

REVISION OF *RHAMPHOMYIA* SPECIES
(DIPTERA, EMPIDIDAE) DESCRIBED BY J. W. ZETTERSTEDT

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Abstract: Types of *Rhamphomyia* species described by J.W. Zetterstedt between 1838 and 1859 are revised. Four new synonymies are established: *R. confinis* Zetterstedt, 1852 is a new synonym of *R. dispar* Zetterstedt, 1838; *R. sulcatina* Collin, 1926 is a new synonym of *R. trilineata* Zetterstedt, 1859; *R. obscurella* Zetterstedt, 1842 is new synonym of *Empis nigripes* Fabricius, 1794, and *R. aperta* Zetterstedt, 1859 is new synonym of *R. dispar* Zetterstedt, 1838. Moreover, the combination *Rhamphomyia rufipes* was used by authors only by mistake and replacement name *R. lapponica* Frey, 1955 must be considered a junior primary synonym of *R. rufipes* Zetterstedt, 1838. Lectotypes of 17 species are designated.

Key words: *Rhamphomyia*, types, Europe, Zetterstedt

INTRODUCTION

Johan Wilhelm Zetterstedt (1785–1874) was a specialist in Diptera of which he collected and described more than 1000 species from Scandinavia in his monumental works *Insecta Lapponica* and *Diptera Scandinaviae* (KJÆRANDSEN 2005). He received the title of professor in 1822, and became a professor of botany and practical economy at the Lund University in 1836; he retired in 1853.

Most of Zetterstedt's types and other material is deposited in the two main collections: the „*Insecta Lapponica*“ collection, based on his work published in 1838, and the „*Diptera Scandinavica*“ collection based on his work with the same name published between 1842–1859. Zetterstedt's types may be found also in the two following collections: a duplicate collection called the „*Gothenburg collection*“ (Göteborgssamlingen), which was regained to Lund from the Museum in Gothenburg, and the Wallengren's collection, deposited originally at the Malmö Museum and transferred to the Lund Museum some 50 years ago. There is also a „*Diptera Exotica*“ collection of Zetterstedt and the Diptera collection of Roth where types can also be found. After Zetterstedt succeeded Karl Fredrik Fallén (1764–1830, professor of Natural History at Lund University) as curator of entomological collections at the Lund University, he complemented his own collection with Fallén's materials and remaining specimens he gave (or sold) to Stockholm (they are now deposited in the Naturhistoriska Riksmuseet, Stockholm – NHRS). This is the reason why many Fallén's types remained in Lund and, possibly, some Zetterstedt's types were erroneously sent to Stockholm. Zetterstedt

also described many species from material borrowed by him from Boheman, Wahlberg and Holmgren, which was later partly returned to NHRS; this is another reason why this collection contains many Zetterstedt's types. For further details about Zetterstedt's collection see MICHELSEN (1985).

J. W. Zetterstedt described a total of 66 species of *Rhamphomyia* (in 1838 erroneously as *Rhamphomyza*) between 1838–1852: in 1838 (*Insecta Lapponica*) 47 species (46 numbered and one, *R. nigrita*, under Obs. *R. reflexa*), in 1842 13 species, in 1852 only a single species, and in 1859 5 species.

Several species originally described as *Rhamphomyia* were later classified in other genera (*Rhamphomyza oedalina* Zetterstedt, 1838, *Rhamphomyza fraternella* Zetterstedt, 1838, *Rhamphomyza consobrina* Zetterstedt, 1838), some other were treated in details already previously by the senior author of this paper (*R. albosegmentata* Zetterstedt, 1838, *R. morio* Zetterstedt, 1838, *R. villosa* Zetterstedt, 1838, and *R. fumipennis* Zetterstedt, 1859 – in BARTÁK 1981; *R. hybotina* Zetterstedt, 1838 and *R. tenuicornis* Zetterstedt, 1838 – in BARTÁK 1999; *R. anomalina* Zetterstedt, 1838 and *R. metatarsata* Zetterstedt, 1838 – in BARTÁK 2003). All remaining species are treated herewith with the exception of *Rhamphomyia picipes* Zetterstedt, 1842 (no material was found in Lund and no material is present in the Stockholm Museum – Niklas Jönsson, pers. comm.) and *R. tibiella* Zetterstedt, 1842 (no syntype(s) present in Lund; the species was redescribed by LUNDBECK (1910: 57) from Staegger's material).

SYSTEMATIC PART

The species are listed in the same order as they were described and under original names and combinations. Statement: „Material in ZML“ means all (?_ syntypes are present at Lund) syntypic materials to be found in Lund.

***Rhamphomyia rufipes* Zetterstedt, 1838.** *Insecta Lapponica*, p. 564. Described from a single male specimen from „Lapponia Tornensi ... Juckasjervi“. Material in ZML: the male holotype, well preserved (both halteres missing, on one pin with much larger specimen of Anthomyiidae), labelled „*R. rufipes* ♂. Juckasj.“. Type locality: Juckasjärvi (Sweden). Note: the replacement of the Zetterstedt's name for *R. lapponica* Frey, 1955 was unjustified (see also BARTÁK 1989), *Rhamphomyia rufipes* should be used as its valid name.

***Rhamphomyia fascipennis* Zetterstedt, 1838.** *Insecta Lapponica*, p. 564. Described from a single female specimen from „Lapponia Norvegica ... ad Evenas prope Ofotenfjord“. Material in ZML: the female holotype of *R. fascipennis* (valid name) (antennae, right halter and cerci missing, on one pin together with two anthomyiids and one sciomyzid) labelled „*R. fascipennis* ♀ Evenaes in xxx“ (xxx = illegible). Type locality: Evenes (Norway).

***Rhamphomyia obscura* Zetterstedt, 1838.** *Insecta Lapponica*, p. 564. Described from an unspecified number of specimens of both sexes from „Evenas et Tromsoe ... in copula capta ... Lapponia Tornensi“. Material in ZML: one well preserved male (only mesoscutum broken by a pin), labelled „*R. obscura* ♂. Tromsoe“, pinned on the same pin with conspecific female. The male was labelled and is designated here as lectotype of *Rhamphomyia obscura* (valid name). Type locality: Tromso (Norway).

***Rhamphomyia alpina* Zetterstedt, 1838.** *Insecta Lapponica*, p. 565. Described from an unspecified number of specimens of both sexes from „Lapponia meridionali ...; ... in alpe Brattiksfjellet ...“. Material in ZML: a single male (both hind legs and left wing missing)

labelled: „*R. alpina* ♂ Brattiksfj.“ and bearing a small black square label, is designated here as lectotype of *Rhamphomyia alpina* (valid name) and it was labelled accordingly. A further similarly labelled female (both third antennomeres and both fore and mid leg on left side missing) is conspecific. Type locality: Brattiksfjellet (Sweden).

***Rhamphomyia caudata* Zetterstedt, 1838.** Insecta Lapponica, p. 565. Described from two males from „... Kardis ..., ... Juckasjervi ...“. Material in ZML: one well preserved male (on one pin with a small nematoceran prey), labelled „*R. caudata* ♂. Kardis“, „197 7 492“, was designated as a lectotype by FREY (1956: 472). The second male (moulted, with right antenna and knob of left halter missing) labelled „Juckasjervi“, „*R. caudata* Zett. ♂.“ belongs to the same species. Because both original syntypes are conspecific with *R. aethiops* Zetterstedt, 1838, COLLIN'S arguments (1961: 378) cannot be accepted, and FREY'S (1956: 472) action proved to be correct; *Rhamphomyia caudata* is a valid name for the species. Type locality: Kardis (Sweden).

***Rhamphomyia arctica* Zetterstedt, 1838.** Insecta Lapponica, p. 566. Described from an unspecified number of specimens of both sexes from „inferalpinis Finmarkiae .; ad Bossekop ... Lappon. Tornensi“. Material in ZML: two males and two females, all from Bossekop, one male (third antennomeres, right halter and parts of both hind tarsi missing), labelled „*R. arctica* ♂. Bossek.“, was selected as lectotype and it was labelled accordingly. All specimens are *Rhamphomyia albosegmentata* (the synonymy was stated already by Zetterstedt himself in 1842 and confirmed by all subsequent authors – FREY 1956, COLLIN 1961). Type locality: Bossekop (Norway).

***Rhamphomyia nitida* Zetterstedt, 1838.** Insecta Lapponica, p. 566 (praeocc. by *Rhamphomyia nitida* Macquart, 1827) = *Rhamphomyia nitidula* Zetterstedt, 1842: 400 (replacement name). Described from an unspecified number of specimens of both sexes from: „... Lapponiis Suecicis ...; in Lapponia Tornensi ad lacum Tornetraesk et ... ad Juckasjervi ...; ... Brattiksfjellet ...; in inferalpinis Nordlandiae, et ad Björkvik prope Ofotenfjord ...; e Lapponia Norvegica ... (Lapponia–Dalekarlia)“. Material in ZML: 6 specimens, however, only one of them (well preserved male labelled „*R. nitida* ♂ Torneträsk“) is certainly syntype. This male was labelled and is herewith designated as lectotype. All specimens are *Rhamphomyia nitidula* (valid name), either provided with label „nitidula“ or without any label. One female labelled „var b“ is probably *R. sulcatina* Collin, 1926. Type locality: Torneträsk lake (Sweden).

***Rhamphomyia reflexa* Zetterstedt, 1838.** Insecta Lapponica, p. 566. Described from an unspecified number of specimens of both sexes from „alpium Tornensium“ (Zetterstedt specified in 1842: 403 the number of specimens: 5 males, 2 females). Material in ZML: one male (well preserved, only left third antennomere broken) labelled „*R. reflexa* ♂ Alp. Torn.“ was labelled and is here designated as lectotype of *Rhamphomyia reflexa* (valid name). Another male (third antennomeres and left midleg missing) labelled „*R. reflexa* ♂ Lapp. Torn.“ „*R. reflexa* Alpi jug“ is conspecific. Type locality: Lapponia Tornensi (Sweden).

***Rhamphomyia nigrita* Zetterstedt, 1838.** Insecta Lapponica, p. 567. Described under sp. 19. (*Rhamphomyia reflexa*) from a single female from „Groenlandia“. Material in ZML: female holotype of *Rhamphomyia nigrita* (valid name) (left wing and both third antennomeres missing) is labelled „55“, „*R. nigrita* ♀ Grönland xxx“ (xx = illegible). Type locality: Greenland.

***Rhamphomyza alata* Zetterstedt, 1838.** *Insecta Lapponica*, p. 567. Described from an unspecified number of females from „Lapponia Tornensi ... ad Juckasjervi; in Gamsttind Nordlandiae ...“. Material in ZML: one well preserved female (only both hind tarsi damaged), labelled „R. alata ♀ Juckasjervi“, was labelled and is designated herewith as lectotype. Further female without abdomen, labelled „R. alata ♀ Juckas.“, is conspecific as well as another female labelled „var. b ♀ Boheman“. All are *Rhamphomyza vesiculosa* Fallén, 1816. Type locality: Jukkasjärvi (Sweden).

***Rhamphomyza plumifera* Zetterstedt, 1838.** *Insecta Lapponica*, p. 567. Described from an unspecified number of female specimens (ZETTERSTEDT 1842: 436 specified one specimen from each locality) from „Lapponia meridionali ... Brattiksfjellet ... Tresunda ac Naestansjö“. Material in ZML: one female (thorax partly damaged by the pin and right mid tarsus partly missing), labelled „R. plumifera ♀. Nästansjö“, is designated herewith as lectotype of *Rhamphomyia plumifera* (valid name) and it was labelled accordingly. Further female (left midleg and right halter missing), labelled „Brattiksfj.“, is conspecific. Type locality: Naestansjö (Sweden).

***Rhamphomyza fuscipennis* Zetterstedt, 1838.** *Insecta Lapponica*, p. 567. Described from a single female specimen from „Lapponia meridionali ... Stensele“. Material in ZML: holotype of *Rhamphomyia fuscipennis* (valid name), well preserved female, labelled „R. fuscipennis ♀ Stens.“. Type locality: Stensele (Sweden).

***Rhamphomyza anthracina* Zetterstedt, 1838.** *Insecta Lapponica*, p. 567 (praeocc. by *Rhamphomyia anthracina* Meigen, 1822) = *Rhamphomyia atripennis* Zetterstedt, 1842: 434 (replacement name). Described from two females from „Lapponia Umensi ... ad lacum Stor-Uman ...; Laponia Norvegica ...“. Material in ZML: two female syntypes, one with broken wings and right foreleg (otherwise well preserved), labelled: „R. atripennis R. anthracina ♀ Stor Uman“, and the other badly damaged, labelled „Stor Uman“, and provided with a small black square label. Both are unsuitable for lectotype designation and both are *Rhamphomyia vesiculosa*. Type locality: Storuman lake (Sweden), Laponia Norvegica (Norway).

***Rhamphomyza aethiops* Zetterstedt, 1838.** *Insecta Lapponica*, p. 568. Described from an unspecified number of specimens of both sexes from „Lapponia Umensi“. Material in ZML: two females, one of them (moulted and with right wing, both halteres and both fore and mid tibiae on right side missing) is labelled „R. aethiops ♀ Lycksele“, and the other (well preserved) labelled „var. b. ♀ Blk.“ is conspecific. Both are *Rhamphomyia caudata*. Type locality: Lapponia Umensi (probably Lycksele) (Sweden).

***Rhamphomyza lividiventris* Zetterstedt, 1838.** *Insecta Lapponica*, p. 568. Described from an unspecified number of specimens of both sexes from „Lapponia Umensi ... Badstutraesk ... Stensele ... Nordlandia ad Björkvik“. Material in ZML: one male, heavily damaged (without legs, mesonotal pubescence and abdomen), labelled „R. lividiventris ♂. Badstut.“ is probably *R. lividiventris* (valid name) sensu subsequent authors. Further two females labelled „R. lividiventris ♀. Lapp.“ and „R. lividiventris ♀ Stensele“ (both bearing small black label) are highly probably conspecific. Type localities: Badstutraesk, Stensele (Sweden) and Björkvik (Norway).

***Rhamphomyza unicolor* Zetterstedt, 1838.** *Insecta Lapponica*, p. 568. Described from a single male specimen from „Björkvik“. Material in ZML: male holotype, heavily moulted and damaged (with a small nematoceran attached to its head, both hind legs, halteres and left

wing missing), labelled „R. unicolor ♂. Björkvik“. In spite this specimen is heavily damaged, characteristic shape of male phallus is well visible and it is *Rhamphomyia plumifera*. Type locality: Björkvik (Norway).

***Rhamphomyia tipulariata* Zetterstedt, 1838.** Insecta Lapponica, p. 569. Described from an unspecified number of male specimens from „Lapponia Tornensi ... ad Karesuando ... et ad Johannis Ro prope Tornoam“. Material in ZML: one male (heavily moulted, without right hindleg, terminalia and both halteres), labelled: „R. tipulariata ♂. Tornea“, and further heavily damaged male without terminalia and other parts of body. Both are unsuitable for lectotype designation and both are *Rhamphomyia sciarina* (Fallén, 1816).

***Rhamphomyia pusilla* Zetterstedt, 1838.** Insecta Lapponica, p. 569. Described from an unspecified number of female specimens from „Finmarkia occidentali ... inter Kautokeino et Karesuando“. Material in ZML: two females on the same pin, upper one is well preserved (only last three joints of right hind tarsus missing) and lower one also well preserved (only part of right antenna, left halter and part right fore tarsus missing), labelled „R. pusilla ♀. Kautokein.“. The upper female is designated herewith as lectotype of *Rhamphomyia pusilla* (valid name) and it was labelled accordingly. Type locality: Kautokeino (Norway).

***Rhamphomyia dispar* Zetterstedt, 1838.** Insecta Lapponica, p. 570. Described from an unspecified number of specimens of both sexes from: „Lapponia Tornensis ... Kardis, Junosuando et Juckasjervi ...; Lapponia ... Umensi ... Lycksele; ... Utsjoki Lapponiae Kemenensis ... Dowrefjell...“. Material in ZML: 19 conspecific specimens, some of them unlabelled and some labelled “Juckasjervi”, “Utsjoki” or “Lycksele”. One male (together with a female and a prey – *Scatopse* sp.), well preserved (only head collapsed and hind part of mesoscutum damaged by pin), labelled „R. dispar ♂ Juckas.“, is designated herewith as lectotype of *Rhamphomyia dispar* (valid name) and it was labelled accordingly. Type locality: Juckasjärvi (Sweden).

***Rhamphomyia niveipennis* Zetterstedt, 1838.** Insecta Lapponica, p. 570. Described from an unspecified number of male specimens from „Lapponia Umensi ... Lycksele ... Lapponia meridional. – Dalecarlia“. Material in ZML: one badly preserved specimen (only one wing and legs glued on card) labelled „R. niveipennis ♂. Lycksel.“ and provided with a small black label. The senior author carefully compared remnants of this only preserved syntype with *R. niveipennis* (valid name) sensu subsequent authors and found no one difference. Type localities: Lycksele, Dalecarlia (Sweden).

***Rhamphomyia lacteipennis* Zetterstedt, 1838.** Insecta Lapponica, p. 570. Described from an unspecified number of male specimens from „Lapponia“ (Lapponia Umensi, Lycksele after Zetterstedt, 1842: 410). Material in ZML: a single male well preserved (only right antenna missing) labelled „R. lacteipennis ♂. Lycks.“ and provided with a small black label is *Rhamphomyia niveipennis*. This specimen has all thoracic setae whitish yellow (the authors consider this feature as variable because it was observed in several other species of *Rhamphomyia*). Type locality: Lycksele (Sweden).

***Rhamphomyia griseola* Zetterstedt, 1838.** Insecta Lapponica, p. 571. Described from an unspecified number of male specimens from „Garnaes Norvegiae“. Material in ZML: one male (antennae, halteres and right foreleg missing), labelled „R. griseola ♂ Bohem.“, and provided with small green label is *Rhamphomyia dispar*. Further male (heavily moulted but otherwise well preserved) labelled „R. griseola Zett. ♂.“, and bearing small label with illeg-

ible number, is conspecific. Type locality: Garnaes (Norway).

***Rhamphomyza fuscula* Zetterstedt, 1838.** *Insecta Lapponica*, p. 571. Described from an unspecified number of male specimens from „... in alpebus Dowreensibus“. Material in ZML: male lectotype (selected by Frey, labelled by Collin) (moulted, with both wings and halteres broken and left foreleg missing), labelled „R. fuscula ♂ Dowre“, „Rh. fuscula Ztt, Lectotype det Frey & Collin“, and bearing small black label, is *Rhamphomyia fuscula* (valid name). Further male labelled „R. fuscula ♂ Dowre“ is *R. dispar*. Type locality: Dowre (Norway).

***Rhamphomyza hybrida* Zetterstedt, 1838.** *Insecta Lapponica*, p. 572. Described from an unspecified number of specimens of both sexes from „Lapponia meridionali ... in copula capta“. Material in ZML: one male and one female on a single pin (male well preserved, female without halteres, left third antennomere, mid and hind left midleg and cerci), labelled: „R. hybrida ♂♀. Lycksele“, and bearing small black label, are probably syntypic and the male is designated herewith as lectotype and it was labelled accordingly. Both specimens are *R. sciarina*. Type locality: Lycksele (Sweden).

***Rhamphomyia filata* Zetterstedt, 1842.** *Diptera Scandinaviae*, 1: 392. Described from an unspecified number of males from „Scania ... Lund“. Material in ZML: one male (moulted with halteres missing and mesoscutum damaged by pinn) labelled „R. filata ♂ Lund“, bearing small red square label. Further male well preserved (only with halteres missing) without locality label, bearing small red square label, is conspecific. Both are *R. caesia* Meigen, 1822. Type locality: Lund (Sweden).

***Rhamphomyia dentipes* Zetterstedt, 1842.** *Diptera Scandinaviae*, 1: 397. Described from an unspecified number of male specimens from „Ostrogothia ad Gusum & in Uplandia ad Stockholmiam, ... Jemtlandia ... Grimnäs & Fanbyn, ... Åreskutan & Mullfjellen ... Dalecarlia ...“. Material in ZML: one well preserved male labelled „R. dentipes ♂. Mullfj.“, and bearing small green label, was labelled and it is designated herewith as lectotype. Further well preserved but slightly moulted male labelled „R. dentipes ♂. Åresk.“ is conspecific. Both are *R. pilifer*. Type locality: Mullfjellet (Sweden). Note: the third specimen is well preserved male, labelled „Grimnäs et Fanbyn Jemtland 19/6 40“, bearing small green label, represents a species previously unknown to us. It is very similar to *R. dentata* Oldenberg, 1910 (yellow setae on laterotergite, genitalia identical), however it is smaller (wing 4.9 mm), subapical swelling on right hind femur is smaller and bituberculate and hind tibia is narrow in middle (0.10 mm broad).

***Rhamphomyia maculipennis* Zetterstedt, 1842.** *Diptera Scandinaviae*, 1: 399. Described from a single female from „Blekingia“. Material in ZML: female holotype of *R. maculipennis* (valid name), labelled „R. maculipennis ♀ Blek.“, well preserved (only right foreleg and right antenna missing). Type locality: Blekinge (Sweden).

***Rhamphomyia lugubrina* Zetterstedt, 1842.** *Diptera Scandinaviae*, 1: 401. Described from a single male from „Jemtlandia ad radicem Åreskutan“. Material in ZML: male holotype, well preserved (slightly immature, with collapsed legs and phallus broken at about middle), labelled „R. lugubrina ♂ Åresk.“, is *R. fuscipennis*. Type locality: Åreskutan Mountain (Sweden).

***Rhamphomyia flexicauda* Zetterstedt, 1842.** *Diptera Scandinaviae*, 1: 403. Described from a single male specimen from „Vaerdalen inter Suulstuen & Kongsstuen“. Material in

ZML: male holotype, slightly moulted but otherwise well preserved, labelled: „*R. flexicauda* ♂“, „Inter Suul et Kongstue. Ing. Alp. Norv.16/7 40“, and bearing small green square label, is *R. reflexa*. *R. flexicauda* is thus a junior synonym of *R. reflexa*. Type locality: Vaerdalen (Norway).

***Rhamphomyia glaucella* Zetterstedt, 1842.** Diptera Scandinaviae, 1: 405. Described from a single female specimen from „Jemtlandia ad Mullfjellet“. Material in ZML: female holotype, well preserved, labelled „*R. glaucella* ♀. Mullfjell.“, and bearing small green label, is *R. pilifer*. Type locality: Mullfjellet (Sweden).

***Rhamphomyia fuliginella* Zetterstedt, 1842.** Diptera Scandinaviae, 1: 420. Described from an unspecified number of females from „Scandinavia boreali, Jemtlandia boreali ad Skalstugan ... in jugo alpino Norvegiae ad Suulstuen Vaerdaliae“. Material in ZML: 5 females, either unlabelled or from Suulstuen or Skalstugan. All are *R. dispar*. One of them (well preserved, only slightly moulted), labelled „*R. fuliginella* ♀. Suul.“, was labelled and it is designated herewith as lectotype. Type locality: Suulstuen (Norway).

***Rhamphomyia hirtula* Zetterstedt, 1842.** Diptera Scandinaviae, 1: 421. Described (under spec. 40 *R. fuliginella* as Obs.) from an unspecified number of specimens of both sexes from „Grönlandia“. Material in ZML: one male, well preserved (only right antenna missing), labelled „56“ „*R. hirtula* ♂. Grönland“, was labelled and it is designated herewith as lectotype of *R. hirtula* (valid name). The second specimen, a female (moulted), is conspecific. Type locality: Greenland.

***Rhamphomyia lucidula* Zetterstedt, 1842.** Diptera Scandinaviae, 1: 422. Described from a single male specimen from „Svecia boreali ... in Helsingia ad diversorium Öfver–Hogdal“. Material in ZML: male holotype of *R. lucidula* (valid name) (moulted but otherwise well preserved), labelled „*R. lucidula* ♂. Öfver–Hogd.“, „Ö. Hogdal in Herjeådalen 17.8.1840“, and bearing small green label. Type locality: Öfverhogdal (Sweden).

***Rhamphomyia costata* Zetterstedt, 1842.** Diptera Scandinaviae, 1: 431. Described from a single female from „Gottlandia ... ad Gothem“ (=Gotland, Sweden). Material in ZML: female holotype (moulted, with left halter missing), labelled: „*R. costata* ♀ Gottl.“, and bearing two small labels (dirty white and red). Type locality: Gotland (Sweden). In spite of the page precedence of *R. costata*, we respect continuity in using names after previous authors (LUNDBECK 1910, COLLIN 1961, FREY 1956 etc.), thus, valid name is *R. tibiella* Zetterstedt, 1842.

***Rhamphomyia obscurella* Zetterstedt, 1842.** Diptera Scandinaviae, 1: 432. Described from a single female specimen from „Norvegia ... Thynaes prope Levanger ...“. Material in ZML: well preserved female holotype, labelled: „*R. obscurella* ♀. Thyn.“, „Thynaess, Levanger. Norveg. 2–7/7 40“, and bearing small green label, is highly probably *Empis nigripes* Fabricius, 1794. *R. obscurella* is a junior synonym of *Empis nigripes*. Type locality: Thynaes (Norway). Note: the identification is only tentative, because according to CHVÁLA (1994): „... almost impossible to identify single females“.

***Rhamphomyia vespertilio* Zetterstedt, 1842.** Diptera Scandinaviae, 1: 435. Described from a single female from „Jemtlandia, ... Mullfjellet“. Material in ZML: female holotype labelled „*R. vespertilio* ♀ Mullf.“, „Mullfjell, Jemtland 27–28/6 40“, and bearing small green square label, is *R. plumipes* (Meigen, 1804). Type locality: Mullfjellet (Sweden).

***Rhamphomyia dissimilis* Zetterstedt, 1849.** Diptera Scandinaviae, 8: 3031. Described from an unspecified number of specimens of both sexes from „... Scania ad Lund ...ut Hafniae...“. Material in ZML: one well preserved male, labelled „61“ (or 19?), „R. dissimilis Zett. n.sp. ♂ xxx 1848“ (xxx = illegible), is designated herewith as lectotype and it was labeled accordingly. It is a specimen of *R. maculipennis*. Two other males labelled „Lund“, and bearing small square red label, are well preserved, both are *R. nodipes*. Type locality: Scania ad Lund (Sweden).

***Rhamphomyia dissimilis* var. b:** two females, one well preserved, with illegible label („var. b. xxx R. nigripes Z.“) and the other (with both antennae and halteres missing) labelled also with illegible notice. Both are *R. maculipennis*.

***Rhamphomyia simplex* Zetterstedt, 1849.** Diptera Scandinaviae, 8: 3035. Described from an unspecified number of specimens of both sexes from „... Dania ad Hafniam...“. Material in ZML: a single well preserved male labelled: „2.4.“, „R. simplex Z. n.sp. ♂. Hafnia a Staeger“, was labelled and it is designated herewith as lectotype of *R. simplex* (valid name). Type locality: Copenhagen (Denmark).

***Rhamphomyia coracina* Zetterstedt, 1849.** Diptera Scandinaviae, 8: 3037. Described from a single female from „Lapponia Lulensi“. Material in ZML: female holotype of *R. coracina* (valid name) provided with illegible label, well preserved (only left third antennomere missing). Type locality: Lapponia Lulensi (Sweden).

***Rhamphomyia confinis* Zetterstedt, 1852.** Diptera Scandinaviae, 11: 4271. Described from a single male from „Uplandia, Upsaliae“. Material in ZML: badly preserved male holotype (without abdomen and antennae), labelled „R. confinis ♂ Upsal Holmgren“, „Ups“, is *R. dispar*. *R. confinis* is a new junior synonym of *R. dispar*. Type locality: Uppsala (Sweden).

***Rhamphomyia trilineata* Zetterstedt, 1859.** Diptera Scandinaviae, 13: 5013. Described from a single female from „Scania ubi ad Herrevadskloster“. Material in ZML: female holotype, labelled „Rhamph. trilineata Zett. ♀ n. sp. Herrevadskl. 1855 Roth“, and bearing small blue square label (slightly moulted but otherwise well preserved), is *R. sulcatina*. *R. sulcatina* is a new junior synonym of *R. trilineata* (valid name). Type locality: Skåne (Sweden).

***Rhamphomyia ignobilis* Zetterstedt, 1859.** Diptera Scandinaviae, 13: 5015. Described probably from a single female from „Lappon. Umensis ad Tärna“. Material in ZML: female holotype of *R. ignobilis* (valid name) (moulted, with third antennomeres broken on both sides), labelled „Rh. ignobilis Zett. n. sp. ♀ Tärna lapp. Um. 56 Holmgr.“. Type locality: Tärna (Sweden).

***Rhamphomyia aperta* Zetterstedt, 1859.** Diptera Scandinaviae, 13: 5021. Described from an unspecified number of specimens from „Kattisafvan ... Stensele ... Suulstuen ..“. Material in ZML: two females. One of them, well preserved, labelled „Kattisafvan Lapp. Umensi 1856 Holmgren“, and bearing a square label with number „4“, is designated herewith as lectotype and it was labelled accordingly. Further female (slightly moulted, with left antenna, halteres on both sides, and right wing missing in apical part), labelled „Rh. aperta Zett. n.sp. Stenstale Lapp. 1856 Holmgren“, and bearing small square label with number “8“, is conspecific. Both are *R. dispar*. *R. aperta* is a new junior synonym of *R. dispar*. Type locality: Kattisafvan (Sweden). Note: both specimens lack dorsal vein closing cell *dm* which is common feature especially in this species (lectotypus even with the vein present on one wing).

***Rhamphomyia lugens* Zetterstedt, 1859.** Diptera Scandinaviae, 13: 5024. Described from an unspecified number of females from „Lappon. Umensi, ubi ad Stensele“. Material in ZML: two females, both heavily damaged, labelled „Rh. lugens Zett. n.sp. ♀ Stenstale Lapp. 1856 Holmgr.“. Both are *R. vesiculosa*. Type locality: Stensele (Sweden).

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APPENDIX

Notes to species described by FALLÉN (1816)

Type specimens of all species mentioned below are present in NHRS except for *R. laevipes*.

Empis nodipes Fallén, 1816. Diptera Sveciae, Empididae: 25. Described from an unspecified number of male(s) from „Ostrogothia“ (=Östergötland, Sweden). Material in ZML: one male labelled „R. spissirostris Zett. nodipes Fall. m. ♂“, (with right antenna and both mid and hind tibiae missing and mesoscutum damaged by pin) is *R. nodipes*.

Empis laevipes Fallén, 1816. Diptera Sveciae, Empididae: 27. Described from unspecified number of males and females from „Esperöd. Et in Fågelsång Scaniae ...ad Lärketorp, Ostrogoth.“. Material in ZML: one male labelled „Lärket.“, well preserved (only third antennomeres on both sides missing) of *R. laevipes* (valid name). Zetterstedt, redescribing the species in 1842, restricted the name to this single

specimen which he retained in his collection and it should be therefore regarded as lectotype. Type locality: Lårketorp (Sweden).

Empis vesiculosa Fallén, 1816. Diptera Sveciae, Empididae: 27. Described from an unspecified number of males and females from „Mysseberg Westrogothiae, et ad Lårketorp, Ostrogothiae“ (Sweden). Material in ZML: a well preserved male (only mesoscutum slightly damaged by too thick pin and several mesonotal setae and setulae broken), labelled „R. vesiculosa ♂ Lårket.“. Further specimen, a female, labelled „R. vesiculosa ♀ Ostr.“ is conspecific and both are *R. vesiculosa* (valid name).

Empis tipularia (Fallén, 1816). Diptera Sveciae, Empididae: 27. Described from an unspecified number of males and females from „Lårketorp Ostrogoth. et in provincia Calmar“ (Sweden). Material in ZML: 4 males and 4 females, mostly moulted and with broken parts of their bodies, labelled either „Ostrog.“ or „Lårket.“ or unlabelled. All are *R. tipularia* (valid name).

Empis culicina (Fallén, 1816). Diptera Sveciae, Empididae: 28. Described from an unspecified number of males and females from „Scania et in Ostrogothia“ (Scania = Skåne, Sweden). Material in ZML: one male (both third antennomeres missing as well as both halteres and labium of proboscis), labelled: „R. culicina ♂. Ostrog.“, and bearing small white label and further two females (one of them unlabelled and the second labelled similarly as male). All specimens are *R. culicina* (valid name).

Empis pallidiventrtris Fallén, 1816. Diptera Sveciae, Empididae: 28. Described from an unspecified number of female(s) from „Scania“. Material in ZML: two badly preserved specimens labelled „R. pallidiventrtris“, and either „Abus.“ or „Esp.“ (= ?Esperöd), are *R. variabilis*. Further moulted female without label is *R. culicina*; and further two females (the first unlabelled and the second labelled „Fall.“) are *R. variabilis*.

Empis tenuirostris Fallén, 1816. Diptera Sveciae, Empididae: 29. Described from an unspecified number of males and females from „Esperöd ... in Scania“. Material in ZML: one female, without antennae and halteres, labelled „Fall.“ is *R. variabilis*.

Empis variabilis Fallén, 1816. Diptera Sveciae, Empididae: 29. Described from an unspecified number of males and females from „Scania“. Material in ZML: three males and three females (one pair on a single pin), mostly well preserved, some without halteres or slightly moulted, either unlabelled or labelled „R. variabilis“ and „Abus“? (illegible). All are *R. variabilis* (valid name).

Empis flava (Fallén, 1816). Diptera Sveciae, Empididae: 30. Described from an unspecified number of males and females from „Svecia“. Material in ZML: four females, one labelled „Lårketorp“, remaining three without locality labels, all bearing small white label, and all are *R. sciarina*. It is clear that COLLIN (1961) was right when stated: „Fallén evidently failed to distinguish the corresponding females (= *R. sciarina*) from specimens of *R. flava*. However, males in Fallén’s Stockholm collection belong to *R. flava*“.

Empis spissirostris Fallén, 1816. Diptera Sveciae, Empididae: 31. Described from an unspecified number of females from „Westrogothia .., ... in Ostrogothia“. Material in ZML: one male (right antenna, both hind legs and right midleg missing), labelled „R. spissirostris ♂“, and one female with both antennae and halteres missing without labels only with small red square label. Both are *R. nodipes*.