New data on the sawfly fauna of Corsica with the description of a new species *Pontania cyrnea* sp. n.

(Hymenoptera, Symphyta)

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Abstract

Records of 38 taxa of Symphyta collected recently by the authors in Corsica are presented. 15 identified species are additions to the known Corsican fauna. *Pontania cyrnea* sp. n. is described and compared with the morphologically similar *P. joergenseni* ENSLIN. The family Xyelidae is recorded for the first time on the island. A total of 71 symphytan species are now known from Corsica.

Introduction

CHEVIN (1999) published a list of 56 species of sawflies and other Symphyta (woodwasps, orussids) from Corsica. His paper is based mainly on material made available to him by specialists in other insect groups who have collected there. He also included data on specimens from Corsica in the Muséum national d'Histoire naturelle (Paris), and mentioned a few taxa already recorded in papers by other symphytologists. The island had previously been visited by a single sawfly specialist, who examined only the leaf-mining species (BUHR 1941). In spring 2004 the junior author stated his intent to collect Symphyta in Corsica. Thinking that his results would be of more interest if combined with additional data, A. L. decided to sample there also. The published data of CHEVIN (1999) are based on rather few specimens, and some of these are about 100 years old or more and have imprecise collection data. For these reasons the entire species list resulting from our recent endeavours is presented below.

Results

Taxa not previously recorded in Corsica are suffixed by an asterisk (*). Specimens were collected by the senior author unless indicated by "J. S.". Altitudes were read from the map "La Carte Touristique Locale", Institut Geographique National, Paris, and are approximate (±100 m in the mountainous areas).

Xyelidae*

***Xyela graeca* J. STEIN, 1876*:** 3♀ 11♂, on catkins of *Betula pendula*, E. Haut Ascu, 1200 m, 2.5.2004; 1♀, swept from ground vegetation S.W. Vivariu, 800 m, 9.5.2004; numerous ♀♂, swarming on and around flowering *Acer monspessulanum*, Foret communale di Muracciu, 900 m, 9.5.2004.

This species is distributed in the West Palaearctic more or less throughout the native range of its hostplant *Pinus nigra*, on its various subspecies (BLANK 2002), including Calabria (TURRISI 1999). The host in Corsica is certainly *Pinus nigra* ssp. *laricio*, the only pine growing at the sites of collection.

Argidae

***Arge cyanocrocea* (FÖRSTER, 1771):** 1♀, Ponte Leccia, 200 m, 2.5.2004, feeding at flower of *Euphorbia characias*; 1♀, Corti, Vincinacce, 500 m, 4.5.2004.

***Arge enodis* (LINNAEUS, 1767):** 1♂, River Figurella near Calvi, 50 m, 29.4.2004, resting on leaf of *Salix babylonica*.
***Arge pagana pagana* (PANZER, 1798)*:** 1♂, Restonica Valley, 750 m, 1.5.2004, resting on inflorescence of *Fraxinus ornus*.

Tenthredinidae

Selandriinae

***Aneugmenus padi* (LINNAEUS, 1761):** 12♀ 5♂, from seven localities, 300-650 m, 30.4.-10.5.2004. All specimens collected from *Pteridium aquilinum*.
***Selandria serva* (FABRICIUS, 1793):** 1♂, N.E. Frangiu, nr. Portivechju, 5 m, 11.4.2004, swept in wet meadow (J. S.).
***Strongylogaster macula* (KLUG, 1817)*:** 1♀, on bank of River Tavignanu below the Citadelle of Corti, 400 m, 1.5.2004.
***Strongylogaster multifasciata* (GEOFFROY, 1785):** 3♂ Restonica, 750 m, 1.5.2004; 2♀ 1♂, Silvarecciu, 900 m, 7.5.2004; 1♀ 2♂ Bacca di Larone, 600 m, 8.5.2004; 1♂, Foret dom. Vivariu, 800 m, 9.5.2004. All specimens of this and the following species collected only on *Pteridium aquilinum*.
***Strongylogaster xanthocera* (STEPHENS, 1835):** 1♂ Restonica, 750 m, 1.5.2004; 2♀, Silvarecciu, 900 m, 7.5.2004; 3♀ 1♂, Bacca di Larone, 600 m, 8.5.2004.

Blennocampinae

***Ametastegia equiseti* (FALLÉN, 1808):** 1♂, Rottani, nr. Aléria, 20 m, 3.5.2004, resting on leaf of *Populus*.
***Athalia cordata* SERVILLE, 1823:** 1♀, Antisanti, 700 m, 3.5.2004; 1♂, Casabianda, Aléria, 5 m, 7.5.2004.
***Athalia cornubiae* BENSON, 1931:** 1♀, Tavignanu, near Corti, 450 m, feeding at flower of *Euphorbia characias*, 2.5.2004.
***Claremontia** sp.:** Larvae on *Rubus caesius*, Tamarriciu, S.E. Portivechju, 20 m, 12.4.2004, J. S. The rearing failed. 2 larvae and 2 euonymphs preserved.

These larvae and similar ones occurring on *Rubus fruticosus* at numerous localities between sea-level and 800 m were at first suspected to belong to *Monophadnoides ruficruris* (see below). The larva of *M. ruficruris* is known to feed on *Rubus* (CHEVIN, 1975), but is not yet described. According to LORENZ & KRAUS (1957), the only known larva of the genus *Monophadnoides* (*M. rubi*, =*geniculata*) differs from *Claremontia* (the other species of *Monophadnoides* s. l.) in morphology. The 2 preserved mature larvae must be assigned to *Claremontia* because the setae on each side of the dorsal midline of annulet 3 have only 2 branches (3 in *Monophadnoides*). Although these Corsican larvae fit the description of *Claremontia alternipes* quite well (LORENZ & KRAUS 1957), they differ in having a completely pale head.
***Emphytus cinctus* (LINNAEUS, 1758):** 1♀, Ascu, 500 m, 2.5.2004, from *Rosa*.
***Emphytus* sp.:** 2 very young larvae on underside of leaflet of *Rosa*, Francardu, 540 m, 6.5.2004. Died through overheating.

These larvae had predominantly blackish heads, and so can not belong to *E. cinctus* (head completely pale).
***Halidamia affinis* (FALLÉN, 1807):** 1♀, Tamaricciu, S.E. Portivechju, 20 m, 10.4.2004, J. S.; 1♀, La Restonica, 600 m, 1.5.2004; 1♀, Bacca di Larone, 600 m, 8.5.2004.
***Monophadnoides ruficruris* (BRULLÉ, 1832):** 1♀ 1♂, Tamaricciu, S.E. Portivechju, 20 m, 10.4.2004, J. S.; 1♀, dead in spider's web, Silvarecciu, 900 m, 7.5.2004; 2♀ 2♂, Pompugliani, near Aléria, 20 m, 7.5.2004.

See comment on larvae of *Claremontia* sp. (above).
***Monsoma pulveratum* (RETZIUS, 1783):** 1♀, L'Uspidali, 600 m, 4.4.2004, J. S.; 1♂, Foret domaniale di Vivariu, 2 km S.W. Vivariu, 800 m., 9.5.2004.

Heterarthrinae

***Fenusa dohrnii* (TISCHBEIN, 1846):** 1♀, from *Alnus glutinosa*, Pompugliani, Aléria, 30 m, 7.5.2004; 1 leaf-mine with larva on *Alnus viridis* ssp. *suaveolens*, Haut Ascu, 1500 m, 20.7.2004.
***Heterarthrus vagans* (FALLÉN, 1808):** 2 leaf-mines with larvae on *Alnus glutinosa*, River Ascu near Moltifau, 270 m, 19.7.2004.
***Heterarthrus wuestneii* (KONOW, 1905)*:** 4 empty leaf-mines on *Acer monspessulanum*, Calacuccia, 800 m, 22.7.2004.
Empty leaf-mines of this species were recorded in Corsica on the same hostplant by BUHR (1941) from the Corti area. Both he and CHEVIN (1999) attribute them, with some reservation, to *H. aceris* (KALTENBACH). Rearing of adults from identical mines in *A. monspessulanum* collected in Franconia (Germany) by the present authors proved that the species involved is *H. wuestneii*. This hostplant association was already suspected by LACOURT (1999). *H. aceris* should therefore be deleted from the list of Corsican species.
***Profenusa pygmaea* (KLUG, 1816)*:** 4 leaf-mines in *Quercus pubescens*, Aléria, 10 m, 7.5.2004.

Tenthredininae

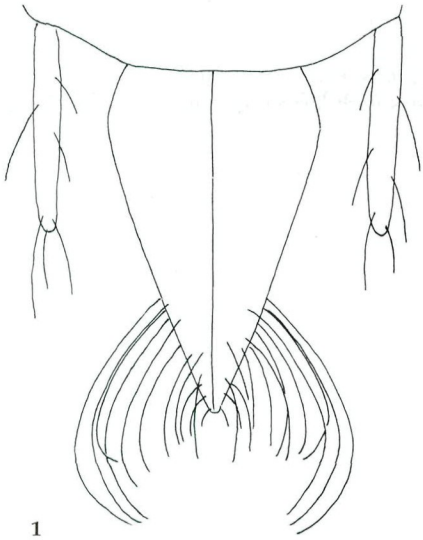
***Macrophya crassula* (KLUG, 1817):** 1 larva, *Sambucus ebulus*, Marina di Sorbo, 5 m, 24.7.2004.

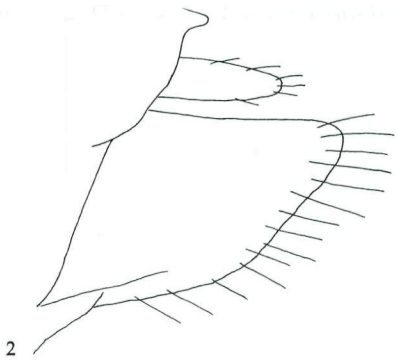
Nematinae

***Amauronematus** sp./ spp.:* Larvae very abundant and widespread in the Corti area on *Salix purpurea* and *S. atrocinerea*, April-May 2004, 0-900 m. 1 larva on *Salix alba*, Aléria, 7.5.2004. Probably at least two species are involved, because the larva on *S. alba* reached a much larger size and formed a cocoon quite different in appearance from those on the other willow species.
***Cladius pectinicornis* (GEOFFROY, 1785):** 2 larvae on *Fragaria*, Foret domaniale di Murraciu, 800 m, 9.5.2004; 2 larvae on *Rosa*, Moltifau, 270 m, 20.7.2004.
***Craesus alniastri* (SCHARFENBERG, 1805):** 5 larvae on *Alnus glutinosa*, mouth of River Porto, 5 m, 30.4.2004.
***Eupontania pedunculi* (HARTIG, 1837)*:** 1♀, Santo Pietro di Venacu, 700 m, 30.4.2004; 1♀, Zicavo, 900 m, 8.5.2004, from *Salix atrocinerea*; 1♀, Foret dom. di Vivariu, 800 m, 9.5.2004. Galls on *Salix atrocinerea*, Ocana, 600 m, 5.5.2004; Marine di Pietro Corbara, 5 m, 6.5.2004; Conca, L'Uspidali, 400 m, 8.5.2004. Only the galls at the locality near sea-level had reached their full size. Vacated galls, Bocca di Vizzavona, 1100 m, 25.7.2004.
***Eupontania viminalis* (LINNAEUS, 1758)*:** Galls on *Salix purpurea*: River Figurella near Calvi, 50 m, 29.4.2004; mouth of Porto River, 5 m, 30.4.2004. These galls were clearly recognisable, but still quite small (about 3 mm diameter). Fully developed galls abundant near Moltifau, River Ascu, 270 m, 19.7.2004; Galeria, River Fangu, 5 m, 21.7.2004; River Tavignanu at Corti, 400 m, 23.7.2004.
***Hoplocampa crataegi* (KLUG, 1816)*:** 2♂♂, Bacca di Larone, 600 m, 8.5.2004, swept from *Crataegus monogyna*.
***Micronematus monogyniae* (HARTIG, 1840)*:** 1♀, Foret dom. di Vivariu, 750 m, 9.5.2004.
***Nematinus steini* BLANK, 1998:** 1 larva, *Alnus glutinosa*, Francardu, 540 m, 6.5.2004.
***Nematus lucidus* (PANZER, 1801)*:** 1 larva, *Prunus domestica*, Corti, 440 m, 2.5.2004.

Pontania cyrnea LISTON sp. n.*

Description. Female: Length 4-4.75 mm. Black. Labrum, mandibles and palpi pale. Femora, tibiae and tarsi pale brown. Apical tarsal segments obscurely darkened. Trochanters and extreme apex of coxa white, rest of coxae and upper apex of rear tibiae black. Entire tegula and narrow hind margin of pronotum white. Stigma white basally with apical half mostly brown. Venation brown except for paler basal third of costa and subcosta. Cerci and hypopygium brown. Frontal area raised, with smooth, rounded margins above the antennal sockets. Clypeus emarginate to almost half of its length. Head and mesonotum densely pubescent, shining between small tubercles. Mesepisternum shining with very weak sculpture, and uniform distribution of pubes-





Figs 1,2: *Pontania cyrnea* sp. n. Female sawsheath: **1,** in dorsal view. **2,** in lateral view.

cence (no glabrous patch). Scutellum shining between dense, shallow punctures. Cerci reaching to midpoint of sawsheath (Fig. 1). with the longest, curved setae arising on the apical third of the sheath. The fringe of setae is extended anteriorly along the lower sides of the sheath, the upper surface being without setae. Sheath in lateral view with upper and lower apical margins slightly emarginate (Fig. 2). Abdominal terga alutaceous, weakly shining. Pubescence sparse and evenly distributed on tergites 1-5, not concentrated on medial parts. Apical tergites more densely pubescent.

Measurements (conventions as in ZINOVJEV & VIKBERG (1999)): Antenna/costa 1.0-1.1, 3rd/4th antennomere 1.1, 3rd antennomere length/maximal width 3.3-4.4, 3rd antennomere/smallest ocular diameter 1.0-1.26, POL/OOL 1.0-1.06, hind femur/hind tibia 0.85-0.86, hind tibia/hind tarsus 0.88-1.0, inner hind tibial spur/hind basitarsus length 0.46-0.48, sawsheath/hind femur 0.86-0.91.

Male: unknown.

Holotype: 1♀ Santo Pietro di Venacu, Corti (700 m), Corsica, 30.4.2004, leg. A. D. LISTON (deposited in Zoologische Staatssammlung, Munich). Paratypes: 2♀ Foret domaniale di Vivariu (800 m), 2 km SW of Vivariu, Corsica, 9.5.2004, leg. A. L. (deposited in ZSM and Deutsches Entomologisches Institut, Müncheberg).

Etymology: *cyrnea*: an adjective meaning Corsican.

Hostplant: *Salix* ? *atrocinerea*. The holotype was collected by hand in rainy weather from a bush of *Salix atrocinerea*. The paratypes were swept from ground vegetation beside a stream which had a similar *Salix* species in the overstorey. No other willow species was present in the immediate vicinity at either site.

Comparison with other species: *P. cyrnea* belongs to the *Pontania crassispina* group as defined by ZINOVJEV & VIKBERG (1999). It runs to *P. joergenseni* ENSLIN in their key, which can be modified as follows to include the new species:

4 Pterostigma distinctly bicoloured, with base pale and apical half brown. Hind femur mostly pale. Sawsheath with longer hairs arranged in one row, proximal to this row without short hairs on dorsal surface. Upper part of mesepisternum without or almost without any surface sculpture, smooth and shining. Tegula yellow.....4a

– Pterostigma unicoloured, or at most with margins piceous. Hind femur may be extensively black. Sawsheath with longest hairs not arranged in one row, and usually on dorsal surface with small hairs proximal to the longer hairs. Tegula yellow or dark.....5

4a Antenna/costa 0.83-0.96. Cerci in dorsal view not reaching to midpoint of sawsheath. Upper margin of sawsheath in lateral view not emarginate. Hind tibia / hind tarsus 1.15-1.33. N. & C. Europe. *Salix caprea*..... *joergenseni* ENSLIN

– Antenna/costa 1.0-1.1. Cerci reaching to midpoint of sawsheath (Fig. 1). Upper margin of sawsheath in lateral view slightly emarginate. Hind tibia / hind tarsus 0.88-1.0. Corsica. *Salix ? atrocinerea*. .....*cyrnea* LISTON

***Pontania proxima* (SERVILLE, 1823)*:** Galls on *Salix alba*, Rottani, Aléria, 20 m, 3.5.2004; Pompuglia, Aléria, 20m, 7.5.2004.

***Pristiphora maesta* (ZADDACH, 1876)*:** 1♀, swept from *Malus*, Silvarecciu, 900 m, 7.5.2004.

***Pseudodineura fuscula* (KLUG, 1816)*:** 1 larva in leaf-mine on *Ranunculus muricatus*, Ascu, 500 m, 2.5.2004.

The larva is identical to those of *fuscula* found on other *Ranunculus* spp. in Central Europe.

***Stauronematus compressicornis* (FABRICIUS, 1804)*:** 1♂, Riv. Figurella nr. Calvi, 40 m, 29.4. 2004.

Cephidae

***Calameuta pygmaea* (PODA, 1761):** 1♀ River Tavignanu, Pianiccione, 60 m, 3.5.2004.

Discussion

The number of Symphyta now known in Corsica totals 71 species (CHEVIN 1999, LACOURT 2003 and new data presented here). It is highly likely that further species will be found, because many of the existing records are based only on one or two specimens. Further, the subalpine and alpine vegetation zones have scarcely been investigated. The senior author intended to sample in the extensive stands of *Alnus viridis* ssp. *suaveolens* which occur above the tree-line. Similar vegetation in the Alps is particularly rich in Symphyta, but at the time of his visit in early May collecting was prevented by winter conditions, with fresh snow above approximately 1300 m. A second visit at the end of July proved to be too late: no adult Symphyta could be found, and only a very few larvae.

Comparisons between the sawfly fauna of Corsica and Sardinia, as already made by CHEVIN (1999), are of obvious interest. We do not wish to expand much on this topic at present because the data for both islands are hardly sufficient to permit a detailed discussion. It should however be noted that in addition to the 59 species recorded in Sardinia by SCHEDL & RITZAU (1995), 4 further symphytans are indicated for this island by MASUTTI & PESARINI (1995), including one species of Diprionidae (a family still not known in Corsica). PESARINI (2001) adds records of 8 further species from Sardinia. The total number of known species (approximately 70) is thus practically the same as at present known in Corsica, but the endemic taxa found in Sardinia (*Urocerus franzinii* C. & F. PESARINI, 1977 and *Allantus didymus* ssp. *insularis* F. PESARINI, 2001) have not been recognized in Corsica. *Pontania cyrnea* may be an endemic Corsican taxon, but the nematine fauna of southern Europe is so poorly investigated that it may well prove to have a wider distribution. Together, the known sawfly fauna of Corsica and Sardinia totals about 105 species.

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Zusammenfassung

Die bisher aus Korsika gemeldeten 56 Symphytenarten (CHEVIN 1999) basieren vorwiegend auf teilweise sehr altem Material mit sehr wenigen Individuen pro Art und ungenauen Fundortdaten. Bei Aufsammlungen im dem Jahr 2004 konnten in Korsika 38 Blattwespenarten nachgewiesen werden, wobei es sich bei 15 Arten um Erstnachweise handelt. Neu für die Insel ist die Familie Xyelidae mit *Xyela graeca* STEIN. Bei den anderen Neunachweisen handelt es sich um die folgen Arten: *Arge p. pagana* (PNZ.), *Strongylogaster macula* (KLUG), *Claremontia* sp., *Heterarthrus wuestneii* (KNW.), *Profenusa pygmaea* (KLUG), *Amauronematus* sp./spp., *Eupontania peduncoli* (HTG.), *Eupontania viminalis* (L.), *Hoplocampa crataegi* (KLUG), *Micronematus monogyniae* (HTG.), *Nematus lucidus* (PNZ.), *Pontania proxima* (SERV.), *Pristiphora maesta* (ZADD.), *Pseudodineura fuscula* (KLUG), and *Stauronematus compressicornis* (F.). *Pontania cyrnea* sp. n. ist neu für die Wissenschaft. Die neue Art wird mit *P. joergenseni* ENSLIN verglichen. Damit sind jetzt 71 Symphytenarten aus Korsika bekannt, aber es ist mit deutlich mehr Arten zu rechnen. Die alpinen und subalpinen Regionen wurden beim Sammeln bisher weitgehend ausgelassen. Aus dem benachbarten Sardinien sind bisher rund 70 Symphytenarten bekannt, wobei die drei für Sardinien endemische Taxa *Urocerus franzinii* C. & F. PESARINI, *Aneugmenus bibolini* ZOMBORI und *Allantus didymus insularis* F. PESARINI bisher nicht aus Korsika nachgewiesen werden konnten. *Pontania cyrnea* ist möglicherweise für Korsika endemisch, allerdings ist die Nematinenfauna Südeuropas bisher kaum untersucht und die Art könnte eine weitere Verbreitung aufweisen.

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