

On the taxonomy of *Phyllocolpa scotaspis* (Förster, 1854) and *Phyllocolpa anglica* (Cameron, 1877) and notes on the species groups of *Phyllocolpa* (Hymenoptera: Tenthredinidae: Nematinae)

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Vikberg, V. 2009: On the taxonomy of *Phyllocolpa scotaspis* (Förster, 1854) and *Phyllocolpa anglica* (Cameron, 1877) and notes on the species groups of *Phyllocolpa* (Hymenoptera: Tenthredinidae: Nematinae). – Sahlbergia 15(2): 3-13. Helsinki, Finland, ISSN 1237-3273.

The gall making sawflies *Phyllocolpa scotaspis* (Förster, 1854) and *Phyllocolpa anglica* (Cameron, 1877), treated as synonyms by Kopelke (2007), are valid species, which belong to different species groups. Some characters of the adults and ways of separating the two species are pointed out. *Nematus westermanni* Thomson, 1863 is regarded as a synonym of *Phyllocolpa scotaspis*. *Pontania nigrolineata* Cameron, 1879 and *Pontania fibulata* Konow, 1901 are proposed as new synonyms of *Phyllocolpa anglica* (Cameron, 1877). *Nematus leucapsis* Tischbein, 1846 is hereby selected as the type species of *Phyllocolpa* Benson, 1960. Notes on the names and composition of the species groups of the genus *Phyllocolpa* are given.

Koripajulla (*Salix viminalis*) elää Euroopassa kolme sahapistiäissuvun *Phyllocolpa* lajia: *P. scotaspis* (Förster), *P. anglica* (Cameron) ja *P. piliserra* (Thomson). Mitään niistä ei ole vielä tavattu Suomesta vaikka ne esiintyvät Leningradin alueella, Baltiassa ja etelä-Ruotsissa. Toukat elävät lehdenkäänteissä tai rullamaisessa äkämässä. Suvun eurooppalaisista lajeista saksalainen tutkija Jens-Peter Kopelke teki vuonna 2007 revision. Siinä hän väärin synonymisoi lajit *Phyllocolpa scotaspis* ja *anglica* mitkä on kuitenkin helppo erottaa toisistaan koska kuuluvat eri lajiryhmiin. Suvun tyyppilajille *Phyllocolpa leucapsis* (Tischbein) hän valitsi neotyypin minkä seurauksena lajin käsitely muuttui vallan toiseksi kuin aikaisemmin yleisesti käytettiin. Tästä aiheutui harmia myös aiemmin käytettyjen lajiryhmien nimien suhteen.

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Introduction

In 1854 Arnold Förster described *Nematus scotaspis* based on an unspecified number of syntype females that were collected near Aachen, Germany. Förster mentioned three times one particular character of the species: mesoscutellum very clearly punctured and wrinkled, completely dull and without gloss (“das Schildchen sehr deutlich runzlich-punktirt, ganz matt und ohne Glanz”). *Nematus anglicus* was described by Cameron (1877) based on one female that stood in Stephens’ collection as *Euura cynips*

and which Cameron considered to represent a possibly new species. Two years later, Cameron (1879) described both sexes of *Nematus nigrolineatus*; four of the syntypic specimens were reared by J. E. Fletcher from larvae living in the rolled-down leaves of *Salix viminalis*. The type locality was not given in the original description, but is Worcester according to Cameron (1885). Konow (1901a) keyed Förster’s species in his treatment of the genus *Pontania* Costa and mentioned that the scutellum is high, semiglobular convex, and with strong punctu-

res. At that time *Pontania scotaspis* was known from Sweden, Germany, France, and Britain, and Konow (1901a) wrote that there is no doubt that the species is the same as *Nematus westermanni* Thomson. Both sexes of the latter species had been described from Scania, southern Sweden (Thomson 1863, Thomson 1871); the name *Nematus Westermanni* was mentioned already by Dahlbom (1835). Konow (1901a, 1901b) placed *Nematus nigrolineatus* as a synonym of *Pontania viminalis* Hartig, and did not mention *Nematus anglicus* at all. Instead, Konow described a new species *Pontania fibulata* from France (Nantes) and Moravia. Several years later, Enslin (1915) keyed *Pontania scotaspis* and *Pontania fibulata* Konow, agreeing with Konow's taxonomic opinion on the former, and placed *anglica* and *nigrolineata* as synonyms of *Pontania leucapsis* Tischbein. Berland (1947) followed Enslin's usage of the names of *Pontania*. Benson (1958) treated *Pontania scotaspis* (Förster) in his key to the British *Pontania* species, and mentioned that the scutellum is strongly convex and dull with coriaceous surface between coarse punctures, saw with basal bands strongly arched and oblique as in *Pontania coriacea* (Benson) (his fig. 636), and the hollows round the outside of the antennae glabrous. Benson (1958) also keyed *Pontania anglica* (Cameron) (= *Nematus nigrolineatus* Cameron), giving the following characters for the species: scutellum only slightly convex and without coarse punctures, face with the hollow outside antenna dull with pilose patches, saw with about 20 segmental bands, the lateral margins of which are straight at the base and oblique at the apex (fig. 641), body 3.5-4.5 mm. Two years later, Benson (1960a) again treated the genus *Pontania* and divided the Holarctic species into several species groups. The leaf-rolling species he divided into two groups: the *Pontania leucosticta* –group with pilose and dull outer antennal hollows, and the *Pontania leucapsis* –group with shining and glabrous outer antennal hollows. He placed *Pontania sco-*

taspsis and *Pontania anglica* in his *leucosticta* –group. Later in the same year, Benson (1960b) erected the genus *Phyllocolpa* (type species *Nematus leucapsis* Tischbein, 1846 by original designation) for leaf-rolling species and placed in it *scotaspis* and *anglica*, among others. Muche (1970) keyed the species of *Pontania* and placed them in two subgenera *Pontania* and *Phyllocolpa*; he placed *fibulata* in the subgenus *Pontania*, and *anglica* and *scotaspis* in the subgenus *Phyllocolpa*. Zhelochovtsev (1988) used the name combinations *Nematus (Phyllocolpa) scotaspis* and *anglicus*, keying both as distinct taxa using mainly the same characters as Benson (1958). Body length of *scotaspis* was given as 5-5.5 mm, and that of *anglicus* as 3.5-5 mm. Lacourt (1999) placed *Pontania anglica* and *P. scotaspis* in the same, *Pontania (Phyllocolpa) leucosticta* –group, but *Pontania fibulata* was listed as an enigmatic species.

The two species *Phyllocolpa scotaspis* and *P. anglica* are treated quite differently in a recent revision of the European species of the genus *Phyllocolpa* by Kopelke (2007a, 2007c). Kopelke (2007c) named a species group of its own for a species which he called *Phyllocolpa scotaspis* Förster. As synonyms of his *Phyllocolpa scotaspis* he gave *Nematus anglicus*, *Nematus nigrolineatus* and *Pontania fibulata*. Kopelke (2007c) pointed out that the types of *Nematus westermanni* Thomson, 1863 are very different from what he regarded as *Phyllocolpa scotaspis*, and wrote that the former does not belong to any species-group of *Phyllocolpa* at all. These discrepancies gave reason to study the lectotype of *Nematus scotaspis* and other specimens of the same species, and to compare them with specimens of *Phyllocolpa anglica*.

Material and methods

Morphological terminology follows Goulet & Huber (1993), Viitasaari (2002), and Vikberg (2003). Specimens were studied and measurements were made as described in Vikberg & Zinovjev (2006); the length of the hind femur was measured with trochantellus. Body parts are measured in millimetres. The annuli of the lancet are counted from the base towards the tip of the lancet starting with annulus 1.

The following acronyms are used for collections in which material is deposited: BMNH = Natural History Museum, London; DEI = Senckenberg Deutsches Entomologisches Institut, Müncheberg; MZH = Zoological Museum, University of Helsinki; RSME = National Museums of Scotland, Edinburgh; ZSM = Zoologische Staatssammlung, Munich.

Study of type specimens

The lectotype of *Nematus scotaspis* Förster, designated by Kopelke (2007a), and several other females and males were borrowed from Enslin's collection (ZSM). Long ago the present author received from Robert B. Benson specimens of *Phyllocolpa* identified by him as *Pontania anglica* (Cameron). Some additional specimens of both species were loaned from MZH. The types of *Pontania fibulata* Konow were loaned from DEI. The lectotypes of *Nematus anglicus* Cameron and *Nematus nigrolineatus* Cameron, designated by Kopelke were requested on loan from BMNH, but these were not made available.

Nematus scotaspis Förster, 1854.

The female lectotype of *N. scotaspis* (ZSM) has a body length of 4.1 mm, which fits the size given in the original description. The shape and sculpture of the mesoscutellum is as given in the original description of *N. scotaspis* and later by Konow (1901a) and Benson (1958). The apex of the lancet is visible and differs from figure 4a given for *Phyllocolpa scotaspis* (Förster) by Kopelke (2007c), in particular rows of

short ctenidial setae are visible. Further measurements (in mm) of the lectotype, which is in good condition except that both flagella are missing, are as follows. Head width 1.16, fore wing length 4.2, costa length 2.4. Hind femur (with trochantellus) length 1.22 (height 0.29), hind tibia length 1.35 (apical width 0.20), inner hind spur 0.20, outer hind spur 0.15, hind tarsal segments 1-5: 0.45, 0.19, 0.13, 0.07, 0.29; total length of hind tarsus 1.13, hind claw 0.17. Ovipositor sheath 1.02, sawsheath 0.53. The unusually small female specimen belongs to the taxon which has until now been called *Pontania scotaspis* by Konow (1901a), Enslin (1915) and Benson (1958).

Nematus anglicus Cameron, 1877 and *N. nigrolineatus* Cameron, 1879.

The female lectotype of *Nematus anglicus* Cameron, 1877 (BMNH: not studied) was designated by Kopelke (2007a: 78), and the female lectotype of *Nematus nigrolineatus* Cameron, 1879 (BMNH: not studied) was designated by Kopelke (2007a: 79).

Cameron's species are evaluated according to data in the literature, particularly the opinion of R. B. Benson as first revising author (Benson 1953, 1958). Enslin's opinion on this matter should be disregarded, because he did not study Cameron's material. In the original descriptions of both *N. anglicus* and *N. nigrolineatus*, the colour of stigma is erroneous; *anglicus*: stigma white, fuscous at base, *nigrolineatus*: stigma large, fuscous at base, white at the apex. The reverse is correct, as given by Cameron (1885: 194) for *Nematus nigrolineatus* the stigma is fuscous, with the base white).

Pontania fibulata Konow, 1901.

Konow (1901a: 84) described *Pontania fibulata* in a key to *Pontania* species and gave more detailed data on the material from Nantes (France) and from Moravia (Czech Republic) in a subsequent description (Konow 1901b: 133). Oehlke & Wudowenz (1984) wrote that the female

from Nantes has already earlier been supplied with a lectotype label, possibly by Muche. However, Muche apparently never published a lectotype designation. Kopelke (2007a) designated a lectotype from Moravia (DEI). The female lectotype of *P. fibulata* has an almost flat, smooth and shining mesoscutellum. The lancet is protruding: lamnium has basal 17 segments present, apical ones are broken off. Measurements: Body 4.1, fore wing 4.0, costa 2.2. Head width 1.16, height 0.82, length 0.70. Malar space 0.08, compound eye 0.50 x 0.41, distance between eyes on frons 0.78, on face 0.76. POL 0.22, OOL 0.24, postocellar area 0.12 x 0.37. Flagellomeres 1-3: 0.44 (height 0.10), 0.49, 0.44; distal flagellomeres missing. Hind legs missing. Ovipositor sheath 1.00, sawsheath 0.48 x 0.18, cercus 0.22 x 0.04. The male paralectotype (DEI) from Moravia is in bad condition. Its face is pale and hypopygium black. Measurements of the male: Fore wing 3.5, costa 2.0. Head width 1.06. Both flagella missing. Hind femur 0.97 (height 0.20), hind tibia 1.07 (width 0.15), hind tarsomeres 1-5: 0.43, 0.19, 0.13, 0.06, 0.20; total 1.01, hind claw 0.10. Hypopygium 1.00 x 0.60. The female paralectotype from France is labelled Mauves 7.VI.[18]97, and obviously Konow wrote into the original label "Nantes Gall." So the correct locality is France, Mauves (co-ordinates 45°02'N 4°50'E). The measurements of the female from Mauves: Body 4.4, fore wing 4.3, costa 2.4. Head width 1.20, height 0.87, length 0.70. Malar space 0.09, compound eye 0.50 x 0.38, distance between eyes across frons 0.79, on face 0.78. POL 0.24, OOL 0.26, postocellar area 0.15 x 0.35. Flagellomeres 1-4: 0.45 (height 0.10), 0.50, 0.45, 0.35; distal flagellomeres missing. Hind femur 1.12 (height 0.25), hind tibia 1.27 (width 0.17), inner hind spur 0.19, outer hind spur 0.14. Hind tarsi missing. Ovipositor sheath 1.05, sawsheath 0.53 x 0.20, cercus 0.27 x 0.05. The characters of all type specimens fit those of *Pontania anglica* in Benson (1958).

Other specimens of the species examined and characters of the species:

Phyllocolpa scotaspis

Eight females and seven males from ZSM, most of them labelled by Enslin or by E. Clément as *Pontania scotaspis*, are all correctly identified and belong to *Phyllocolpa scotaspis* (Förster). The localities given in the labels are as follows: Crefeld Rh. (leg. Aerts or Ulbricht), Boppard, Emelsbll.[?] (?Denmark, leg. Wüestneii), and Suecia (leg. Dahlbom). One female of *Phyllocolpa scotaspis* from RSME was studied; it was labelled only Cameron 1907-124, probably the specimen was captured along the Severn, near Gloucester which is the only locality mentioned by Cameron (1885). Five females and one male of *Phyllocolpa scotaspis* from MZH were studied. The females were from Ilstorp, Skåne (labelled N. Westermanni Dbm., Scania Thomson), from Ringsjön, Skåne, from Jakutsk (leg. B. Poppius) and two females from Jenisseisk (leg. J. Sahlberg). The three Siberian females were identified as *Pontania scotaspis* Förster by Fr. W. Konow in 1907. The male was captured in Selburg, Latvia on 8.6.1931 by Håkan Lindberg.

Characters of *Phyllocolpa scotaspis*

The body length of females is 4.6-5.7 mm and males 3.8-5.0 mm. The head width is 1.29-1.43 mm in females and 1.15-1.35 mm in males. The largest female (Figs. 1-3) labelled "Crefeld Rh. 6. Ulbricht; Sammlung Dr. Enslin; *Pontania scotaspis* Först. ♀." [in Enslin's handwriting] has the lancet almost totally exposed. Its body length is 5.7 mm, head width 1.43 mm. Ovipositor sheath 1.14 mm, lamnium of lancet 0.62 mm long, with 19 segments, annuli 2-15 (counted from base) with short ctenidial hairs, basal segments oblique as in *Phyllocolpa leucosticta*.

Frontal area defined, almost smooth, no pit anterior to median ocellus. Brown colour extensive on lateral vertex and temple with con-

tinuous brown from upper part to malar space. The outer antennal hollow (area between antennal socket and nearest orbit) in *Phyllocolpa scotaspis* is dull and pilose, but a smaller upper part is glabrous. Pronotum with broad yellow area laterally. Mesoscutellum strongly convex, punctured and coriaceous between punctures. Costa pale yellow apically; stigma pale, only slightly darker apically. The legs are mostly reddish yellow. Hind coxa reddish yellow, with basal 0.3-0.4 black, trochanter pale yellow, hind femur reddish yellow, hind tibia and tarsus reddish yellow. Abdominal sterna reddish yellow. Hypopygium of male brownish yellow. Lancet (Figs. 5-8), lamnium with 18-20 segments, annuli 2-14 or 2-15 or 2-17 or 2-18 with ctenidia. Basal annuli oblique, curved. Penis valve (Figs. 13-14) with basal end narrow, without pigmentation.

Measurements of a large female of *Phyllocolpa scotaspis* from Crefeld (leg. Aerts): Body 5.0. Fore wing 5.0, costa 2.8. Head width 1.36, head height 1.05, head length 0.82. Malar space 0.10. Intertorular distance 0.17. Compound eye 0.62 x 0.44. Distance between eyes on frons 0.87, on face 0.86. POL 0.24, OOL 0.27, OD 0.09. Postocellar area 0.22 x 0.40. Flagellomeres 1-7: 0.49 (height 0.12), 0.49, 0.44, 0.35, 0.29, 0.27, 0.30 (height 0.08); total 2.63. Hind femur 1.43, height 0.35. Hind tibia 1.60, apical width 0.23, inner hind spur 0.26, outer spur 0.21. Hind tarsomeres 1-5: 0.55, 0.20, 0.15, 0.08, 0.32; total 1.30. Hind claw 0.19. Ovipositor sheath 1.15. Sawsheath 0.56 x 0.19. Cercus 0.27 x 0.04. Lamnium of lancet 0.59.

Measurements of a male of *Phyllocolpa scotaspis* from Crefeld (leg. Ulbricht): Body 4.4. Fore wing 4.3, costa 2.4. Head width 1.25, head height 0.93, head length 0.74. Malar space 0.07. Intertorular distance 0.14. Compound eye 0.57 x 0.42. Distance between eyes on frons 0.77, on face 0.75. POL 0.21, OOL 0.23, OD 0.09. Postocellar area 0.16 x 0.36. Flagellomeres 1-7: 0.45 (height 0.10), 0.45, 0.41, 0.35, 0.32, 0.29, 0.33 (height 0.08); total 2.60. Hind

femur 1.30, height 0.31. Hind tibia 1.40, apical width 0.19, inner hind spur 0.20, outer spur 0.17. Hind tarsomeres 1-5: 0.59, 0.27, 0.20, 0.09, 0.32; total 1.47. Hind claw 0.15. Hypopygium 1.28 x 0.81.

Characters of *Phyllocolpa anglica*

The British specimens of *Phyllocolpa anglica*, identified by Benson, are darker (Fig. 4) and smaller: females 4.0-4.4 mm long, frontal area defined, with a pit anterior to median ocellus. The outer antennal hollows completely pilose and dull, except narrow area near bottom. Lateral vertex with small area of dark brown colour, lower part of temple totally black. Lateral pronotum with narrow area of brownish yellow colour. Costa apically dark, stigma distinctly bicoloured, whitish basally and dark brown apically. Mesoscutellum almost flat, smooth, shining. Legs darker: Hind coxa mostly black, trochanter yellowish white, hind femur black, hind tibia yellowish white, with a black spot between basal and medial third, apically dark, hind tarsus dark. Abdominal sterna black, male hypopygium brownish black. The apex of the sawsheath is rather similar to that of *Phyllocolpa scotaspis*, but the saw is quite different (as in Benson 1958: fig. 641 for *anglica* or Kopelke 2007c: fig. 4a for *scotaspis*). Lancet (Figs. 9-12), lamnium with 21 segments, ctenidia missing, basal annuli forming a right angle with dorsal margin of lancet, straight. Penis valve (Figs. 15-16) with basal end swollen, pigmented.

Measurements of a female of *Phyllocolpa anglica* from HT. [Hertfordshire] Boxmoor (leg. R. B. Benson): Body 4.3. Fore wing 4.4, costa 2.4. Head width 1.21, head height 0.86, head length 0.70. Malar space 0.09. Intertorular distance 0.15. Compound eye 0.50 x 0.39. Distance between eyes on frons 0.80, on face 0.79. POL 0.25, OOL 0.26, OD 0.09. Postocellar area 0.13 x 0.39. Flagellomeres 1-7: 0.45 (height 0.11), 0.50, 0.45, 0.35, 0.31, 0.28, 0.31 (height 0.08); total 2.65. Hind femur 1.14, height 0.25.

Hind tibia 1.27, apical width 0.17, inner hind spur 0.20, outer spur 0.20. Hind tarsomeres 1-5: 0.43, 0.14, 0.11, 0.07, 0.22; total 0.97. Hind claw 0.13. Ovipositor sheath 1.07. Sawsheath 0.54 x 0.20. Cercus 0.27 x 0.05. Lamnium of lancet 0.70.

Measurements of a male of *Phyllocolpa anglica* from HT. [Hertfordshire] Hemel Hempstead (leg. R. B. Benson): Body 3.6. Fore wing 3.7, costa 2.0. Head width 1.10, head height 0.77, head length 0.65. Malar space 0.07. Intertorular distance 0.13. Compound eye 0.46 x 0.37. Distance between eyes on frons 0.70, on face 0.69. POL 0.20, OOL 0.20, OD 0.08. Postocellar area 0.12 x 0.35. Flagellomeres 1-7: 0.44 (height 0.12), 0.47, 0.45, 0.34, 0.31, 0.30, 0.29 (height 0.07); total 2.59. Hind femur 0.97, height 0.21. Hind tibia 1.13, apical width 0.15, inner hind spur 0.16, outer spur 0.13. Hind tarsomeres 1-5: 0.44, 0.18, 0.13, 0.06, 0.21; total 1.02. Hind claw 0.12. Hypopygium 1.05 x 0.64.

One additional female of *Phyllocolpa anglica* was studied from Vyritsa, south of St. Petersburg, Leningrad oblast, Russia. It was reared from leaf-rolls on *Salix dasyclados* taken on 19.7.1977, female emerged on 9.5.1978 (leg. and det. A. G. Zinovjev, coll. Matti Viitasaari, Helsinki). The female is similar to British females, except that the pale colouration on head and lateral pronotum is a little more extensive.

Measurements of the female of *Phyllocolpa anglica* from Vyritsa: Body 4.2. Fore wing 4.5, costa 2.6. Head width 1.28, head height 0.89, head length 0.77. Malar space 0.09. Intertorular distance 0.16. Compound eye 0.54 x 0.39. Distance between eyes on frons 0.87, on face 0.87. POL 0.24, OOL 0.29, OD 0.08. Postocellar area 0.15 x 0.40. Flagellomeres 1-7: 0.50 (height 0.10), 0.52, 0.46, 0.38, 0.32, 0.29, 0.32 (height 0.08); total 2.79. Hind femur 1.26, height 0.30. Hind tibia 1.38, apical width 0.19, inner hind spur 0.23, outer spur 0.18. Hind tarsomeres 1-5: 0.47, 0.18, 0.14, 0.07, 0.25; total 1.11. Hind claw 0.15. Ovipositor sheath 1.10. Sawsheath

0.52 x 0.20. Cercus 0.27 x 0.05. Lamnium of lancet 0.71, with 19-20 segments.

Given the evidence outlined above, it is obvious that Kopelke (2007c) misidentified Förster's *Nematus scotaspis* and used the name for *Nematus anglicus* Cameron, a species that is not at all closely related to *Phyllocolpa scotaspis*. Alternatively, he possibly studied a mixture of both species. *Nematus westermanni* Thomson is a synonym of the real *Phyllocolpa scotaspis*, as Konow (1901a, 1901b) and Enslin (1915) pointed out, and as Lindqvist (1954) stated after he had studied the syntypes of Thomson's species.

Phyllocolpa anglica (Cameron, 1877) is a valid species, and has two synonyms: *Nematus nigrolineatus* (Cameron, 1879), syn. nov. and *Pontania fibulata* Konow, 1901, syn. nov.

On the food plants, galls and larvae *Phyllocolpa scotaspis*, *Phyllocolpa anglica* and *Phyllocolpa piliserra* (Thomson, 1871)

It is well known that the larvae of these three species of *Phyllocolpa* live in leaf rolls on *Salix viminalis* L. (Beneš 1968, Benander 1969, Zinovjev 1999). *Phyllocolpa scotaspis* and *Ph. anglica* induce galls also on Eastern Palearctic *Salix schwerinii* E. Wolf, and *Ph. anglica* and *Ph. piliserra* induce galls also on *Salix dasyclados* Wimm. (Zinovjev 1999). These two species of *Salix* belong to the same Section Vimen as *Salix viminalis*. I have seen galls of *Ph. anglica* on the leaves of *Salix dasyclados* found in Leningrad area by Alexey Zinovjev.

No species of *Phyllocolpa* is known to feed on *Salix viminalis* in Finland; therefore I briefly summarise earlier reports on what is known about their leaf-rolls and larvae.

Phyllocolpa scotaspis (Cameron 1885, Jörgensen 1906, Benander 1969): one side of the leaf blade is rolled underneath nearly throughout its whole length. Only one larva in the tight gall. Full-grown larva about 10 mm long,

pale green with brown head. Anal segment without black dots, cerci small, pale.

Phyllocolpa anglica (Cameron 1885, Benander 1969): one side of the leaf blade is rolled underneath nearly throughout its whole length. Only one larva in the tight gall. Larva green, head brown yellow, abdominal segments 9-10 dorsally with two black spots, black cerci and one black fleck around base of cercus.

Phyllocolpa piliserra (Beneš 1968, Benander 1969): Several eggs are laid in the leaf blade, both sides of which begin to roll underneath before the larvae hatch. 3-5 larvae or up to 8 larvae can live in one gall, they feed on the lower epidermis and parenchyma, leaving upper epidermis untouched. Mature larvae leave the spacious tubular space of the gall and feed on the unrolled apical part of the leaf, leaving only the veins untouched. Larvae olive greyish green, anal tergum rounded apically, without cerci. *Pteronidea weiffenbachi* Lindqvist, 1957 is a synonym of the species (Vikberg 1970), not mentioned in Kopelke (2007c).

Kopelke (2007c) collected more than 4600 galls of *Phyllocolpa* “*scotaspsis*” from four European countries, of which more than 3900 galls were from different parts of Germany. He does not mention how many adults were reared or the localities from which adults were reared, and he does not say anything about the characters of the larvae. His descriptions of the female and male fit almost completely *Phyllocolpa anglica* but he does not state on which specimens (some of the types studied or reared specimens) these are based. However, it is at least probable that *Phyllocolpa anglica* can be added to the list of German sawflies based on his study.

Designation of the type species of *Phyllocolpa*

The type species of *Phyllocolpa* is *Nematus leucapsis* Tischbein sensu Benson (1960b). In the original description of *Nematus leucapsis* Tischbein, 1846 only colour characters are given and the species could belong either to *Phyllocolpa leucapsis* sensu Konow, Enslin,

Benson, Zhelochovtsev, Zinovjev, Vikberg, Lacourt and most other entomologists, i.e. a species with shining and glabrous antennal hollows, or to *Phyllocolpa anglica* (Cameron) or *Phyllocolpa coriacea* (Benson). Unfortunately, Kopelke (2007a, 2007b) selected a neotype for *Nematus leucapsis* with dull and pilose antennal hollows, which according to him is similar to *Phyllocolpa coriacea* (Benson). This designation destroyed the long lasting usage of two commonly known species names and even results in the placement of *leucapsis* in a different species group. If it is felt that this alteration is unacceptable, then the case should be submitted to the International Commission of Zoological Nomenclature to revoke Kopelke’s neotype designation. Note that in the abstract (both English and German) in Kopelke (2007b) *Nematus coriaceus* is stated to be a new synonym of *Ph. leucapsis*, but in the text (p. 153) *N. coriaceus* is synonymised with *P. alienata* (Förster). Presumably the synonymy mentioned in the abstract is the result of a mistake and the intended taxonomic act is that which appears in the text. If the neotype designation for *N. leucapsis* is accepted, it follows that the type species of *Phyllocolpa* originally designated by Benson was misidentified. In accordance with Article 70.3.1 of the Code, I select as type species of *Phyllocolpa* the nominal species already previously cited as the type species, i.e. *Nematus leucapsis*.

Names of species groups of *Phyllocolpa*

The names of the species groups of *Phyllocolpa* require some attention after Kopelke’s revision of the European species of the genus (Kopelke 2007a, 2007b, 2007c). Names of species groups are not regulated by the code of zoological nomenclature (ICZN 1999). Benson’s concept of the *Pontania* [*Phyllocolpa*] *leucosticta* –group was broadly defined and included also *piliserra* Thomson and *purpureae* Cameron, both of which are now placed elsewhere. Kopelke’s *Phyllocolpa leucosticta* –group is heteroge-

neous, and in my opinion only *leucosticta* and *erythropygga* belong to the *leucosticta* –group of Benson because they have hairy antennal hollows and basal segments of lamnium of lancet oblique as in *Ph. leucosticta*. Furthermore, all species of Kopelke’s *leucapsis* –group fit better in the *leucosticta* –group of Benson. I would place also *Phyllocolpa scotaspis* Förster in the *leucosticta* –group, although with some reservations because of the peculiarly shaped mesoscutellum and glabrous upper part of outer antennal hollow.

The group of species with glabrous antennal hollows, which corresponds with Benson’s *leucapsis* –group, should now be called *Phyllocolpa oblita* –group according to the oldest species name included. The pubescence of the mesepisternum of this group differs from that of *leucosticta* –group (see Zinovjev & Vikberg 1999).

Phyllocolpa anglica is a morphologically isolated species and belongs to a group of its own; *Phyllocolpa anglica* –group (= Kopelke’s “*scotaspis*” –group).

Acknowledgements

Andrew Liston (Senckenberg DEI, Münchenberg), and Dr. Stefan Schmidt (ZSM, Munich) loaned me the types of *Phyllocolpa* species needed for this small study. Other specimens were received from Pekka Malinen (MZH, Helsinki), Dr. Mark R. Shaw and Richard Lyszkowski (RSME, Edinburgh), and Matti Viitasaari, Helsinki. Dr. Gavin Broad and Suzanne Ryder (BMNH, London) tried to loan me the types of Cameron’s species but it was not possible in ten months time. Dr. Andreas Taeger helped me with the literature. Dr. Stephan M. Blank, Andrew Liston, and Stefan Schmidt considerably improved the structure and English language of my manuscript. Pekka Malinen took the photographs.

Figs. 1-3. *Phyllocolpa scotaspis* (Förster), female from Crefeld, Germany. Length of body 5.7, length of lamnium of lancet 0.62 mm. (Photographs taken by Pekka Malinen).

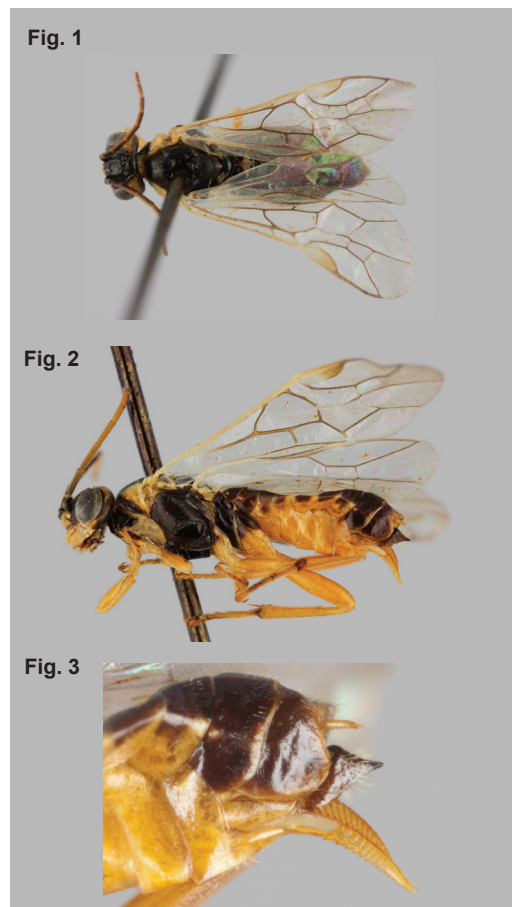
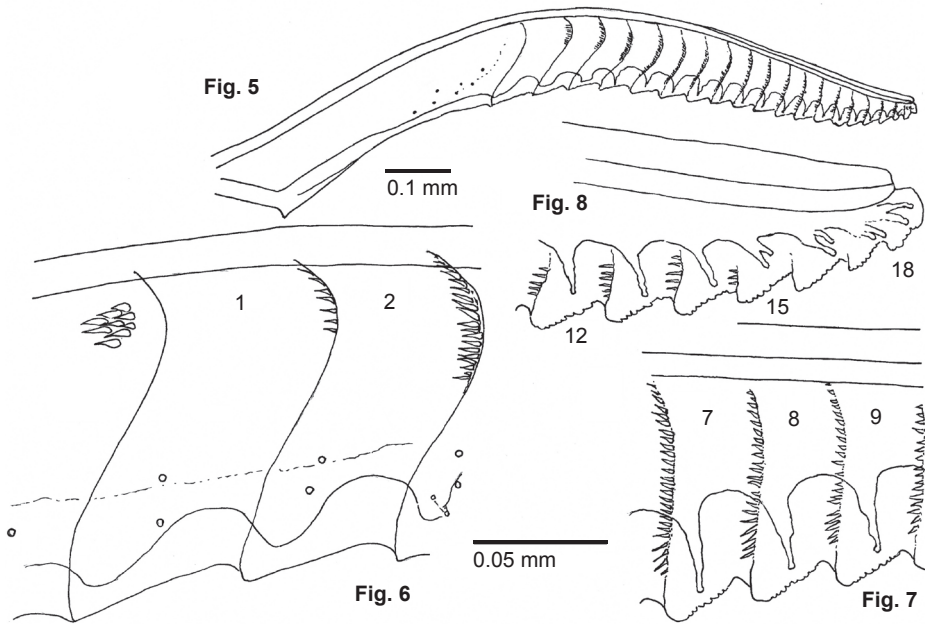


Fig. 4. *Phyllocolpa anglica* (Cameron), female from BX. Princes Risborough, England. Length of body 4.2 mm. (Photograph taken by Pekka Malinen).



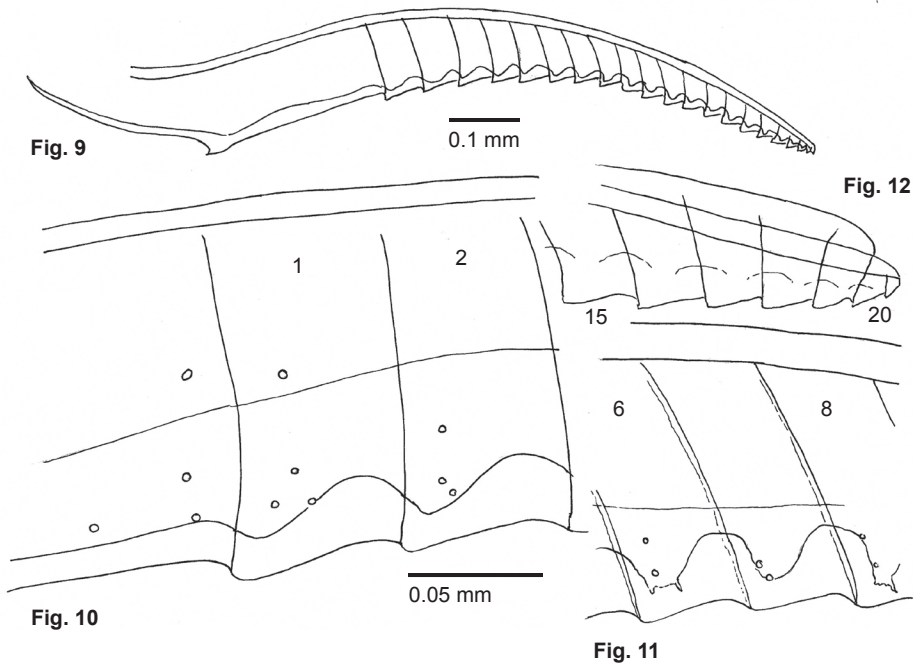
Figs. 5-8. Female *Phyllocolpa scotaspis* (Förster).

Fig. 5. Female from Jenisseisk, lancet. Figs. 6-8. Female from Ilstorp, Skåne, base, middle part and apex of lamnium of lancet (number of segments given counted from base).



Figs. 9-12. *Phyllocolpa anglica* (Cameron), female from HT. Hemel Hempstead, England.

Fig. 9. lancet. Figs. 10-12. base, middle part and apex of lamnium of lancet (number of segments given counted from base).



Figs. 13-14. *Phyllocolpa scotaspis* (Förster), male from Latvia.

Fig. 13. Penis valve. Fig. 14. Apex of penis valve.

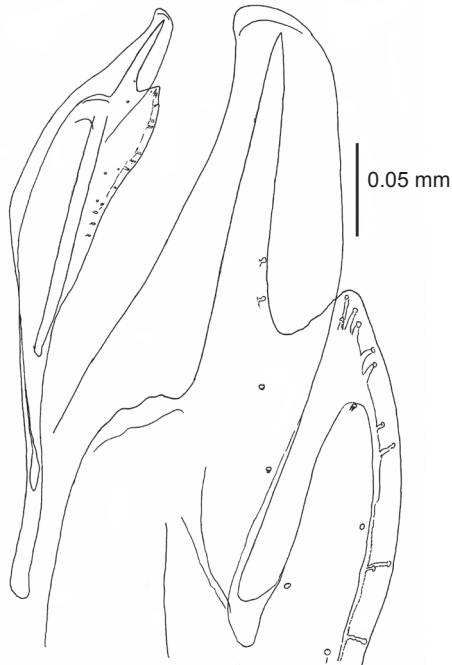


Fig. 13

Fig. 14

Figs. 15-16. *Phyllocolpa anglica* (Cameron), male from HT. Boxmoor, England.

Fig. 15. Penis valve. Fig. 16. Apex of penis valve.

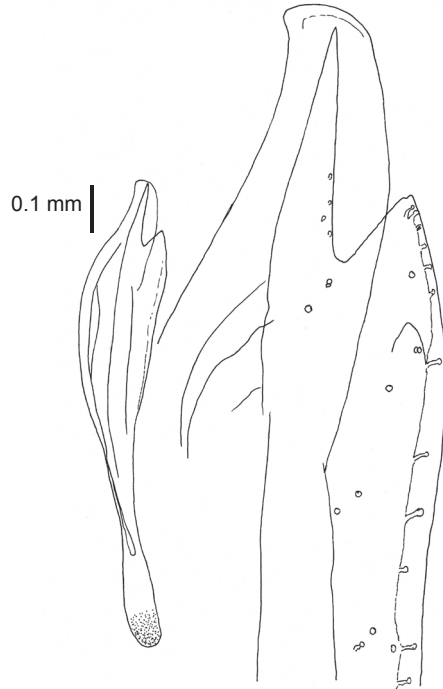


Fig. 15

Fig. 16

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