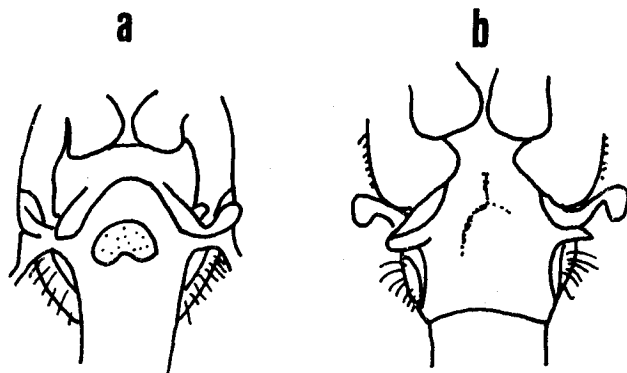
SUB-GENUS *NEOASCIA* WILLISTON 1886 (s. str.)

Fig. 2. — Structure of metapleurae (after Stackelberg, 1955): *a* — sub-genus *Neoascia* Will., *b* — sub-genus *Neoasciella* Stack.

Grada metapleura (prema Stackelberg-u, 1955):

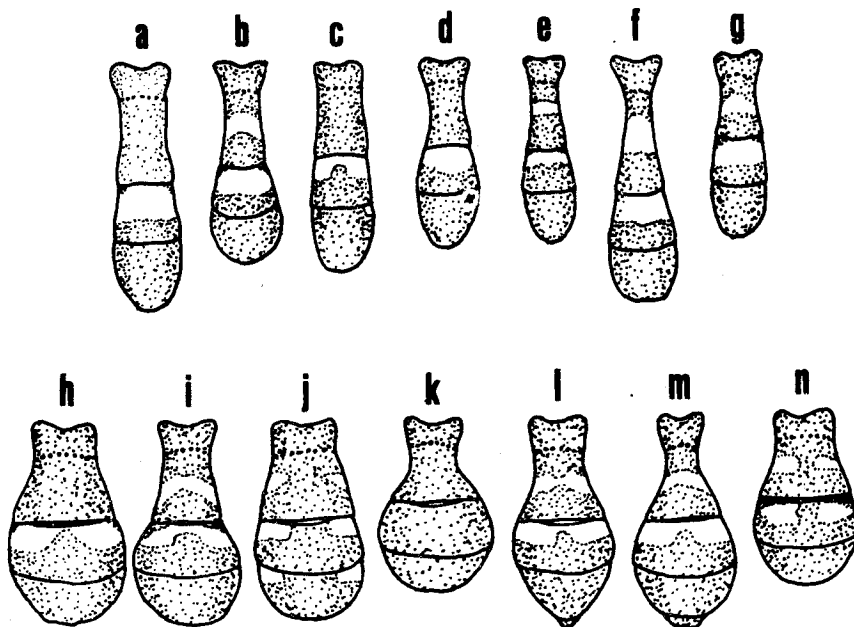


Fig. 3. — *Neoascia* abdomens: male abdomens (*a-g*), female abdomens (*h-n*) (after Barkemeyer & Clausen, (1986): *a, h* — *Neoascia unifasciata*, *b, i* — *N. obliqua*, *c, j* — *N. interrupta*, *d, k* — *N. meticulosa*, *e, l* — *N. podagrica*, *f, m* — *N. annexa*, *g, n* — *N. tenur*,
Abdomen mužjaka (*a-g*) i ženki (*h-n*) vrsta roda *Neoascia* (prema Barkemeyer & Clausen, 1986):

1. Wing veins *tm* and *tp* darkened (Fig. 1*a*), tergites 2 and 3 with yellow bands or spots (Fig. 3*e, f*). Male genitalia shown in fig. 4*e*.

Neoascia (s. str.) *podagrica* (Fabricius, 1776).

— Wing veins *tm* and *tp* are not darkened

... 2

2. Tergites 2 and 3 with yellow bands reaching the side margins of tergite (Fig. 3f, m). Male genitalia at fig. 4f.

Neoascia (s. str.) *annexa* (Müller, 1776)

- Tergites 2 and 3 with yellow bands (or spots) narrowed laterally (Fig. 3g, n). Male genitalia shown in fig. 4g.

Neoascia (s. str.) *tenur* (Harris, 1780)

SUB-GENUS *NEOASCIELLA* STACKELBERG 1965

1. Wing veins tm and tp are darkened (Fig. 1a) ... 2
 — Wing veins are not darkened. Female tergites metallic black without yellow band or spots (Fig. 3k). Male genitalia in fig. 4d.

Neoascia (N.) *meticulosa* (Scopoli, 1753).

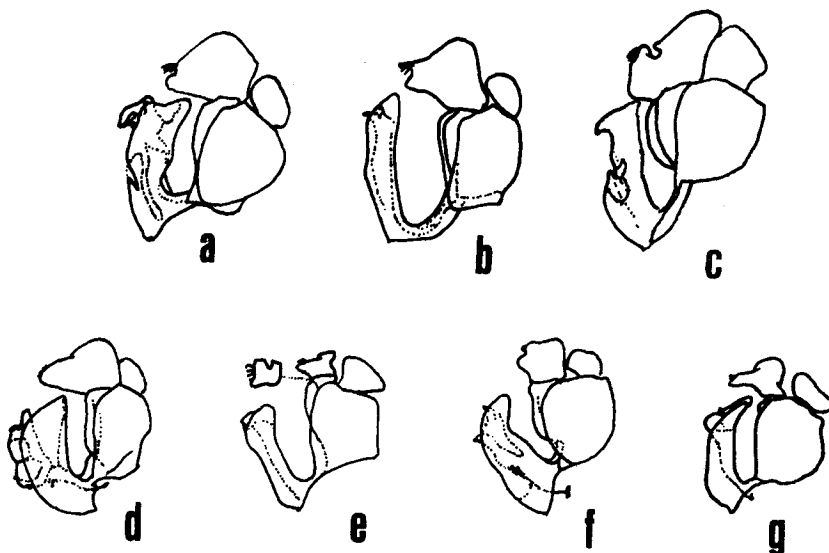


Fig. 4. — Male genitalia (after Barkemeyer & Clausen, 1986):
 a — *Neoascia unifasciata*, b — *N. obliqua*, c — *N. interrupta*, d —
N. meticulosa, e — *N. podagrica*, f — *N. annexa*, g — *N. tenur*
 Građa genitilija mužjaka (prema Barkemeyer & Clausen, 1986):

2. Third antennal segment oval, 1,5 times as long as wide. Tergite 4 with a pair small, lateral, yellow spots (Fig. 3c, j). Male genitalia shown in fig. 4c.

Neoascia (N.) *interrupta* (Meigen, 1822).

- Third antennal segment oval and long, 2—2,5 times as long as wide. Tergite 4 without yellow spots ... 3

3. Male sternit 8 with black hairs. Tergite 2 in females is almost parallel at basal half but towards its apex it broadenes abruptly (Fig. 3i). Front femur is yellow only with dark area at central part. Tergite 2 with yellow band (Fig. 3b, i). Male genitalia shown in fig. 4b.

Neoascia (N.) *obliqua* Coe, 1940.

- Male sternite 8 with yellow hairs. Female tergite 2 broadenes evenly from base towards the apex (Fig. 3h). Front femur yellow with

broad, black ring. Tergite 2 without yellow markings. Male genitalia in fig. 4a.

Neoascia (N.) *unifasciata* Strobl, 1898.

1. *Neoascia* (s. str.) *annexa* Müller, 1776 (Fig. 3f, m; 4f).

In the Catalogue of *Syrphidae* (Glumac 1972), this species is registered under the synonym *Neoascia floralis* (Meigen, 1822). New discoveries of this species have been registered on the slopes of high mountains (Durmitor, Kopaonik, Stara Planina, Šarplanina) and on some lower mountains such as Kučaj. One sample has been found in Slovenia (Bled). Season of appearance: May-August; less numerous populations.

2. *Neoascia* (N.) *interrupta* (Meigen, 1822) (Fig. 3c, j; 4c).

This species has been recorded only in Serbia, exclusively in marshy areas of Obedska Bara and Petrovaradinski Rit. Season: April-September.

3. *Neoascia* (N.) *meticulosa* (Scopoli, 1763) (Fig. 3e, k; 4d).

This species belongs to rare and low in abundance hoverflies and it was not registered in Yugoslavia earlier. During these researches it has been recorded on:

Stara planina (Dojkinačka Reka 29. 05. 1987. 1 ♂); Vlasina (Crna Trava 3. 05. 1988 1 ♂); Kopaonik (Jablanova Ravan 14. 06. 1986. ♂ ? , Velika Reka 2. 05. 1986. 1 ♂, Kadijevac 21. 05. 1988. 1 ♂); Vojvodina (Sviljojevo 2. 05. 1983. 1 ♂); Fruška Gora (Stari Ledinci 19. 04. 1988. 1 ♂); Obedska Bara 23. 04. 1988. 2 ♂.

4. *Neoascia* (N.) *obliqua* Coe, 1940 (Fig. 3b, i; 4b).

It has been recorded only in Serbia so far. It is frequent on mountains such as Fruška Gora, Kopaonik and Kučaj but can be found also on Stara Planina, Suva Planina, Goč and Vlasina; season: April-September.

5. *Neoascia* (s. str.) *podagrica* (Fabricius, 1776) (Fig. 1a; 3e, l; 4e).

Most frequent and most numerous species in Yugoslavia. Its distribution covers the area from seashore up to 1700 m altitude (Šarplanina) and all types of biotopes; season: April-September.

6. *Neoascia* (s. str.) *tenur* (Harris, 1780) (Fig. 3g, n; 4g).

The species is recorded in the Catalogue of hoverflies in Yugoslavia (Glumac 1972) and in follow-up papers under the synonym *Neoascia dispar* (Meigen, 1822). It has been represented in the collections with only few samples gathered on Kopaonik, Obedska bara and Fruška gora between May and September.

7. *Neoascia* (N.) *unifasciata* (Strobl, 1898) (Fig. 3a, h; 4a).

Numerous in population but rather rare species that was not recorded in Yugoslavia before these researches.

Records: Stara Planina (Dojkinačka Reka 29. 05. 1987. 7 ♂ 4 ♀, 29. 05. 1988. 13 ♂ 8 ♀); Kopaonik (Vlajkovci 24. 05. 1987. 2 ♂, Br.

zeće 24. 05. 1987. 1 ♂); Deliblatska Peščara (Alibunar 2. 06. 1987. 1 ♂); Fruška Gora (Paragovo 1. 05. 1988. 1 ♂, Glavica 9. 05. 1988. 2 ♂ 2 ♀).

In our country this species is characterized with a very short season — only in May.

Five species of this genus were recorded in Yugoslavia; after these researches, records of *Neoascia* (N.) *meticulosa* Scop. and *Neoascia* (N.) *unifasciata* Str. have increased the number to 7.

CHARACTERISTICS OF GENUS *SPHEGINA* MEIGEN 1822

The size of these hoverflies is between 5—9 mm. As with the previously described genus, abdomen at base are narrowed while hind femora are broadened. They differ from each other in wing structure (Fig. 1), i. e. the loop of median vein at apex.

Only the development of species *Sphegina clunipes* Flin. is known — its larvae found in woodland and cool, dense shaded places (Stackelberg, 1953). The diversity and numerosity of populations of this species are greatest in the north forest areas of Palearctic. According to Stackelberg (1956) 23 species were recorded in Palearctic. Today this number is around 30. Earlier researches recorded 5 species of this genus in Yugoslavia, usually found in beech and coniferous forests above 1000 m altitude.

DIAGNOSIS OF GENUS

Head profile shows the part carrying antennae and mouth edge projecting forwards (Fig. 7). Bare eyes, widely separated both in males

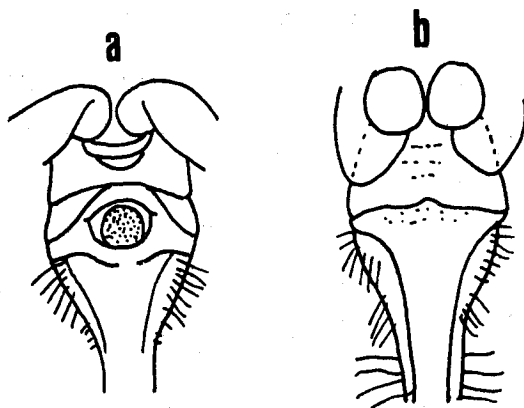


Fig. 5. — Structure of metapleurae and sternite 1 (after Stackelberg, 1956a): a — sub-genus *Sphegina* Mg., b — sub-genus *Asiosphegina* Stack.

Grada metapleura i prvog sternita (prema Stackelberg-u, 1956a):

and females. Square-shaped thorax, thoracic dorsum covered with short hairs. Hind femora swollen, with two rows of small thorns. Hind tibiae slightly arched; first segment of hind tarsus slightly broadened. Wing structure in fig. 1*b*. Appearance of male abdomen shown in fig. 6.

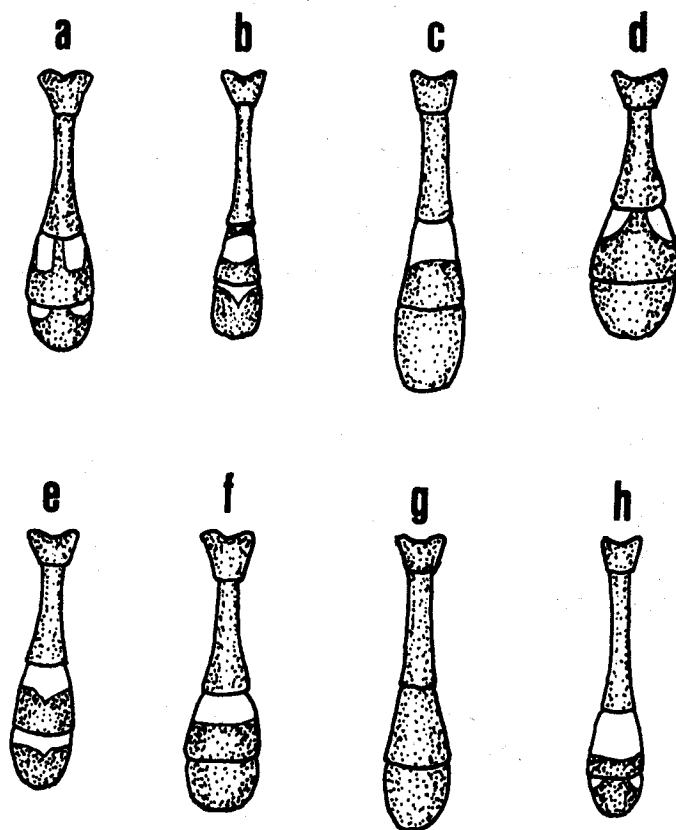


Fig. 6. — *Sphegina* abdomens (males): a — *Sphegina clunipes*, b — *Sph. elegans*, c — *Sph. latifrons*, d — *Sph. sublatifrons*, e — *Sph. verrecunda*, f — *Sph. clavata*, g — *Sph. montana* — *Sph. sibirica*.

Abdomeni mužjaka vrsta roda *Sphegina*:

Structure of metapleurae divides this genus into two sub-genera:

— metapleurae in the shape of bridge bearing a wide, pentagonal, heart-shaped or circular sternite 1 (Fig. 5*a*).

sub-genus *Sphegina* Meigen 1822.

— metapleurae broad and whole, not in the shape of bridge (Fig. 5*b*).

sub-genus *Asiosphegina* Stackelberg, 1953.

SUB-GENUS *ASIOSPHEGINA* STACKELBERG, 1953.

1. Two hind segment of front and middle legs are black, the rest is yellow. Face in its lower part yellow (Fig. 7c) or entirely black. Structure of male genitalia shown in fig. 8f.

Sphegina (A.) *sibirica*, Stackelberg, 1953.

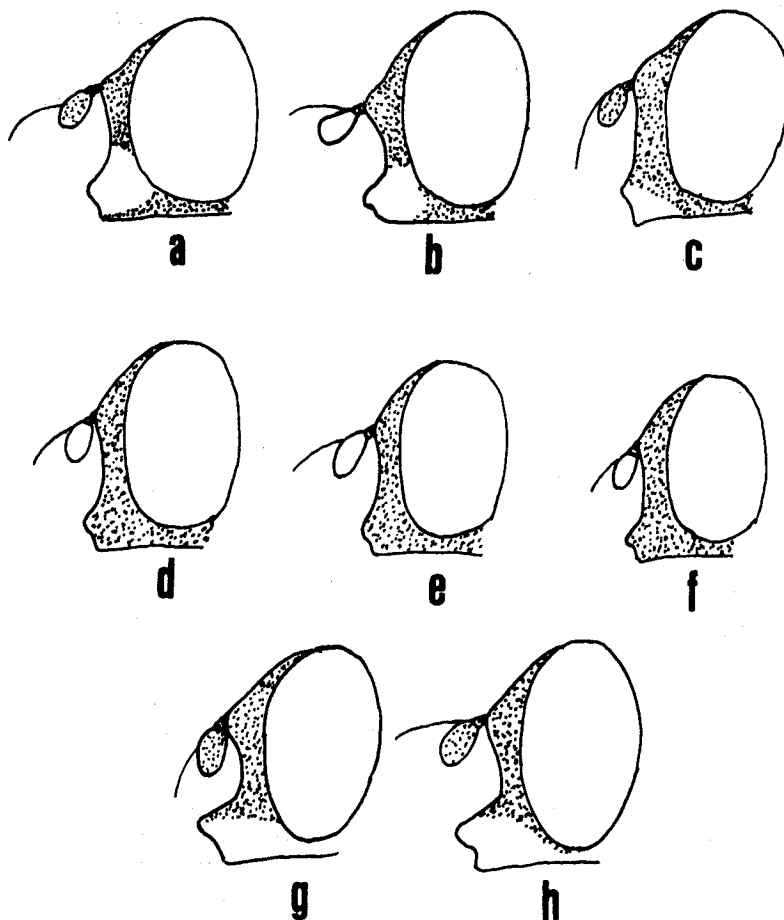


Fig. 7. — Female head (laterally): a — *Sphegina clunipes*, b — *Sph. elegans*, c — *Sph. sibirica*, d — *Sph. verrecunda*, e — *Sph. clavata*, h — *Sph. montana*, g — *Sph. latihrons*, h — *Sph. sublatifrons*.

Glava ženke (bočno):

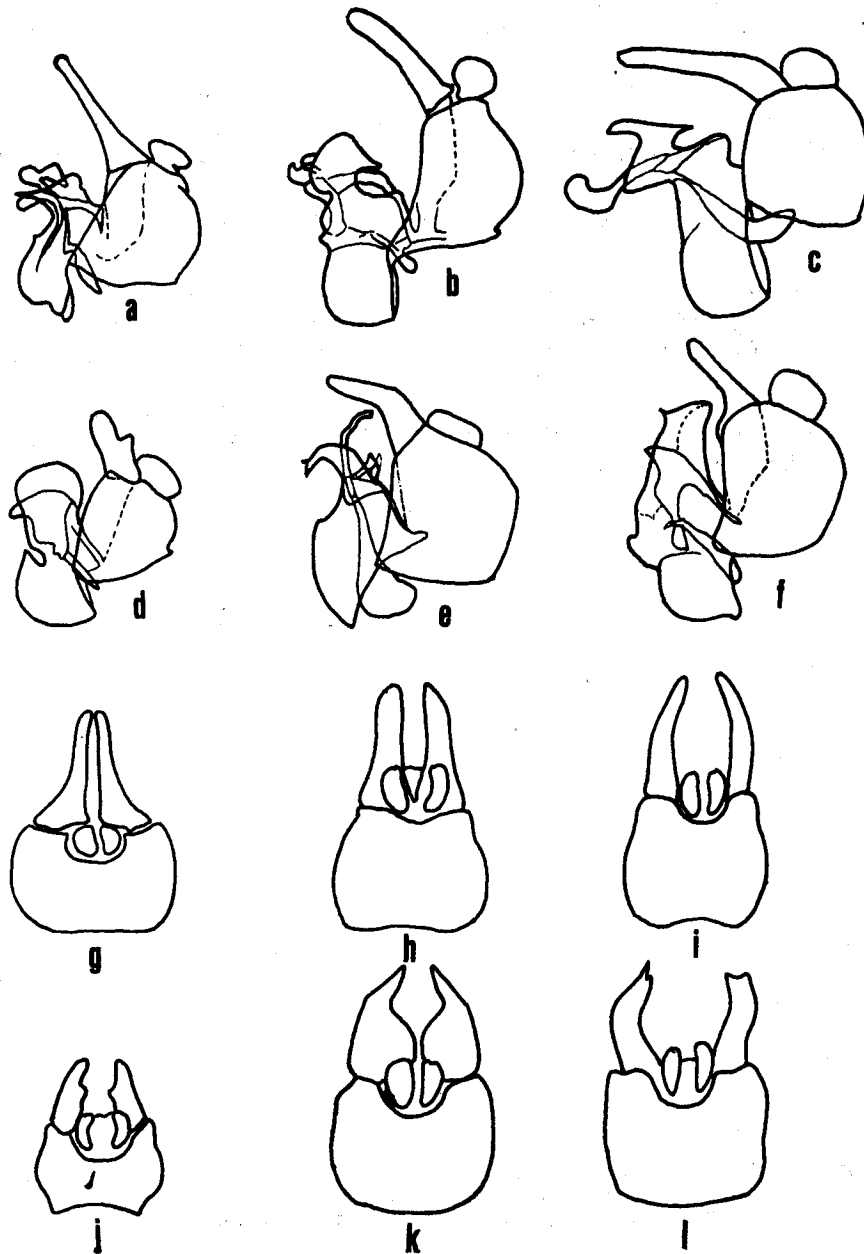


Fig. 8. — Male genitalia; *a-f* laterally, *g-l* dorsally (*a, b* and *d* after Stackelberg, 1953): *a, g* — *Sphegina clunipes*, *B, h* — *Sph. verrecunda*, *c, i* — *Sph. clavata*, *d, j* — *Sph. elegans*, *e, k* — *Sph. montana*, *f, l* — *Sph. sibirica*
 Građa genitalija mužjaka; *a-f* bočno, *g-l* dorzalno, (*a, b* i *d* prema Stackelberg-u, 1953):

SUB-GENUS *SPHEGINA* MEIGEN, 1822

1. Front and middle legs yellow, sometimes with dark apical tarsal segments ...2
2. Hind sternite of male abdomen raised in form of a shield with distinct protuberances covered with pile of pale hairs (Fig. 10c, d). Mount edge strongly projecting forwards, face in its lower part yellow (Fig. 7g, h) ...3
- Hind male sternite differs in structure. Mouth edge not projecting so strongly ...4
3. Distance between sternites 3 and 4 two to three times as long as the length of sternite 3; hind part of sternite 4 wider than its length (Fig. 10a). In profile, projections at front part of sternite 4 two times as small as projections of hind part (Fig. 10c). Female sternite 3 square (Fig. 10e). Male genitalia in fig. 9a, c. Side view shows that styli are broadest in the middle, while dorsal view shows them to be broadest at apex.

Sphegina (s. str.) *latifrons* Egger, 1865

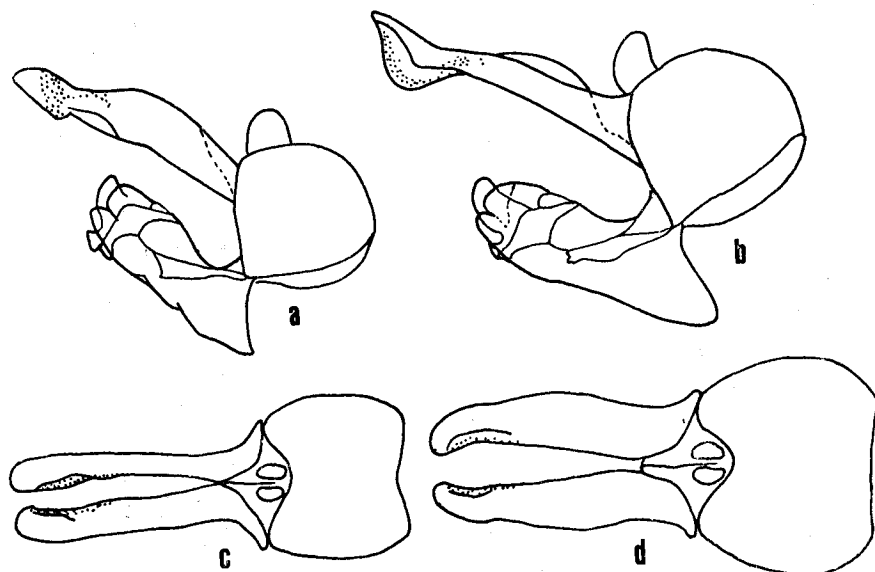


Fig. 9. — Male genitalia; a, b laterally, c, d dorsally: a, c — *Sphegina latifrons*, b, d — *Sph. sublatifrons*.

Grada genitalija mužjaka (a, b bočno, c, d dorzalno)

- Distance between third and fourth sternite 1—1.5 times as long as the length of sternite 3; hind part of sternite 4 longer than its width (Fig. 10b). Profile view shown a slight projection at front margin of sternite 4 (Fig. 10d). Female third sternite 1.5—2 times as wide as its length (Fig. 10f). Male genitalia illustrated at fig. 9b, d.

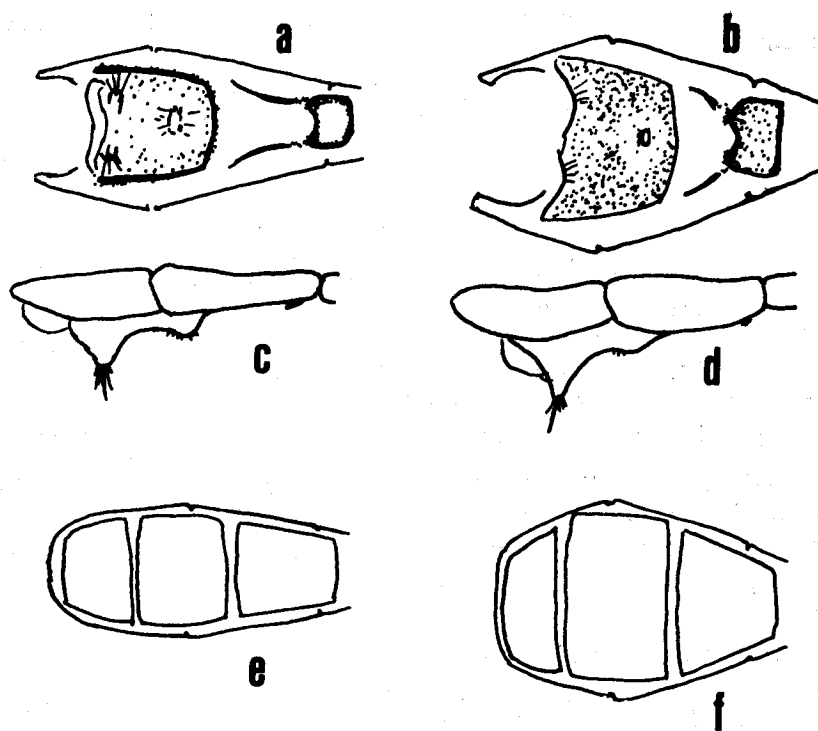


Fig. 10. — Sternites 3 and 4; *a-d* male, *e-f* female (*a, b, c, f* ventrally, *c, d* laterally): *a, c, e* *Sphegina latifrons*, *b, d, f* *Sph. sublatifrons*
 Građa sternita 3 i 4; *a-d* mužjak, *e-f* ženka (*a, b, c, f* ventralno, *c, d* bočno):

Side view shows that styli are the broadest at front part, while dorsal view shows them to be broadest in the middle.

Sphegina (s. str.) *sublatifrons* sp. nova

4. Face entirely black ... 5
 — Face in lower part yellow ... 7
 5. Sternopleurae glossy, without dustiness. Front with long, erect hairs.
 — Male abdomen without pale markings (Fig. 6g). Structure of male genitalia illustrated in fig. 8e.

Sphegina (s. str.) *montana* Becker., 1921

- Sternopleurae and whole pleurae grey dusted. Front with short, flattened, pale hairs ... 6
 6. Fourth abdominal segment at front margin with yellow band (Fig. 6e). Male genitalia in fig. 8b.

Sphegina (s. str.) *verecunda* Collin, 1937.

- Fourth abdominal segment at front margin without yellow band (Fig. 6f). Male genitalia in fig. 8c.

Sphegina (s. str.) *clavata* (Scopoli, 1763)

7. Third antennal segment large and pale (Fig. 7b). Male genitalia in fig. 8d.

Sphegina (s. str.) *elegans* Schummel, 1843

- Third antennal segment small and dark (Fig. 7a). Male genitalia in fig. 8a.

Sphegina (s. str.) *clunipes* (Fallen, 1816)

1. *Sphegina* (s. str.) *clunipes* (Fallen, 1816) (Fig. 6a; 7a; 8a, g).

The most frequent and numerous species of this genus in Yugoslavia. It occurs in forest biotopes on both high mountains (Kopaonik, Durmitor, Stara Planina, Šarplanina) and low mountains (Fruška Gora, Goč, Tara) but in less abundant populations. In the south and low altitudes (Konjsko-Macedonia) it occurs as early as April, while at higher altitudes (Mlinski potok — Durmitor) the season is in August.

2. *Sphegina* (s. str.) *verrecunda* Collin, 1937. Fig. 6e; 7d; 8b, h).

This species was registered on Durmitor (Šimić 1987). After checking the collection it has been found that there are no samples of this species but the pale specimens of *Sphegina sibirica* Stack. Male genitalia preparation confirms it. A single male sample of this species has been caught in Slovenia.

Record: Slovenia (Savinja 16. 06. 1988. 1 ♂, 1 ♀).

3. *Sphegina* (s. str.) *clavata* (Slopoli, 1763) Fig. 6f; 7e; 8c, i).
Sphegina miciki Vujic, 1987 Syn. n.

Records: Vršачke Planine (Prevala 8. 06. 1985. 1 ♂ holotyp); Fruška Gora (Testera 24. 05. 1979. 1 ♂); Kopaonik (Jošanica 24. 05. 1987. 1 ♂, Samokovska Reka 22. 05. 1986. 2 ♂, 1 ♀, 1. 05. 1986. 1 ♂). Slovenija (Savinja 16. 06. 1988. 1 ♂).

Compared to all other species of the genus this one occurs at lowest altitudes.

4. *Sphegina* (s. str.) *elegans* Schummel, 1843 (Fig. 6b; 7b; 8d; j).
Sphegina kimakoviczi Strobl, 1897

According to the catalogue of hoverflies in Yugoslavia (Glumac 1972), this species has a wide distribution in Yugoslavia. But the material analysis has proved only the specimens gathered on Kopaonik — in the canyons on the Samokovska and Palještica rivers. Season: May—July.

5. *Sphegina* (s. str.) *montana* Becker, 1921 (Fig. 6g; 7f; 8e; k, l).
Sphegina eoa Stackelberg, 1953

It was not recorded in Yugoslavia earlier. First records have been located in north-west part of our country.

Records: Slovenija (Logarska Dolina 17. 06. 1988. 2 ♂, Jesenice 18. 06. 1988. 1 ♂, Savica 14. 06. 1988. 1 ♂, Kamniška Bistrica 16. 06. 1988. 8 ♂, 5 ♀, Savinja 16. 06. 1988. 2 ♂, 1 ♀).

6. *Sphegina* (A.) *sibirica* Stackelberg, 1953 (Fig. 6h; 7c; 8h; 8l).

The only species of sub-genus *Asio.phegina* Stack. recorded in Yugoslavia. It occurs in coniferous zone of highest mountains. The first record was on Durmitor (Šimić 1987). During these researches it has been registered on Kopaonik, Tara and several mountains in Slovenia. Season: June (the most numerous populations) — August.

7. *Sphegina* (s. str.) *latifrons* Egger, 1865 (Fig. 6c; 7g; 9a, c; 10a, c).

Taxonomical status

During the researchs, specimens of species *Sphegina latifrons* have been registered in Yugoslavia for the first time. Morphological characteristics the species clearly distinguishes from other described species (except perhaps from *Sphegina cornifera* Beck.). A detailed taxonomical analysis of collected samples has shown that there are two species on the basis of description from various keys (Sack 1932; male genitalia and some other morphological characters, we intend to show through description of new species. It is rather difficult to decide up-on the belonging of described species to either of these two species on the basis of description from various keys (Sack 1932; Stackelberg 1953, 1956, 1956a; Violović 1983; Bankowska 1963, 1967). The characters relevant for their separation are not given due to already mentioned distributions of these two species (or a group of species). They all mention the variety of abdomen markings being a sign that they have probably had samples of both species. According to the illustration of abdomens and genitalia given by Bankowska (1963, 1967), we can be pretty sure that it presents the species we designate to be a typical form, i. e. *Sphegina latifrons*. Description given by Stakelberg (1953) „abdomen... with a broad reddish-yellow band in front half of third segment” can also be applied to this species (Fig. 6c). Descriptions given by Sack (1932) are the vaguest ones. None of the characters valid for the separation of these species are mentioned in the key, except the formulation that”... third segment is broad” (Sack 1932). The illustrations of abdomen (Fig. 6c, d; 10) show that typical form is more slender than the separated species, but there are specimens in the collected material which make the separation on the basis of the width of third and fourth segment rather difficult, due to very slight differences. The reliable characters are the structure of male genitalia and the distance between third and fourth segment (Fig. 10a, b). Having in mind descriptions given by Bankowska (1967) and Stakelberg (1953), as well as a large number of specimens collected over a wide area, we have chosen to mark this species as a typical form under the name already given by Egger.

Records: Savinja 16. 06. 1988. 1 ♂; Siara Planina (Dojkinačka Reka 29. 05. 1987. 4 ♂, 2 ♀, 30. 05. 1988, 1 ♂, Arbinje 26. 06. 1987. 3 ♂, 1 ♀, Topli Do — Pilj 28.05. 1987. 1 ♂, 25. 06. 1987. 3 ♂, 2 ♀); Kopaonik (Duboka Reka 18. 06. 1986. 5 ♂, 5 ♀, 23. 05. 1986. 2 ♂, Marina Voda 15. 06. 1986. 10 ♂ 6 ♀, 24. 05. 1986. 7 ♂ 4 ♀, Karamanski Potok 7. 07. 1986. 4 ♂, 2 ♀, 22.06. 1987. 8 ♂, 5 ♀, Pajino Preslo 18. 06. 1986. 4 ♂, 6. 07. 1986. 2 ♂, Velika Reka 23. 05. 1986. 4 ♂, 1 ♀, Jasle — Čukara 20. 05. 1986. 4 ♂, 3 ♀, Samokovska Reka 16. 06. 1986. 1 ♂, 22. 05. 1986. 9 ♂, 7 ♀).

In Yugoslavia, this species occurs at the altitudes above 1300 m, in coniferous forest zone, near the brooks and in dense shaded places. Numerous populations occur in May — June.

8. *Sphegina* (s. str.) *sublatifrons* sp nova (Fig. 6d; 7h; 9b, d; 10b, d, f).

Morphologically similar to species *Sphegina latifrons* Egg.; each distinction shall be clearly emphasized in following description.

Males

Front black covered with pale hairs. The projected part with antennae shiny black. Face in upper half black, dusted pale. Face in lower half yellow. Mouth edge strongly projected (Fig. 7h). Antennae black, quite large, oval. Arista dark brown.

Thorax glossy black, covered with flattened pale yellow hairs on dorsum and scutellum. Humeri dusted pale. Front and middle pair of legs yellow except two hind tarsal segments being light brown. Femur 3 swollen, the first 1/3 yellow (with *Sphegina latifrons* it is yellow in first 2/5). Third tibia arched at basal, broadened at apex, Third tibia with a small brown ring at first 1/3, while at apical thirds it is dark. Tarsi of hind legs black, metatarsus swollen. Halteres yellow. Wing surface uniform, wing veins yellow at base, the rest dark brown.

Abdomen illustrated in fig. 6d. Tergites 1 and 2 black; tergite 3 with yellow band of various width. Tergite 4 slightly longer than its width. Sternites 3 and 4 illustrated in fig. 10b, d. The basic distinctions from species *Sphegina latifrons* could be noticed here. Sternite 3 has two slight projections and the beginning of sternite 4 is only 1,5 times as long as sternite 3 (with *Sphegina latifrons* this distance is always 2 times longer). In the first half of sternite 4 there is a protuberance covered with black bristle. It is not so noticeable as it is with *Sphegina latifrons*. Hind part of sternite 4 has a pair of small knobs with long, pale hairs. Posterior part of sternite 4 wider than its length (with *Sphegina latifrons* it is longer than its width). Male genitalia are illustrated in fig 9b, d. Styli are elongated and are broadest at apex (view from side); (with *Sphegina latifrons* they are broadest at middle). From dorso-lateral view styli are broadest at middle (with *Sphegina latifrons* they are broadest at apex).

Females

Females are very similar to males. Tarsal segments of front and middle legs are darker. Abdominal segment somewhat broader than with the males. Sternites illustrated in fig. 10f. Sternite 3 is 1,5—2 times wider than its length (with *Sphegina latifrons* it is square shaped).

Records: Holotype — ♂ — Kopaonik (Karamanski potok 22. 06. 1986.).

Allotype — ♀ — Kopaonik (Pajino preslo, 18. 06. 1986.).

Kopaonik (Marina voda 15. 06. 1986. 2 ♂, Duloka reka 23. 05. 1986. 1 ♂, Jasle—Čukara 20. 05. 1986. 2 ♂, 1 ♀. Velika Reka 23. 05. 1986. 1 ♂ Treska 17. 07. 1985. 1 ♂, Karamanski potok 22. 06. 1986. 2 ♂ — paratype, 7. 07. 1986. 2 ♂, 2 ♀, Karaman 17. 07. 1985. 4 ♂, 3 ♀, Srebrenac 21. 06. 1987. 1 ♂).

Stara planina (Dojkinačka Reka 29. 05. 1987. 1 ♂, Arbinje 26. 06. 1987. 1 ♂).

Šarplanina (Durlov Potok 18. 07. 1986. 1 ♂).

The species has been recorded at the same localities where the previously described species also and during the same season, or later (in July). It has been recorded so far only on the highest mountains of the central part of Balkan peninsula (Kopaonik, Stara planina, Šarplanina).

These researches increased the number of species of genus *Sphegina* in Yugoslavia from 6 to 9 by adding the records of *Sphegina montana* *Sphegina latifrons* and *Sphegina sublatifrons*.

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**RODOVI NEOASCIA WILLISTON 1886 I SPHEGINA MEIGEN 1822
(DIPTERA: SYRPHIDAE) U JUGOSLAVIJI I OPIS VRSTE SPHEGINA
SUBLATIFRONS SP. NOVA**

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S a ž e t a k

Detaljna faunistička istraživanja osolikih muva na području Jugoslavije tokom poslednjih nekoliko godina, otkrila su veći broj vrsta dva morfološki bliska roda *Sphegina* i *Neoascia*. U ovom radu su sabrani dosadašnji rezultati i raščišćeni taksonomski problemi vezani za ove rodove. Analiza je vršena na osnovu materijala iz zbirke Instituta za biologiju u Novom Sadu i zbirke Prirodnjačkog muzeja u Beogradu.

U okviru roda *Neoascia* ustanovljeno je 7 vrsta za koje je dat ključ, crteži abdomena mužjaka i ženki (Sl. 3) i genitalija mužjaka (Sl. 4). Za svaku vrstu je navedeno rasprostranjenje u Jugoslaviji. Vrste *N. annexa* Müll. i *N. tenur* Harr. su u radovima naših autora navođene pod sinonimima *N. floralis* Mg. i *N. dispar* Mg. Za vrste *N. meticulousa* Scop., *N. unifasciata* Str. koje do sada nisu bile registrovane u Jugoslaviji, navedeni su prvi nalazi.

U okviru roda *Sphegina* utvrđeno je 8 vrsta. Za njih je dat ključ, crteži abdomena mužjaka (Sl. 8 i 9). Za svaku vrstu je navedeno rasprostranjenje u Jugoslaviji. Vrste *Sph. montana* Stack. i *Sph. latifrons* Egg. su tokom ovih istraživanja prvi put zabeležene u našoj zemlji.

Analiza jedinki vrste *Sph. latifrons* je pokazala da u okviru nje postoje dve vrste. Razlike među njima do sada nisu bile uočene zbog njihove velike morfološke odvojenosti od ostalih vrsta roda.

Podrod: *Sphegina* Meigen, 1822.

3. Rastojanje između trećeg i četvrtog sternita 2—3 puta veće od dužine trećeg; četvrti sternit duži od širine u zadnjem delu (Sl. 10a). Posmatrano u profilu, ispupčenje na prednjem kraju četvrtog sternita dva puta manje od para ispusta na zadnjem kraju (Sl. 10c). Kod

ženke treći sternit kvadratast (Sl. 10e). Građa genitalija mužjaka je na sl. 9a, c. Bočno posmatrano, stili su najširi oko sredine, a dorzalno, na vrhu.

Sphegina (s. str.) *latifrons* Egger, 1865.

— Rastojanje između trećeg i četvrtog sternita 1—1,5 puta veće od dužine trećeg; četvrti sternit širi u zadnjem delu nego što je dug (Sl. 10b). U profilu posmatrano, ispupčenje na prednjem rubu četvrtog sternita samo blago (Sl. 10d). Kod ženke treći sternit 1,5—2 puta širi nego što je dug (Sl. 10f). Građa genitalija mužjaka data je na sl. 9b, d. Posmatrano bočno, stili su najširi na prednjem kraju, a gledano dorzalno, oko sredine.

Sphegina (s. str.) *sublatifrons* sp. nova.