



Genus *Microsania* (Platypezidae: Microsaninae) in Finland

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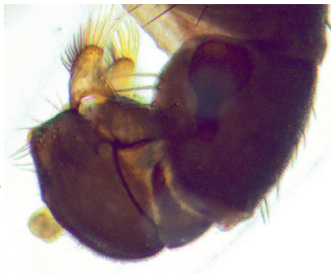
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Three species of flat-footed flies of the genus *Microsania* (Platypezidae: Microsaninae) are reported as new to Finland, and one of these, *M. capnophila* Shatalkin is also new to Europe. *Microsania capnophila* Shatalkin and *M. collarti* Chandler in Vanhara, 1980 are reported from Regio kuusamoensis, and *M. vrydaghi* Collart, 1954 from Nylandia and Regio kuusamoensis. The total species number of *Microsania* in Finland is presently six.

This contribution to new data on flat-footed flies (Platypezidae) of Finland focuses on the genus *Microsania* (Platypezidae: Microsaninae). Three species were earlier listed from Finland: *Microsania pallipes* (Meigen, 1830) from provinces *Tb*, *Om* and *Ks*, *M. pectipennis* (Meigen, 1830) from *Ab* and *M. straeleni* Collart, 1954 from *Ks* (Hackman 1980, Chandler 2001). The two first mentioned species were recorded multiple times in Finland and indicated as common in northern Europe by Chandler (2001), while *M. straeleni* was registered based on one male specimen from Regio kuusamoensis (*Ks*) (Oulanka biological station). In Chandler (2001) *M. straeleni* was listed from Britain, Belgium and Czech Republic, and the taxon was also recently reported from Sweden (Wikars 2009). In Europe three additional species occur, *M. collarti* Chandler, 2001 which

is known from Belgium, Britain, Czech and Slovak republics; Shatalkin reported the taxon from Russian Far East under the name *M. stigmatalis* Zetterstedt, but see discussion in Chandler (2001), *M. meridionalis* Collart, 1960 from Greece and southern France (Chandler 2001, and *M. vrydaghi* Collart, 1954 recorded from Sweden, Switzerland and Greece. Shatalkin (1985) described *M. capnophila* and *M. fumida* from the Russian Far East based on male specimens. He indicated *M. capnophila* as morphologically close to *M. vrydaghi*, and *M. fumida* to *M. straeleni* but that both species differ from their similar congeners in characters of male genitalia. Chandler (2001) keyed the females for *M. collarti*, *M. pallipes*, *M. pectipennis* and *M. straeleni*, and males of all West Palearctic species.

Fig. 1. *Microsania capnophila* Shatalkin, male genitalia, lateral view, gonopod with long yellowish pilosity in addition to black pilosity (*Ks*: Kuusamo, Oulanka).



All *Microsania* species are fumotropic, i.e. the specimens are attracted to smoke from burning vegetable debris or wood and are thus also called smokeflies. As detailed in Chandler (2001), it appears that some chemical substance in the smoke impacts males to assemble in smaller or bigger swarms in or near smoke, which also attracts the females.



Fig. 2. Male of *Microsania collarti* Chandler (Ks: Taivalkoski, Inkee), body length 2.2 mm.



Fig. 3. Male of *Microsania vrydaghi* Collart (N: Vihti, Salmi), body length 2.6 mm.

Microsania is most frequently collected at bonfires, but Wikars (2009) obtained *M. straeleni* from a Malaise trap. In summer 2013 we collected *Microsania* specimens by hand-netting at one and the same bonfire site in *N*: Vihti, Salmi between 5 June and 24 August. Highest numbers of specimens (male and female) were obtained in July, while after mid-August only a few females were caught. Species of *Hormopeza* (Hybotidae) are also attracted to smoke, and these dancefly species predate on *Microsania* flies at forest fire sites or bonfires. Tuomikoski (1960) discussed the two *Hormopeza* species occurring in Finland. We collected three *Hormopeza copulifera* Melander, 1927 males from *Ks*: Oulanka at bonfire smoke in 2011.

During collections 2010-2013 with insect nets at and around small bonfires in wooded areas in Finland the following *Microsania* material was obtained by the authors:

Microsania capnophila Shatalkin, 1985: *Ks*: Oulanka, Rytisuo nature trail, 73673:36020, 22.VIII.2011, three males. External characters and male genitalia similar to *M. vrydaghi*, but has gonopod with long yellowish pilosity in addition to black (Fig. 1). **New to Europe.**

M. collarti Chandler, 2001: *Ks*: Oulanka, Rytisuo nature trail, 73673:36020, 22.VIII.2011, 2 males; *Ks*: Taivalkoski, Inkee, 729641:35711, 23.VIII.2011, 6 males (Fig. 2). **New to Finland.**

M. pallipes (Meigen, 1830): *N*: Vihti, Salmi, 66965:33614, 15.VII. 2013, G. Ståhls & E. Rättel leg. 2 males; idem 27. VII.2013, 2 males; idem, 8. VIII.2013, 3 males. New to *N*.

M. pectipennis (Meigen, 1830): *N*: Vihti, Salmi, 66965:33614, 27.VII -8.VIII.2013; *Ks*: Oulanka, Rytisuo luontopolku, 22.VIII.2011; *Kb*: Eno, Kolvananuuron luonnonsuojelu-

alue, 69766:36518, 25.VIII.2011 (13 males, 33 females); *Kb*: Kolin kansallispuisto, 69952:36487, 25.VIII.2011; *Ks*: Taivalkoski, Inkee, 729641:35711, 21.-23.VIII.2011 (69 males, 7 females). At all sites males and females were obtained in high number. *M. pectipennis* appears to be the most abundant species in Finland. New to *Kb* and *Ks*.

M. straeleni Collart, 1954. No new findings from Finland.

M. vrydaghi Collart, 1954: *N*: Vihti, Salmi, 66965:33614, 5. VI.2013, E. Rättel leg. 2 males; idem 27. VII.2013, G. Ståhls & E. Rättel leg. 2 males (DNA voucher), 8. VIII.2013, E. Rättel & G. Ståhls leg. 1 male; *Ks*: Taivalkoski, Inkee, 729641:35711, 21.-23.VIII.2011, 5 males (Fig. 3). **New to Finland.**

Acknowledgements

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