Notes on Fanniidae (Diptera) of Finland, with a description of the female of Fannia stigi Rognes, 1982

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This paper documents the presence of 20 species of Fanniidae in Finland. Fannia alpina Pont, 1970 and F. slovaca Gregor & Rozkošný, 2005 are new to North Europe. Fannia barbata (Stein, 1892), F. lineata (Stein, 1892) and F. nigra Malloch, 1910 are removed from the Finnish checklist. The female of Fannia stigi Rognes, 1982 is described from a Finnish specimen caught together with a male. The total number of fanniid flies known from Finland is now 61.

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1. Introduction

The dipterous family Fanniidae is a smallish family of mostly black, rather inconspicuous flies. About 85 species are known from Europe (Pont 2012). The larvae are saprophagous and feed on a range of decaying organic tissues like rotting wood, old fungi, cadavers, faeces and bird or mammal nests. A few species are pests or known to cause myiasis in severely weakened hosts.

Fanniiids have attracted relatively little attention in Finland. Lauri Tiensuu (1906–1980) studied them in the 1930s as a part of a larger project on muscid flies. He returned to the family in the sixties and seventies, but did not publish any new papers during the latter period.

This is reflected by the slow increase in the number of species known from Finland: 37 species were listed in 1941 (Tiensuu 1941). Only two had been added by 1980 for a total of 39 species (Hackman 1980). The latest decade has seen a surge of interest in brachyceran flies in Finland, and many new species have been recorded in the country. Rozkošný et al. (1997) list 46 fanniids from Finland. Fannia atra (Stein, 1895) has recently been reported from Finland by Haarto (2009). The additional records presented in this paper raise the total number of Fanniidae known from Finland to 61.

2. Material and methods

Finnish biogeographical provinces are abbreviated using the standard Latinate forms. Complete province names in a map are presented in all volumes of Fauna Entomologica Scandinavica. Coordinates are given in Finnish National Coordinate System (yhtenäiskoordinaatisto, YKJ) (Heikinheimo & Raatikainen 1971). The discussed material is deposited in the Finnish Museum of Natural History (MZH) and the private collections of the authors, Kaj Winqvist, Jari Flinck, and Iiro Kakko.
3. New records of Fanniidae from Finland

**Fannia aethiops** Malloch, 1913
New to Finland. A Holarctic species that is widespread in North America, but previously recorded only from Norway and Sweden in Europe (Pont 1986, 2012).


**Fannia alpina** Pont, 1970
New to North Europe. One of the most surprising finds was a male of this very rarely collected species from Finland. The locality is a highway verge cutting through small-scale farming land and it harbours a strong (if fluctuating) population of the greater knapweed (*Centaurea scabiosa*). *Fannia alpina* was described from the Austrian Alps (Pont 1970). It has also been found in Japan (Nishida 1974) and Nepal (Nishida 1994). The Finnish site is far from any mountains and represents rather typical south boreal lowland landscape dominating the southern half of Finland.

*Material examined.* FINLAND 1 ♂ Ta: Heinola, Lusi, Vanha-Sipilä (67983:34500), 26.VII.2009, leg. J. Kahanpää (id jka09-06049). Illustrated in Fig. 1.

**Fannia carbonella** (Stein 1895)
Previously listed from Finland by Pont (2012).


**Fannia fuscitibia** Stein, 1920
New to Finland.


**Fannia gotlandica** Ringdahl, 1926
New to Finland. A rare species hitherto known only from Sweden and the British Isles (Pont 2012).


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Fig. 1. *Fannia alpina* Pont, 1970, male. Tip of abdomen detached.
**Fannia immutica** Collin, 1939
Listed from Finland by Pont (2012), but we have been unable to locate any correctly identified museum specimens.


**Fannia latipalpis** (Stein, 1892)
New to Finland.


**Fannia leucosticta** (Meigen, 1838)
The species is first mentioned in Tiensuu (1946a) from Finland, although his collecting locality is now in the Russian territory. Pont (1986) and Rozkošný et al. (1997) record this species from Finland. Pont (2012) lists the occurrence as doubtful. There are four male specimens under this name in Finnish collections (all in MZH). Two males belonging to *F. leucosticta* were found in the MZH Diptera Fennica collection. A pair from Vieljärvi (Russia) identified as *Azelia gibberoides* by Tiensuu belong to *Azelia triquetra* (Wiedemann, 1817) (Muscidae).


**Fannia metallipennis** (Zetterstedt, 1838)
Previously listed from Finland by Rozkošný et al. (1997) and Pont (2012).


**Fannia pauli** Pont, 1997
New to Finland within borders after World War II. Hennig (1955): “Finland (Sortavala: Tiensuu 1935)”. Sortavaa is in Russian Karelia.


**Fannia slovaca** Gregor & Rozkošný, 2005
New to North Europe. This recently described species was previously confused with *F. umbratica* (Gregor & Rozkošný 2005); the male genitalia figures in Rozkošný et al. (1997) belong to this species. Pre-war collecting localities of Rolf Krogerus in Kuusamo are spread on both sides of the current border between Finland and Russia. The exact collecting locality, and thus, the country of the second specimen remains unknown.

**Material examined.** FINLAND 1 ♂ Ab: Karjaa, Nordlingsberget (66653:33240), 17.V. 2006, leg. J. Kahanpää, id jka06-00217, reared from a pupa found within soft heart rot of a spruce (*Picea abies*) stump on a clearcut. Illustrated in Fig. 2. FINLAND or RUSSIA: 1 ♂ Ks: Kuusa-

**Fannia stigi** Rognes, 1982
New to Finland. A Palearctic species, previously known from Sweden, Norway (Rognes 1982) and China (Wang et al. 2007).

**Description of the female.** See Fig. 3.

Head. Frons broad, distance between eye margins about as wide as one third of head width. Eyes bare. Parafacials bare and densely grey dusted. Fronto-orbital plates entirely grey dusted but much less than grey parafacials. Fronto-orbital plates as broad as frontal vitta at narrowest part. Upper postocular setulae uniserial. Palpi distinctly spathulate and about as broad as three fourth of antennal flagellomere. Theca of proboscis shining and moderately long, not transversely broadened.
Thorax. Shining black but distinctly grey dusted. Mesonotum without darker longitudinal stripes. Acrostichal setulae triserial. Two prealar setae, length of anterior one about one fourth of posterior notopleural setae. Calypters white and with white fringe. Lower calypter almost as broad as upper calypter.

Legs. Dark, base of femora translucent brownish. Fore femora with complete rows of short posterodorsal, posterior and postoventral setae. Fore tibia only with preapical setae. Mid femora apically with 3 posterior setae and with complete row of short anterior setae. Mid tibia slightly thickened in apical half. Mid tibia with 1 anterodorsal and 1 posterodorsal setae and without anteroventral setae. Hind femora apically with 2 anterodorsal and 2 anteroventral setae and with complete row of short anterior setae. Hind tibia with 1 anterodorsal and 1 anteroventral setae. Inner posterior margin of hind coxa bare.

Abdomen. Shining black but slightly grey dusted.

The female of *Fannia stigi* runs to the couple 63 in the key in “The European Fanniidae (Diptera)” (Rozkošný et al. 1997) and it does not key out.


*Fannia subatripes* d’Assis-Fonseca 1967

Listed from Finland by Pont (2012).

**Material examined.** FINLAND 1 ♂ Lkoc: Kolari, Ylläs (750016:337977), 1.–7.VII.2012, leg. A. Haarto, meat bait trap. 1 ♂ as previous but caught with a malaise trap. Both traps were near a subarctic forest spring near the treeline.

*Fannia subpubescens* Collin, 1958

Previously mentioned by Hedström (1968) and
by Tiensuu (1940) as *F. pubescens* [auct. nec. Stein].


**Fannia umbratica** Collin, 1939

New to Finland.


**Fannia umbrosa** (Stein, 1895)

New to Finland within borders after World War II. Hennig (1955): “Sünfinnland [sic] (Tiensuu 1940)”. The localities listed by Tiensuu (1940) are Terijoki and Sortavala Rytty (both now in Russia). The Russian male from Sortavala, 17.VII.1934, leg. L. Tiensuu, “*F. umbrosa* Stein”, id http://id.luomus.fi/HT.794) turned out to be *F. ringdahlana* Collin, 1939.


**Fannia verrallii** (Stein, 1895)

New to Finland.


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*Fig. 3. Fannia stigi*

Rognes, 1982, female.
Fannia vesparia (Meade, 1891)
New to Finland within borders after World War II. Hennig (1955): “Südfinnland (Salmi nach Tiensuu 1935; var. fumigera aus Sortavala)”. No specimens were found at MZH, where Tiensuu’s collections are deposited. Both Salmi and Sortavala are in Russia.

Material examined. FINLAND 1 ♂ Sb: Kuopio, Puijo (6978:3533), 31.VII.2012, leg. A. Haarto, id AHa12-002416.

Fannia vespertilionis Ringdahl, 1934
New to Finland.


Piezura graminicola (Zetterstedt, 1846)
New to Finland.


Piezura pardalina (Rondani, 1866)
Locally rather common in coastal alder forests on the south coast.


4. Deletions from the Finnish checklist

Fannia barbara (Stein, 1892)
Hennig (1955) “Finland (Ostkarelien: Kolatselkä nach Tiensuu, 1946)”, Pont (1986, 2012) and Rozkošný et al. (1997) record this species from Finland. The source for all these is probably Tiensuu (1946a): “2 ♂ in Ostkarelien, AK: Kolatselkä, 18.V.1943”. Kolatselkä belongs to the Russian Republic of Karelia. No specimens were found in Finnish collections, but there is a male F. spathiophora Malloch, 1918 collected from Kolatselkä on 18.VI.1943 (id http://id.luomus.fi/HT.782) which may be one of the specimens referred to by Tiensuu. It is possible that the Palaearctic Catalogue record from North European Russia (NET) is also based on Tiensuu’s missing specimens. It should probably also be considered doubtful until the specimens are found and identifications confirmed.

Fannia lineata (Stein, 1892)
The only published record of this species in Finland is by Tiensuu (1938): “1 ♂ in V: Naantali, 23.VI. 1935, on flowers of Anthriscus silvester (L.) Hoffm.”. The only fanniid in MZH collections matching the published data is a male Fannia similis (Stein, 1895) labeled “Naantali/L. Tiensuu/Anthriscus silv./23.VI. 1935” (id http://id.luomus.fi/HT.780).

Fannia nigra Malloch, 1910
Hennig (1955) “aus S.O.-Finland (Tiensuu 1940)”, Pont (1986, 2012) and Rozkošný et al. (1997) note the species from Finland. Tiensuu (1940) mentions only specimens from Terijoki = Zelenogorsk (now in Leningrad Oblast, Russia) and Sortavala (Republic of Karelia, Russia). The notebooks of Lauri Tiensuu mention a Finnish specimen (Ka: Hamina, Kannusjärvi, 14.VI. 1971, leg. LT), but no such specimen has been found in collections. We are not aware of any confirmed records from within the current borders of Finland.

5. Other notes

**Fannia latifrontalis** (Stein, 1892)

Tiensuu (1946b) originally added this species (as *Fanniosoma latifrons* Ringdahl, 1932) to the Finnish fauna on the basis of a single male specimen collected by sifting a *Lasius fuliginosus* ant nest (N: Vantaa, Tammisto, 21.V.1946., leg. E. Kangas, det. L. Tiensuu). He described the male as having “... Behaarung der Augen und die Beborstung der Wangen” [hairy eyes and setose parafacialia]. Unfortunately Tiensuu never published the description he intended to write, and we could not find this specimen in MZH. The record could not be confirmed without specimens. Nonetheless, we accept it for now.

**Fannia rabdionata** Karl, 1940

The type locality of this species was given as “Finnland (Magala am Luirojoki)” by Karl (1940). We did not find any material in MZH. It has recently been redescribed from Chinese material (Wang *et al.* 2007). While ‘Magala’ could not be found on any maps we consulted, the type locality is definitely within the current borders of Finland.

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**References**


