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### NEW DATA ON PHORIDAE (DIPTERA)

The present paper contains some new records about 44 species of *Phoridae* from the Baltic districts of the USSR and a new revised key to the world species of the genus *Plastophora*. The faunistic material was collected in 1960—1967 in Estonia, Latvia and Lithuania by K. Elberg and J. Vilbaste (in the latter case the surname of collector is given at the collecting data) and determined by C. N. Colyer. The species new in the investigated district are marked with an asterisk behind the name of the country.

There are only very few published records about the Phorid-fauna of this area: 4 papers with 56 species in all (Dampf, 1924; Schmitz, 1924; Elberg, 1961; Colyer, Elberg, 1966). The probable number of the species is, however, more than 200. There are added 14 new species in Estonia, 2 in Latvia and 21 in Lithuania. The number of the Estonian *Phoridae* is increased up to 70 and for all Baltic districts — up to 78. Among these species there are several rare Phorids, some of them presumably occurring on the limits of their area.

In the taxonomic part of this paper, the hitherto unknown male of *Plastophora sicaria* Colyer (the type was a female from Yugoslavia) is now described, and a revised key to the world species of the genus, with a Check List, is given by C. N. Colyer.

### PHORINAE

#### 1. *Phora aterrima* (Fabricius)

Colyer, Elberg, 1966: 212.

New records. Estonia: Tartu, Zoological Museum, on window, 4. VI. 64, 1 ♂.

Distribution. Europe, Algeria and North America.

#### 2. *Phora dubia* Zetterstedt (= *schineri* Becker)

New records. Estonia\*: Naissoo, oak wood with *Betula pubescens* and *Corylus avellana*, 13. V. 65, 2 ♂ ♂ 1 ♀; Tartu, Vasula, mixed forest (*Picea abies*, *Populus tremulae*, *Corylus avellana* etc.), 8. V. 67, 4 ♂ ♂ 1 ♀.

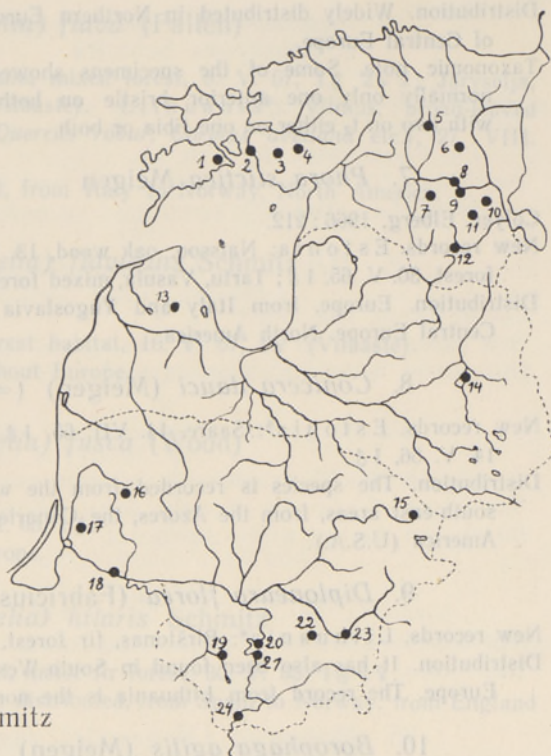
Distribution. From Lapland to Italy. Common in Northern and Central Europe.

## Scheme 1. Situation of the localities

Estonia: 1 — Kingli, 2 — Puhtu, 3 — Tuhu, 4 — Naissoo, 5 — Tooma, 6 — Saare, 7 — Konguta, 8 — Tartu, 9 — Reola, 10 — Järvelja, 11 — Taevaskoja, 12 — Sõmerpalu.

Latvia: 13 — Talsi, 14 — Lake Lubana.

Lithuania: 15 — Lake Zalva, 16 — Tverai, 17 — Saugai, 18 — Pagegiai, 19 — Lake Žuvinta, 20 — Birštonas, 21 — Forest Punia, 22 — Trakai, 23 — Vilnius, 24 — Druskininkai.

3. *Phora hamata* Schmitz

Colyer, Elberg, 1966 : 212.

New records. Estonia: Puhtu, broad-leaved deciduous forest (*Tilia cordata*, *Quercus robur*, *Fraxinus excelsior*, *Corylus avellana* etc.), 18. V. 65, 2♂♂; Naissoo, oak wood, 13. V. 65, 1♂. Lithuania\*: Trakai, pine forest with *Corylus avellana*, 10. VI. 64, 1♂.

Distribution. The Estonian records represent the northern limit of this rare Central-European species known from Austria, Bavaria and Hungary.

Taxonomic note. One aberrant specimen had two anterior bristles on  $t_2$ .

4. *Phora holosericea* Schmitz

Colyer, Elberg, 1966 : 212.

New records. Latvia\*: Talsi, Lauciene, mixed forest (*Picea abies*, *Betula verrucosa*, *Populus tremulae*, *Quercus robur* etc.), 15. VI. 65, 3♂♂. Lithuania\*: Pagegiai, Mykitai, 21. VI. 65, 1♂.

Distribution. Europe, Lapland to Portugal and Hungary.

5. *Phora hyperborea* Schmitz

Colyer, Elberg, 1966 : 212.

New records. Estonia: Tuhu, rich fen, 16. VII. 61, 2♂♂; Sõmerpalu, mesotrophic wet pine peat-moor, 23. VI. 60, 1♂; Sõmerpalu, Lake Varesejärv, swampy shore, *Caricetum*, 13. VII. 60, 4♂♂. Lithuania\*: Lake Žuvinta, swampy shore, *Phragmitetum*, 17. V. 66, 5♂♂.

Distribution. Northern Europe, up to Lapland. Mountain areas of Central Europe.

6. *Phora obscura* Zetterstedt

New records. Estonia\*: Naissoo, oak wood, 13. V. 65, 26♂♂ 2♀♀; Tartu, Rähni, moist fir forest, 30. V. 65, 11♂♂ 1♀. Lithuania\*: Birštonas, fir forest, 15. V. 66, 2♂♂.

Distribution. Widely distributed in Northern Europe; also known from mountain areas of Central Europe.

Taxonomic note. Some of the specimens showed interesting aberrations — there is normally only one anterior bristle on both  $t_2$  and  $t_3$ , but specimens occurred with two on  $t_2$  either on one tibia or both.

### 7. *Phora sictica* Meigen

Colyer, Elberg, 1966 : 212.

New records. Estonia: Naissoo, oak wood, 13. V. 65, 4 ♂ ♂; Tartu, Tiksoja, moist fir forest, 30. V. 65, 1 ♂; Tartu, Vasula, mixed forest, 8. V. 67, 1 ♀.

Distribution. Europe, from Italy and Yugoslavia up to Lapland. Mountain areas of Central Europe. North America.

### 8. *Conicera dauci* (Meigen) (= *atra* (Meigen))

New records. Estonia\*: Saare, 14. VII. 65, 1 ♂. Lithuania\*: Birštonas, fir forest, 14. V. 66, 1 ♂.

Distribution. The species is recorded from the whole of Europe except Italy and the south-east areas, from the Azores, the Canaries, Madeira, Japan (Tokyo) and North America (U.S.A.).

### 9. *Diploneura florea* (Fabricius)

New records. Lithuania\*: Birštonas, fir forest, 14. V. 66, 1 ♂.

Distribution. It has also been found in South-West England and Central and Southern Europe. The record from Lithuania is the northernmost one.

### 10. *Borophaga agilis* (Meigen)

Colyer, Elberg, 1966 : 212.

New records. Lithuania\*: Forest Punia, meadow, *Caricetum*, 13. VII. 66, 1 ♀.

Distribution. Europe, from Finland to Italy.

## METOPININAE

### 11. *Megaselia (Megaselia) angustifrons* (Wood)

Colyer, Elberg, 1966 : 214.

New records. Lithuania\*: Lake Zuvinta, swampy shore, *Phragmitetum*, 17. V. 66, 1 ♀.

Distribution. Northern and Central Europe; the Canaries.

### 12. *Megaselia (Megaselia) brevicostalis* (Wood)

Colyer, Elberg, 1966 : 214.

New records. Lithuania\*: Lake Zalva, dry glade, 4. VII. 64, 1 ♂; Vilnius, Lake Kryžiuočiu, swampy shore, *Phragmitetum*, 12. VI. 64, 1 ♂.

Distribution. Common throughout the Palaearctic Region.

### 13. *Megaselia (Megaselia) coetanea* Schmitz

New records. Estonia\*: Tartu, Vasula, mixed forest, 8. V. 67, 4 ♂ ♂.

Distribution. Uncommon in Finland, Austria, Spain.

### 14. *Megaselia (Megaselia) crassicosta* (Strobl)

New records. Lithuania\*: Saugai, 21. VI. 65, 1 ♀.

Distribution. Uncommon but widely distributed in Europe; from Yugoslavia to Denmark, from Ireland to Lithuania.

15. *Megaselia (Megaselia) flava* (Fallén)

New records. Estonia\*: Tartu, Vasula, mixed forest, 8. V. 67, 1♂ 2♀♀; Järvselja, forest habitat, 16. V. 67, 1♀ (Vilbaste). Lithuania\*: Vilnius, broad-leaved deciduous forest (*Tilia cordata*, *Quercus robur*, *Corylus avellana* etc.), 27. VIII. 65, 1♂.

Distribution. Europe, widely distributed, from Italy to Norway. North America.

16. *Megaselia (Megaselia) flavicans* Schmitz

Colyer, Elberg, 1966: 214.

New records. Estonia: Järvselja, forest habitat, 16. V. 67, 1♀ (Vilbaste).

Distribution. Widely distributed throughout Europe.

17. *Megaselia (Megaselia) fusca* (Wood)

Dampf, 1924: 21.

New records. Estonia: Saare, 14. VII. 65, 1♂.

Distribution. Northern and Central Europe.

18. *Megaselia (Megaselia) hilaris* Schmitz

New records. Estonia\*: Tartu, Rähni, moist fir forest, 30. V. 65, 1♂ 1♀.

Distribution. Uncommon. Europe, widely distributed, from Spain to Norway, from England to Estonia.

19. *Megaselia (Megaselia) hybrida* Schmitz

New records. Estonia\*: Tartu, Vasula, mixed fir forest, 8. V. 67, 2♀♀.

Distribution. Uncommon. Europe, widely distributed, from Spain to Norway.

20. *Megaselia (Megaselia) lata* (Wood)

New records. Lithuania\*: Birštonas, fir forest, 15. V. 66, 1♀.

Distribution. Widely distributed throughout the Palaearctic Region.

21. *Megaselia (Megaselia) latifemorata* (Becker)

Colyer, Elberg, 1966: 214.

New records. Estonia: Puhtu, broad-leaved deciduous forest, 18. V. 65, 1♂ 1♀; Kõnguta, Aru, beach forest, 19. V. 65, 1♂.

Distribution. Widely distributed throughout Europe.

22. *Megaselia (Megaselia) longiseta* (Wood)

New records. Lithuania\*: Birštonas, fir forest, 15. V. 66, 1♂.

Distribution. Widely distributed throughout the Palaearctic Region.

23. *Megaselia (Megaselia) mallochi* (Wood)

New records. Estonia\*: Taevaskoja, dry pine forest with *Gramineae* and *Vaccinium vitis-idaea*, 1. V. 66, 1♀.

Distribution. Uncommon. Europe, widely distributed.

24. *Megaselia (Megaselia) minor* (Zetterstedt)  
*v. politifrons* Schmitz

Colyer, Elberg, 1966 : 214.

New records. Lithuania\*: Lake Zuvinta, swampy shore, *Phragmitetum*, 17. V. 66, 1 ♀; Druskininkai, 19. V. 66, 1 ♀.

Distribution. Up till now it is only known from England, Austria, Estonia, and Southern Spain (La Linea).

25. *Megaselia (Megaselia) picta* Lehmann

Colyer, Elberg, 1966 : 214.

New records. Estonia: Puhtu, broad-leaved deciduous forest, 26. VI. 63, 4 ♂ ♂.

Distribution. Widely distributed in Europe.

26. *Megaselia (Megaselia) pulicaria* (Fallén)

Dampf, 1924 : 22; Elberg, 1961 : 19 (probably a false determination).

New records. Estonia: Järvelja, forest habitat, 16. V. 67, 1 ♀ (Vilbaste).

Distribution. Europe, widely distributed.

27. *Megaselia (Megaselia) ruficornis* (Meigen)

New records. Estonia\*: Puhtu, broad-leaved deciduous forest, 18. V. 65, 1 ♀.

Distribution. Common and widely distributed throughout the Palaearctic Region.

28. *Megaselia (Megaselia) rupestris* Schmitz

New records. Estonia\*: Tartu, Vasula, mixed forest, 8. V. 67, 1 ♂; Reola, pine forest with *Corylus avellana*, 25. IV. 66, 1 ♀.

Distribution. Hitherto only known from Austria and Spain.

29. *Megaselia (Megaselia) subtumida* (Wood)

Colyer, Elberg, 1966 : 215.

New records. Estonia: Puhtu, broad-leaved deciduous forest, 18. V. 65, 1 ♂ 1 ♀; Konguta, Aru, beach forest, 19. V. 65, 1 ♂; Tartu, Vasula, mixed forest, 8. V. 67, 1 ♂; Järvelja, forest habitat, 16. V. 67, 1 ♂ (Vilbaste). Lithuania\*: Vilnius, broad-leaved deciduous forest, 27. VIII. 65, 1 ♂.

Distribution. Common throughout the Palaearctic Region.

30. *Megaselia (Megaselia) tarsella* (Lundbeck)

New records. Lithuania\*: Birštonas, fir forest, 15. V. 66, 1 ♂ 1 ♀.

Distribution. Uncommon. Northern Europe.

31. *Megaselia (Aphiochaeta) altifrons* (Wood)

New records. Lithuania\*: Birštonas, fir forest, 14. V. 66, 1 ♀.

Distribution. Europe, widely distributed.

32. *Megaselia (Aphiochaeta) baltica* Schmitz

Schmitz, 1924 : 163—165.

New records. Estonia: Tooma, Lake Kaasikjärv, swampy shore, *Caricetum*, 28. VI. 60, 1 ♂.

Distribution. Northern Europe.

33. *Megaselia (Aphiochaeta) ciliata* (Zetterstedt)

New records. Estonia\*: Naissoo, oak wood, 13. V. 65, 1♀.  
Distribution. This species is known from the whole of Europe, except for its eastern and south-eastern parts as well as Italy.

34. *Megaselia (Aphiochaeta) conformis* (Wood)

New records. Lithuania\*: Birštonas, fir forest, 15. V. 66, 4♂♂.  
Distribution. Northern and Central Europe. Widely distributed.

35. *Megaselia (Aphiochaeta) fuscipalpis* Lundbeck

Dampf, 1924 : 21.  
New records. Estonia: Tuhu, rich fen, 6. VIII. 61, 1♂.  
Distribution. Uncommon. Northern Europe and the mountains of Central Europe.

36. *Megaselia (Aphiochaeta) involuta* (Wood)

New records. Estonia\*: Järvselja, forest habitat, 16. V. 67, 1♀ (Vilbaste).  
Distribution. Common and widely distributed throughout Europe, from Finland to Crete.

37. *Megaselia (Aphiochaeta) lucifrons* (Schmitz)

New records. Lithuania\*: Birštonas, fir forest, 15. V. 66, 2♂♂.  
Distribution. Widely distributed in Northern Europe, from Ireland to Estonia. Mountains of Central Europe.

38. *Megaselia (Aphiochaeta) manicata* (Wood)

Dampf, 1924 : 22.  
New records. Estonia: Tartu, Vasula, mixed forest, 8. V. 67, 1♀. Latvia\*: Lake Lubana, River Iča, *Caricetum*, 29. VI. 64, 1♀.  
Distribution. Europe, common and widely distributed, from Lapland to the Canary Islands, Spain, Majorca, Yugoslavia.

39. *Megaselia (Aphiochaeta) producta* (Schmitz)

Dampf, 1924 : 21; Colyer, Elberg, 1966 : 213.  
New records. Estonia: Tooma, Lake Kaasikjärv, shampy shore, *Caricetum*, 2. VIII. 60, 1♂. Lithuania\*: Tverai, rich fen, 17. VII. 66, 1♂.  
Distribution. Only in Northern Europe. Uncommon.

40. *Megaselia (Aphiochaeta) pumila* (Meigen)

Colyer, Elberg, 1966 : 213.  
New records. Estonia: Island Saaremaa, Kingli, 28. VI. 63, 3♂♂; Tartu, Vasula, mixed forest, 8. V. 67, 1♀; Reola, pine forest with *Corylus avellana*, 25. IV. 66, 1♂1♀; Taevaskoja, moist forest of *Alnus glutinosa*, 1. V. 66, 2♂♂2♀♀.  
Distribution. Common throughout the Palaearctic Region, including North Africa.

41. *Megaselia (Aphiochaeta) variana* Schmitz

Colyer, Elberg, 1966 : 213.

New records. Estonia: Tooma, Lake Kaasikjärv, swampy shore, *Caricetum*, 28. VI. 60.

1 ♀. Lithuania\*: Birštonas, fir forest, 15. V. 66, 1 ♂.

Distribution. Common throughout the Palaearctic Region.

42. *Plastophora aristica* (Schmitz)

New records. Estonia\*: Naissoo, oak wood, 13. V. 65, 1 ♂.

Distribution. Uncommon. Only Northern Europe.

43. *Plastophora sicaria* Colyer

New records. Estonia\*: Tartu, Vasula, mixed forest, 8. V. 67, 1 ♂.

Distribution. Up till now it is only known from Yugoslavia.

44. *Plastophora styloprocta* (Schmitz)

Colyer, Elberg, 1966 : 215.

New records. Estonia: Tartu, Tiksoja, moist fir forest, 30. V. 65, 1 ♂ 1 ♀; Tartu,

Vasula, mixed forest, 8. V. 67, 1 ♂ 4 ♀.

Distribution. Widely distributed in the Palaearctic Region, but uncommon.

*Plastophora sicaria* Colyer ♂

Frons somewhat less wide than in the ♀ (about 5 : 4), blackish, with grey dusting; overall with strong black pubescence, the hairs longer toward the vertex. Antials well removed from the eye-margin, and closer to the anterolaterals than to the upper supra-antennals. Supra-antennals small, the upper much closer together than the praeocellars, the lower more approximated. Second transverse row of frontal bristles standing much nearer to the third than to the anterior row, and its bristles equidistant. Third antennal segment of normal size, brown; arista about as long as the maximum width of the frons, finely pubescent. Palpi greyish-yellow, short, broad-oval, the bristles very short.

Thorax black, somewhat shining, with dark pubescence; the pleura brownish below. Mesopleura with longish, but uniform hairs in upper posterior corner. Scutellum furrowed with very fine hairs in the recesses; two pairs of scutellar bristles, the anterior weak.

Abdomen, including the venter, black, dull, weakly haired. Tergites III—V about equal in length, II and VI somewhat longer. Hypopygium (Fig. 1) withdrawn in the allotype, higher than long, unicolorous with the remainder of the abdomen, a few tender hairs on the lower and hind margins; anal opening large; anal tube long and rather slender, greyish-yellow, darker at the base; end-hairs of the ventrite strong, but not exceptionally long.

Legs darker than in the ♀, greyish-brown, somewhat shining. Fore tarsi slim, all the segments longer than wide; pulvilli on all tarsi clearly evident. Hind femora rather dilated, the basiventral hairs medium long, decumbent, 6—7 in number, reaching almost to the middle. Hind tibiae robust, dorsal seam well arched, 7—8 fairly strong posterodorsal cilia standing out in the apical half, the upper more numerous and thickly disposed, and much weaker.

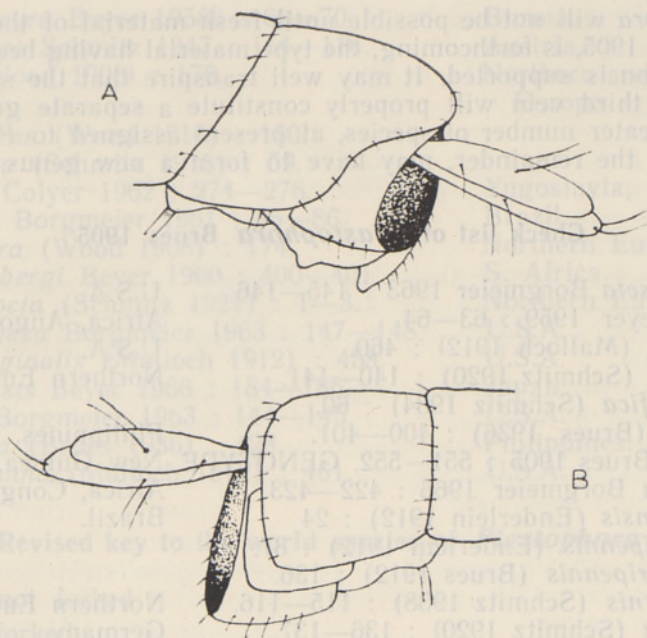


Fig. 1. *Plastophora sicaria* Colyer, ♂, hypopygium: A — left side, B — right side.

Wings (Fig. 2) rather darkly tinged with brownish-grey, the thick veins brown, and the thin veins well pigmented. Costal index 0.46; ratios about 24:17:7, i. e.  $1=2+3$ . Cilia moderately short (0.082 mm), about 17 in each row from the humeral cross-vein to the end of the costa, of which 7 stand on 2+3. Vein 4 a little obliterated at its origin, well curved basally, thence almost straight to the margin. General outline rather long and narrow. Halteres, including the peduncle, black.

Length 1.6 mm.

Allotype ♂, with micro-preparation of wing, in the collection of the Institute of Zoology and Botany, Tartu, Estonia, U.S.S.R. Collected on 8. V. 1967, Vasula, Tartu, Estonia, K. Elberg.

Remarks. The ♀ was described by Colyer (1962) from Yugoslavia, and apart from the customary sexual differences in this genus and the closely related *Megaselia*, the ♂ agrees so closely that it can confidently be assigned to this species. Since a previous world key to the genus by Colyer (1957), a considerable number of new species have been added by Borgmeier, Beyer and Colyer, and it has therefore been thought desirable to bring forward a revised key, and Check List, which follow. Further new species awaiting publication are not included. Borgmeier (1963) considers that a satisfactory definition of the generic boundaries

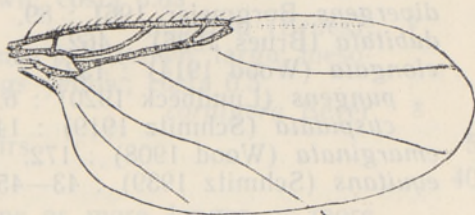


Fig. 2. *Plastophora sicaria* Colyer, ♂, wing.



of *Plastophora* will not be possible until fresh material of the genotype, *beirne* Brues 1905, is forthcoming, the type material having been lost, and this contention is supported. It may well transpire that the section with an unforked third vein will properly constitute a separate genus, while the much greater number of species, at present assigned to *Plastophora*, which forms the remainder, may have to form a new genus.

### Check list of *Plastophora* Brues 1905

- aequaliseta* Borgmeier 1963 : 145—146. U.S.A.  
*afra* Beyer 1959 : 63—64. Africa, Angola.  
*arcuata* (Malloch 1912) : 460. U.S.A.  
*aristica* (Schmitz 1920) : 140—141. Northern Europe.  
*mirifica* (Schmitz 1934) : 60.  
*bakeri* (Brues 1936) : 400—401. Philippines.  
*beirne* Brues 1905 : 551—552. GENOTYPE. New Guinea.  
*bilobata* Borgmeier 1966 : 422—423. Africa, Congo.  
*brasiliensis* (Enderlein 1912) : 24. Brazil.  
*fumipennis* (Enderlein 1912) : 37.  
*umbripennis* (Brues 1912) : 136.  
*brevicornis* (Schmitz 1938) : 115—116. Northern Europe.  
*brunnea* (Schmitz 1920) : 136—137. Germany.  
*colyeri* Beyer 1966 : 182—184. Japan.  
*conferta* Borgmeier 1967 : 254—255. Okinawa.  
*cornigera* Beyer 1966 : 180—181. New Guinea (New Britain).  
*cultrata* (Brues 1936) : 391. Philippines.  
*divergens* Borgmeier 1961 : 89. Brazil.  
*dubitata* (Brues 1936) : 462. Philippines.  
*elongata* (Wood 1914) : 153. Europe.  
*pungens* (Lundbeck 1920) : 6.  
*cuspidata* (Schmitz 1919) : 145—146.  
*emarginata* (Wood 1908) : 172. Europe.  
*equitans* (Schmitz 1939) : 43—45. Arabia, Yemen. S. Africa.  
*fennicola* Beyer 1958a : 107—108. Finland.  
*furcilla* Schmitz 1956 : 43—46. Austria.  
*glandulifera* Borgmeier 1967 : 255—256. Java.  
*gracilis* Borgmeier 1961 : 88. Brazil.  
*infumata* (Malloch 1912) : 490. U.S.A.  
*juli* (Brues 1908) : 201. North and South America.  
*mucronata* (Borgmeier 1925) : 140.  
*lucigaster* Borgmeier 1961 : 90—91. Brazil.  
*luteipes* (Schmitz 1918) : 60—61. Northern Europe.  
*croceipes* (Schmitz 1948) : 388—390.  
*luteizona* (Borgmeier 1925) : 142. Brazil.  
*nudipleura* Beyer 1958a : 106—107. Finland.  
*obscuricauda* Beyer 1966 : 181—182. New Guinea (New Ireland).  
*opilionidis* (Borgmeier 1931) : 143. Argentina, Brazil.  
*pallidicornis* Colyer 1966 : 75—76. U.S.S.R., Kuril Islands, Kunashir.  
*persecutrix* (Schmitz 1932) : 129—130. Malaya.  
*pictorufa* Colyer 1957 : 79—82. England.

<i>postobscura</i> Beyer 1958b : 69—70.	Burma.
<i>romphaea</i> Schmitz 1947 : 114—116.	Austria.
<i>rufa</i> (Wood 1908) : 170.	Northern and Central Europe.
<i>pallens</i> (Wood 1910) : 150.	
<i>rubra</i> (Schmitz 1918) : 59.	
<i>sicaria</i> Colyer 1962 : 274—276.	Yugoslavia, Estonia.
<i>sinuosa</i> Borgmeier 1961 : 85—86.	Brazil.
<i>spinigera</i> (Wood 1908) : 174.	Northern Europe.
<i>stuckenbergi</i> Beyer 1960 : 400—401.	S. Africa.
<i>styloprocta</i> (Schmitz 1921) : 1—3.	Northern Europe.
<i>subconvexa</i> Borgmeier 1963 : 147—148.	U.S.A.
<i>submarginalis</i> (Malloch 1912) : 458.	U.S.A.
<i>tokyoënsis</i> Beyer 1966 : 184—186.	Japan.
<i>tristis</i> Borgmeier 1963 : 144—145.	U.S.A.
<i>tubulata</i> (Brues 1936) : 428.	Philippines.
<i>winnemana</i> (Malloch 1912) : 461.	U.S.A.

### Revised key to the world species of *Plastophora*

1. Vein 3 not forked 2.
- Vein 3 forked 4.
2. Yellow species with black markings on abdomen 3.
  - Genotype. *beirne* Brues, ♀
  - Dark species, abdomen uniformly coloured
3. 2 pairs of supra-antennals; antennae dark brown; mesopleura with 2 strong bristles; legs brown; costa 0.53 3.
  - dubitata* (Brues), ♀
  - 1 pair of supra-antennals; antennae pale brown, large; mesopleura with only short hairs; legs yellow; costa 0.5 4.
    - cornigera* Beyer, ♂
4. Mesopleura with bristles or hairs 5.
- Mesopleura bare 40.
5. Mesopleural bristles include one or more longer or more robust 6.
- Mesopleural bristles or hairs uniform 28.
6. Only one longer or more robust mesopleural bristle or hair 7.
- Two or more longer or more robust mesopleural bristles or hairs 24.
7. Scutellum with only two bristles, i. e. the outer pair absent, or if present, minute and hairlike 8.
- Scutellum with four well-developed bristles 13.
8. Halteres dark, black or blackish-brown 9.
- Halteres pale, at least the knob yellow or whitish 11.
9. Costa reaching the middle or beyond 10.
- Costa short (0.42—0.44) 10.
  - elongata* (Wood), ♂
10. Antials nearer to middle line than eye-margin; legs pale; f<sub>3</sub> slender, with darkened apex; costa 0.53; I shorter than 2 + 3; fork acute 10.
  - cultrata* (Brues), ♀
  - Antials nearer eye-margin than middle line; legs dark; f<sub>3</sub> somewhat dilated; costa 0.5; I longer than 2 + 3; fork normal 10.
    - romphaea* Schmitz, ♂

11. Costa clearly reaching beyond the middle (0.56) *persecutrix* (Schmitz), ♀  
 — Costa not reaching the middle 12.
12. Antennae dark brown *arcuata* (Malloch), ♂  
 — Antennae reddish or reddish-yellow *pallidicornis* Colyer, ♀
13. Thorax dark, brownish to blackish 14.  
 — Thorax pale, reddish to yellowish 19.
14. Halteres pale 15.  
 — Halteres dark 18.
15. Legs pale; 1 longer than 2 + 3; antials midway between upper supra-antennals and anterolaterals 16.  
 — Legs dark; 1 equal to 2 + 3; antials close to upper supra-antennals 17.
16. Antennae blackish-brown; lower supra-antennals wanting; major bristle on mesopleura robust *stuckenbergi* Beyer, ♀  
 — Antennae reddish; lower supra-antennals present, although minute and thin; major bristle on mesopleura less differentiated from remainder *brunnea* (Schmitz), ♀
17. Hind femora with short basiventral hairs; anal angle of wing somewhat rectangular *submarginalis* (Malloch), ♀  
 — Hind femora with long basiventral hairs; anal angle of wing normally curved *arcuata* (Malloch), ♀
18. Costa to middle (0.5); 1 almost equal to 2 + 3 (25:15:9); arista shorter than frons-median *fennicola* Beyer, ♂ ♀  
 — Costa not reaching middle (0.44—0.47); 1 clearly longer than 2 + 3 (5:2:1 or similar); arista longer than middle line of frons *elongata* (Wood), ♀
19. Lower supra-antennals minute or rudimentary 20.  
 — Lower supra-antennals, although thin, almost as long as the upper; abdominal tergites III—V brown *juli* (Brues), ♂ ♀
20. Some of the abdominal tergites reddish or yellowish 21.  
 — All abdominal tergites dark, brownish or blackish 22.
21. Hind half of tergite III and the whole of IV and V yellow *luteizona* (Borgmeier), ♂ ♀  
 — Tergites III—IV blackish *equitans* (Schmitz), ♀
22. Scutellum with 4 equal bristles 23.  
 — Outer scutellars only half as long as the inner *bakeri* (Brues), ♀
23. Costa not reaching the middle *equitans* (Schmitz), ♀  
 — Costa well beyond the middle (0.53) *postobscura* Beyer, ♀
24. Costa to middle *spinigera* (Wood), ♂ ♀  
 — Costa not reaching middle 25.
25. 1 longer than 2 + 3 26.  
 — 1 equal to 2 + 3 *arcuata* (Malloch), ♀
26. Scutellum with 4 equal bristles *aristica* (Schmitz), ♂ ♀  
 (Footnote 1)
- Outer scutellars reduced to hairs 27.

Footnote 1. Schmitz, in his original description of the ♂ of *aristica*, stated "ohne Einzelborste", but of *mirifica*, which he subsequently sank as a synonym, he said that it was closely related to *spinigera* and *styloprocta*. The former has two stout major mesopleurals and the latter uniform hairs, only exceptionally the lowest being somewhat longer. In specimens from Estonia and Sweden seen by the present writer, two well-differentiated major mesopleurals were evident.

27. Dark species; fork acute; 1 not much longer than 2 + 3 (21 : 11 : 7) *arcuata* (Malloch), ♂  
 — Pale species; fork not acute; 1 nearly 1½ times as long as 2 + 3 (31 : 15 : 8) *colyeri* Beyer, ♀
28. Halteres pale, yellow or yellowish 29.  
 — Halteres dark, brownish to blackish 36.
29. Costa reaching middle or beyond 30.  
 — Costa not reaching middle 32.
30. Costa longer (0.53); larger species, 1.6—2.2 mm; abdominal tergite VI (♀) trapezoid *winnemana* (Malloch), ♂ ♀  
 — Costa shorter (0.5); smaller species, up to 1.7 mm 31.
31. Abdominal tergites pale with dark markings; tergite VI rounded apically; arista short *pictorufa* Colyer, ♀  
 — Abdominal tergites all blackish; tergite VI trapezoid; arista of normal length *luteipes* (Schmitz), ♀ (Footnote 2)
32. Scutellum with 4 equal bristles *aequaliseta* Borgmeier, ♂ ♀  
 — Scutellum with unequal bristles, or the outer reduced to hairs 33.
33. Costa long (0.44 or above) 34.  
 — Costa definitely short (0.41) 35.
34. Smaller species (1.15—1.7 mm); frons clearly wider than high; arista of normal length; 1 not much longer than 2 + 3 (7 : 4 : 2 or similar) *luteipes* (Schmitz), ♂ ♀ (Footnote 2).  
 — Larger species (1.8—2.4 mm); frons quadratic; arista short, about as long as width of frons; 1 about 1½ times as long as 2 + 3 (19 : 8 : 4) *subconvexa* Borgmeier, ♂ ♀
35. 1 not much longer than 2 + 3 (22 : 13 : 6 or similar); posterodorsal cilia of t<sub>3</sub> large; basiventral hairs of f<sub>3</sub> long; arista short, not longer than middle line of frons; abdominal tergite VI (♀) triangular *rufa* (Wood), ♂ ♀  
 — 1 about 1½ times 2 + 3 (48 : 22 : 11); posterodorsal cilia of t<sub>3</sub> fine and small; basiventral hairs of f<sub>3</sub> weak; arista clearly longer than middle line of frons; abdominal tergite VI (♀) rectangular *tokyoensis* Beyer, ♀
36. 1 equal to 2 + 3 37.  
 — 1 longer than 2 + 3 38.
37. Venter yellow; costal index 0.58 *lucigaster* Borgmeier, ♂ ♀  
 — Venter dark; costal index 0.45—0.46 *sicaria* Colyer, ♂ ♀
38. Antennae reddish, sometimes darkened apically or anteriorly *brevicornis* (Schmitz), ♂ ♀  
 — Antennae black or brown 39.

Footnote 2. Schmitz, in his original description of *luteipes* stated "costa bis zur Mitte" and gave the size as 1.7 mm; later he sank *croceipes*, in which the costa varies from 0.44—0.45, and the size from 1.15 to 1.5 mm, as a synonym. Material from Estonia and Czechoslovakia seen by the present writer agrees closely with the description of *croceipes*, and it is therefore concluded that the type material was widely divergent from the norm.

39. Costa not reaching middle *tristis* Borgmeier, ♂ ♀  
 — Costa reaching middle *styloprocta* (Schmitz), ♂ ♀  
*tristis* Borgmeier, ♂ ♀  
 (Footnote 3).
40. Lower supra-antennals absent 41.  
 — 2 pairs of supra-antennals present 46.
41. Fifth vein almost straight 42.  
 — Fifth vein distinctly curved 43.
42. Larger species (2—2.5 mm); costa 0.6; ♂ hypopygium pale brown; anal tube short, reddish; all abdominal tergites dark  
*brasiliensis* (Enderlein), ♂ ♀  
 — Smaller species (1.4 mm); costa 0.55; ♂ hypopygium dark brown; anal tube long, whitish-yellow; abdominal tergite II mainly yellow  
*bilobata* Borgmeier, ♂
43. Costa not reaching middle *tubulata* (Brues), ♂  
 — Costa beyond middle 44.
44. Fifth vein only moderately curved; antennae large, brownish or blackish, at least apically; costa not above 0.56 45.  
 — Fifth vein strongly sinuate; antennae small, red; costa very long (0.62)  
*sinuosa* Borgmeier, ♂ ♀
45. Abdomen yellow; costa 0.52; costal cilia short; 2 only about twice 3 (11:5); antennae brownish above and yellow basally; ♂ hypopygium large  
*conferta* Borgmeier, ♂  
 — Abdomen black; costa 0.56; costal cilia moderately long; 2 three times 3 (15:5); antennae blackish-brown; ♂ hypopygium small  
*infumata* (Malloch), ♂
46. Supra-antennals equal or subequal 47.  
 — Supra-antennals unequal 48.
47. Halteres yellow; antials near eye-margin; praeocellars convergent; abdominal tergite VI (♀) without a circling of bristles posteriorly  
*gracilis* Borgmeier, ♂ ♀  
 — Halteres brown; antials well removed from eye-margin; praeocellars divergent; abdominal tergite VI (♀) with a posterior circling of bristles  
*divergens* Borgmeier, ♀
48. Costa reaching far beyond the middle (0.58)  
*opilionidis* (Borgmeier), ♀  
 — Costa not reaching the middle 49.
49. Four scutellar bristles 50.  
 — Two scutellar bristles, or the outer pair reduced to fine hairs 53.
50. Antennae pale, orange or reddish-yellow; costal cilia short or, at most, only moderately long 51.  
 — Antennae dark; costal cilia long 52.

Footnote 3. Borgmeier (1963:145) comments on the close similarity of *tristis* and *styloprocta*, stating that the costa in the former is generally shorter. From Borgmeier's figure of the wing of *tristis*, it would appear that the fork is less acute and the costal cilia somewhat longer than in *styloprocta*, and 1 relatively longer in relation to 2 + 3; in some specimens of *styloprocta* seen by the present writer 1 is practically equal to 2 + 3. In using the key, if *styloprocta* is taken to have 1 equal to 2 + 3, it will run down to *sicaria* Colyer, from which it is immediately distinguishable by its much longer costa (0.5—0.52). The ♂♂ of *styloprocta* from Estonia recorded earlier in this paper afford no satisfactory distinctions, other than the foregoing, from Borgmeier's brief description of the ♂ of *tristis*.

51. Costa 0.45—0.46; arista short; thorax fawn-brown; wings only weakly tinged; fork very small; 1 not much longer than 2 + 3 (15 : 10 : 3) *furcilla* Schmitz, ♂  
 — Costa 0.48; arista twice as long as frons; thorax reddish-yellow; wings brownish-yellow; fork narrow but not exceptionally small; 1 about  $1\frac{1}{3}$  times 2 + 3 (20 : 11 : 4) *tubulata* (Brues), ♀
52. Larger species (over 3 mm); wings of curious shape, constricted after middle; 1 equal to 2, and therefore shorter than 2 + 3; antials midway between upper supra-antennals and anterolaterals;  $f_3$  slender *glandulifera* Borgmeier, ♀  
 — Smaller species (1—1.6 mm); wings of normal shape; 1 nearly double 2 and longer than 2 + 3, antials closer to anterolaterals than to upper supra-antennals;  $f_3$  dilated *emarginata* (Wood), ♂ ♀
53. Costa shorter (0.43—0.44) 54.  
 — Costs longer (0.49) *nudipleura* Beyer, ♀
54. 1 about equal to 2 + 3 (42 : 29 : 12); fork small;  $f_3$  without darkened apex *afra* Beyer, ♀  
 — 1 much longer than 2 + 3 (22 : 11 : 5); fork longer;  $f_3$  with darkened apex *obscuricauda* Beyer, ♀

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## UUSI ANDMEID SUGUKONNA PHORIDAE (DIPTERA) KOHTA

## Resüme

Esitatakse uusi andmeid sugukonna *Phoridae* 44 liigi leidudest Eestis, Lätis ja Leedus. Neist on 14 nimetust Eesti faunas uued liigid, 2 uued Läti ja 21 Leedu faunas. Koos uute leidudega on Nõukogude Liidu Balti liiduvabariikidest kogutud ja määratud käesolevani 78 liiki (Eestist 70).

Kirjeldatakse liigi *Plastophora sicaria* Colyer 1962 isane, mille esmasleid on saadud Eestist. Liigi holotüüp — emane — on leitud ja kirjeldatud Jugoslaaviast. Tuuakse ära C. N. Colyer poolt koostatud perekonna *Plastophora* Brues 1905 kogu maailma liikide nimestik ning määramistabelid.

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## НОВЫЕ ДАННЫЕ О PHORIDAE (DIPTERA)

## Резюме

В статье публикуются новые находки 44 видов семейства *Phoridae* в Прибалтике. Из них 14 видов указываются впервые для Эстонии, 2 — для Латвии и 21 — для Литвы. До сих пор на исследованной территории вместе с новыми находками всего известно 78 видов этого семейства (в Эстонии — 70).

Приводится первоописание самца вида *Plastophora sicaria* Colyer 1962, а также список мировой фауны рода *Plastophora* Brues 1905 и определительные таблицы видов этого рода.

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