Earomyia argenta sp. nov. (Diptera: Lonchaeidae) from Sweden with a revised checklist and province catalogue

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A new species within the genus *Earomyia*, Zetterstedt, 1842 namely *Earomyia argenta* **sp. nov.** is described from Sweden. Differences between it and other related species are discussed. An updated checklist and province catalogue of Swedish Lonchaeidae is provided listing 66 species in 6 genera.

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The genus *Earomyia* Zetterstedt, 1842 is one of the smaller of the 9 genera in the family Lonchaeidae with 23 described species globally, 11 of which are known from Europe. As with many other Lonchaeidae genera definitive attribution to species level is usually dependant on the characters of the male terminalia. The larval requirements of species in the genus are quite varied with several being associated with the cones of coniferous trees where they feed on the seeds, others breed in thistle heads and the stems of various herbaceous plants.

Whilst examining specimens from the Swedish Malaise Trap Project I came across individual specimens of *Earomyia* which keyed out to near *Earomyia virilis* Collin, 1953 but differed in the pattern of pollinosity on the face and in the structure of the male genitalia. Further material of this unrecognised species was obtained for study from the Biological Museum, Lund University.

Species description

***Earomyia argenta* sp. nov.**

Description

Male, head: Eyes bare. Frons black, covered by light grey pollinosity, ratio of frons width to eye width 1:1.2. Orbital plate sub-shining black, dulled by microsculpture, bare apart from orbital seta. Frontal and interfrontal setulae approximately 0.75x length of orbital seta, interfrontals incurved towards centre of frons. Lunule bare, ground colour light orange, when viewed from above covered in intense silver pollinosity. Parafacials also intensely silver pollinose, this extending onto anterior part of the genae (Figs 1–2). Face lightly silver dusted. Anterior genal setulae in a well-spaced row of 5–6 along mouth edge. Antennae entirely black, postpedicel length to depth ratio 1.2:1.

Arista bare, slightly thickened basally.

Thorax: Scutum sub-shining black covered in long setulae, as long as orbital seta. Anepisternum grey pollinose, 2 anterior setae, posterior setae in row of 4, remainder of the sclerite covered in long setulae almost as long and strong as the setae. Katepisternum grey pollinose, 2 setae situated near dorsal margin, 2 setulae immediately anterior to these otherwise sclerite bare. Proepimeron and proepisternum each with 1 seta. Scutellum sub-shining black, without setulae on margin between the setae (Paratype has 1 setula on each side between apical and lateral setae and specimens listed in the additional material have 1 lateral and 2 apical setulae). Calypteres pale, with a darker margin and a brownish fringe. Wings, clear, veins yellow, wing length 3.25mm. Legs; black, all basal tarsomeres clear yellow.

Male terminalia (Figs 3A–D): In lateral view (Fig. 3A) epandrium twice as wide as long, posterior margin flat, anterior margin with a slight pointed process medially, a row of strong setae along posterior and ventral margins. Cerci large, triangular, almost width of epandrium, membranous, narrowing ventrally with a group of apical setulae. Surstyli extending ventrally from shell of epandrium as a rounded lobe with 2 long, strong apical setae. Posterior view; cerci in the form of a pair of rectangular lobes with bluntly rounded apices, each separated from each other along their lengths (Fig. 3B). Internal view; surstyli; (Fig. 3C) ventral portion narrower than dorsal, two strong setae apically, anterior margin with a single seta on apical half, dorsal portion with a uniform row of 4 setae on anterior margin. Phallus; (Fig. 3D) broadly J-shaped, apically thin and slightly sinuous, basally broad and with a conspicuous row of spicules along outer margin, these extending from near base to half way along length.

Figure 1. *Earomyia argenta* **sp. nov.** Adult male head, anterior view.

Figur 1. *Earomyia argenta* **sp. nov.** Huvud av adult hane, framifrån.

Female: Resembling the male apart from the usual sexual differences. Frons slightly grey dusted, dulled by microsculpture, ratio of width to eye width 1:1, frontal and interfrontal setulae shorter than in male. Lunule orange- brown, parafacials and anterior genae almost as intensely silver pollinose as in the male. Apical segment of aculeus with a pair of dorso-basal setulae 0.75x length of the segment, at apex a slightly shorter pair ventrally and a short pair dorsally.

Holotype: ♂ **SWEDEN**: Skåne, Dalby, Ö. Mölla, 7.v.1989, R Danielsson

Paratypes: 4♂ with the same data as the Holotype. Skåne, N. Väla, 2 Km SW Saxtorps, 30.iv.1988, 1♂, R. Danielsson. Skåne, Dalby, Ö. Mölla, 11.vii.1989, 1♂, R Danielsson (all specimens in Biological Museum, Lund University).

Additional material: Dalarna, Säters kommun, Säterdalen, Näsåkerspussen **Altitude:** 162 m.s.l. alder wood ravine, N 60°22´ E 15°43´, 15.iv–13.v.2004, (SMTP site 10, capture 407) 3♂, 2♀. Same trap, 13. v–18.vi.2004, (SMTP site 10 capture 408) 4 ♀. Same trap, 18.v–31.v.2005 (SMTP site 10 capture 1621), 1♂ 1♀. All specimens from Swedish Malaise Trap Project.

In 2014 a photograph of an *Earomyia* specimen (Fig. 2) was posted on the *Diptera.info* web site by Belinda Andersen. At that time, I assumed it to be of *E. virilis* but re-examining it in light of this present study it is obviously a male of *E. argenta*. The intensely silvered parafacials are clearly obvious although due to the angle of light in this photograph the silvered lunule is not obvious as in Figure 1 and the tarsomeres also appear darkened (the pale tarsomeres are obvious when the photograph is viewed in high contrast).

DENMARK: Bornholm Island, 10.v.2014, B. Andersen, oak and grass habitat, 1♂.

Figure 2. *Earomyia argenta* **sp. nov.** Adult male habitus. Photo: Belinda Andersen.

Figur 2. *Earomyia argenta* **sp. nov.** Adult hane habitus. Foto: Belinda Andersen.

Etymology: The specific epithet refers to the intense silvering of the parafacials.

Differential diagnosis

Within the European *Earomyia* this species with its bare eyes, yellow basal tarsomeres, katepisternum bare *apart* from the row of setae/setulae near the dorsal margin and epandrium in lateral view wider than high keys out to *E. virilis* with which it has been previously confused. It is however a clearly distinct species both in external features as well as in the morphology of the male terminalia.

In the rather short original description of *E. virilis* Collin (1953) much of the emphasis is on outlining the differences between *E. virilis* and *E. viridana* (Meigen, 1826) rather than on the description of the key characters. In order to carry out a proper comparison with *E. argenta* it was therefore necessary to examine the male syntype of *E. virilis* from the Verrall-Collin collection, Oxford University Museum of Natural History.

The syntype specimen is from England, Barton Mills, 9.v.1938, VC Type 752. The main points of distinction from *E. argenta* are that in *E. virilis* the lunule has a dark ground colour and the lunule,

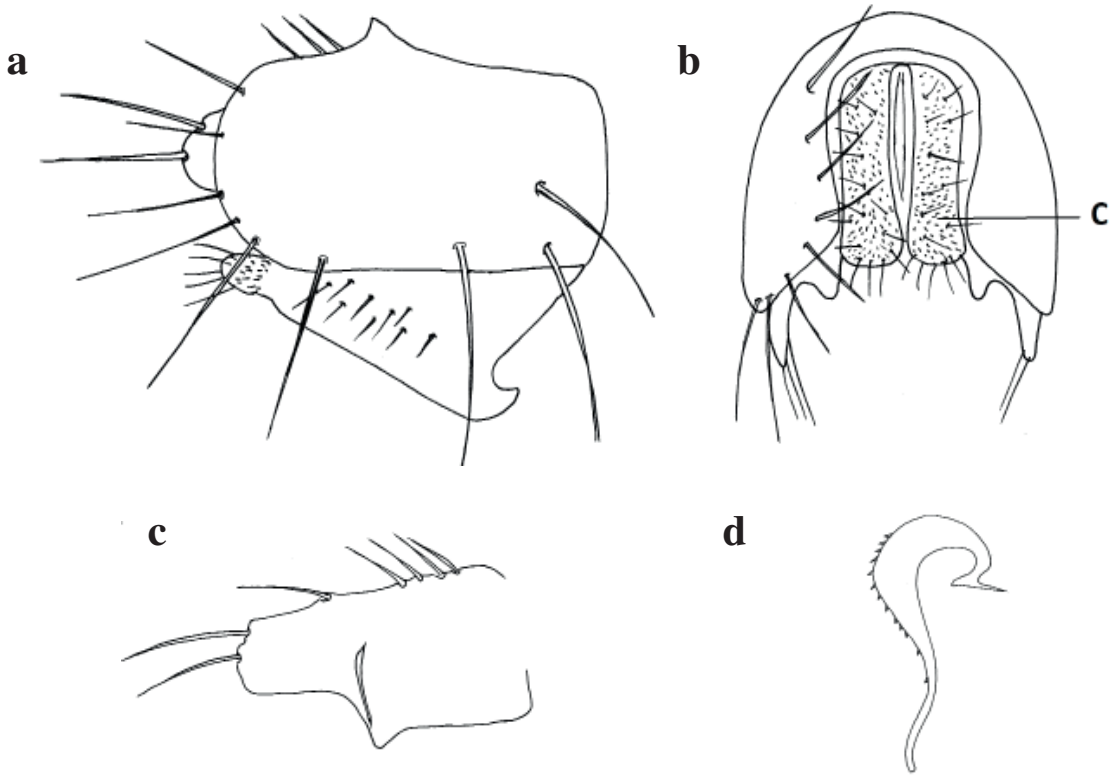

Figure 3. *Earomyia argenta* **sp. nov.** Male terminalia. – a) epandrium and associated structures, lateral view; – b) same as previous, posterior view, C = cerci; – c) inner surface of surstylus; – d) phallus.

Figur 3. *Earomyia argenta* **sp. nov.** Hane, terminala segment – a) epandrium och tillhörande strukturer, från sidan; – b) samma som föregående, ovanifrån, C = cerci; – c) insidan av surstylus; – d) fallus.

parafacials and face are lightly grey pollinose. Although the 3–4 most anterior genal setulae are in a single row there is a tendency for them to become multiserial basally. There are also differences in the male genitalia, in *E. virilis* the phallus is shorter and less sinuous and lacks spicules along the outer surface. In posterior view the cerci are fused basally with a semi-circular excavation instead of appearing as 2 separate rectangular structures in *E. argenta.*

Distribution

At present *E. argenta* is only known from Sweden and Denmark from the localities listed in the type description. Examination of available British material has shown that all specimens examined are *E. virilis*. The true *E. virilis* does also occur in Sweden but previous records may need re-examination in light of these current findings.

Revised checklist

Since the previous province checklist of the Swedish Lonchaeidae was published (MacGowan 2015) approximately 800 additional specimens have been examined, mainly from Swedish Malaise Trap Project but also some unidentified material from Lund University, Biological Museum, Swedish Museum of Natural History, Stockholm as well as personal records from Sven Hellqvist. As a result, a further 6 species and 101 province records are added to the checklist giving a new Swedish total of 66 species in 6 genera, making this the largest known fauna for any European country.

In addition to *E. argenta*, 5 further species are added to the Swedish fauna; *Dasiops noctuinus* Morge, 1959, *Lonchaea bruggeri* Morge, 1967,

Lonchaea defecta McAlpine, 1964, *Lonchaea helvetica* MacGowan, 2001, and *Lonchaea hyalipennis* Zetterstedt, 1847. Further details of these species are provided below.

Swedish faunal provinces : Skåne (**Sk**), Blekinge (**Bl**), Halland (**Ha**), Småland (**Sm**), Öland (**Öl**), Gotland (**Go**), Gotska Sandön (**GS**), Östergötland (**Ög**), Västergötland (**Vg**), Bohuslän (**Bo**), Dalsland (**Ds**), Närke (**Nä**), Södermanland (**Sö**), Uppland (**Up**), Västmanland (**Vs**), Värmland (**Vr**), Dalarna (**Dr**), Gästrikland (Gä), Hälsingland (**Hs**), Medelpad (**Me**), Härjedalen (**Hr**), Jämtland (**Jä**), Ångermanland (**Ån**), Västerbotten (**Vb**), Norrbotten (**Nb**), Åsele lappmark (**Ås**), Lycksele lappmark (**Ly**), Pite lappmark (**Pi**), Lule lappmark (**Lu**) and Torne lappmark (**To**).

LONCHAEIDAE
DASIOPINAE
Dasiopini
DASIOPS Rondani, 1856

appendiculus Morge, 1959	Sm*, Sö, Vr, Dr*, Ån, Vb*, Ly, To*.
facialis Collin, 1953	Sm, Go, Jä, Vb, Dr*, Pi, To.
hennigi Morge, 1959	Ha.
laticeps (Czerny, 1934)	Sm, Sö, Up, Dr*, Jä.
mucronatus Morge, 1959	Sk, Sm, Öl.
***noctuinus* (Morge, 1959)	Lu*.
occultus Collin, 1953	Ög, To.
perpropinquus Morge, 1959	Sk, Sö, Up*, Dr*.
solivagus Morge, 1959	Ly.
spatiosus (Becker, 1895)	Sk, Sö*, Bo, Up, Vr, Me, Hr, Jä*, Vb*, Ås*, Lu, To*.

LONCHAEINAE
Earomyiini
PROTEAROMYIA McAlpine, 1962

nigra (Meigen, 1826)	Sk, Bl*, Sm, Öl, Go, Ög, Bo, Sö, Up, Vs, Dr, Jä, Vb*, To.
rameli MacGowan, 2014	Sk, Sm*, Up*.
withersi MacGowan, 2014	Sk, Sm*, Öl*, Sö*.

CHAETOLONCHAEA Czerny, 1934

brevipilosa Czerny, 1934	Sk, Öl, Vb*.
dasyops (Meigen, 1826)	Sk, Sm, Öl, Go, Ög*, Bo*, Up,.
pallipennis (Zetterstedt, 1855)	Sk, Bl, Ha, Sm, Öl, Ög, Bo*, Up, Me*.

EAROMYIA Zetterstedt, 1842

***argenta* **sp. nov.**	Sk*, Dr*.
lonchaeoides Zetterstedt, 1848	Sk, Ha*, Sm, Ög, Vg*, Sö*, Up, Vr, Dr*, Hs, Hr, Ån, Vb, Lu.
netherlandica MacGowan 2004	Öl.
schistopyga Collin, 1953	Sk, Sm*, Up, Dr*.
viridana (Meigen, 1826)	Sk, Sm.
virilis Collin, 1953	Sk, Ög, Dr*.

Lonchaeini
LONCHAEA Fallén, 1820

affinis Malloch, 1920	Sk, Ha, Sm, Öl*, Ög*, Sö, Up, Vs*, Vr, Dr, Hs, Hr, Jä,
= *laxa* Collin, 1953 **syn. nov.**	Ån, Vb, Nb, Ås. Ly, Pi, Lu, To.
albigena Collin, 1953	Sk, Ög, Sö*, Up.
albitarsis Zetterstedt, 1837	Sk*, Ha*, Sm*, Jä, Vb, To*.

angelina MacGowan, 2014	Vr.
***bruggeri* Morge, 1967	Jä*.
bukowski Czerny, 1934	Sm*, Öl*, Ög, Hr, Up, Vs*, Vb, Dr*, Lu*, To.
caledonica MacGowan & Rotheray, 2000	Sk, Up.
carpathica, Kovalev, 1974	Sm*, Ög*, Me, Vb.
caucasica Kovalev, 1974	Bl*, Ha.
chorea (Fabricius, 1781)	Sk, Bl, Ha, Sm, Go*, Öl, Ög, Sö, Up, Vr, Dr*, Me, Jä, Ån*, Vb, Ås, Ly, Lu, To*.
collini Hackman, 1956	Sk, Sö, Up, Ån*.
contigua Collin, 1953	Sk, Ha, Sm, Up, Me, Ån, Vb.
corusca Czerny, 1934	Sk, Ha, Sm*, Go, Bo*, Sö, Up, Vs, Dr*, To.
***defecta* McAlpine, 1964	Vb*.
deutschi Zetterstedt, 1837	Sk*, Sm, Ög*, Vs, Hs, Hr, Jä, Vb, Ås*, Ly, Lu, To, Up*.
fraxina MacGowan & Rotheray, 2000	Sm, Sö, Up, Vs, Vr, Ol*, Sk*.
fugax Becker, 1895	Sk, Sm, Öl*, Ög, Na, Sö, Up, Vs, Vr, Dr, Hs, Ån, Vb, Ås*.
gorodkovi Kovalev, 1974	Sm.
hackmani Kovalev, 1981	Ha, Sm, Sö, Up, Vb, Ås*.
***helvetica* MacGowan, 2001	Sk*, Sm*
hirticeps Zetterstedt, 1837	Go*, Ly*, To.
***hyalipennis* Zetterstedt, 1847	Bl*,
iona MacGowan, 2001	Ha, Öl*, Sm*.
limatula Collin, 1953	Sm*, Vs*, Ån,, To*.
mallochi MacGowan & Rotheray, 2000	Sk, Bl*, Sm*.
nitens (Bigot, 1885)	Sm, Ög, Sö, Up, To.
nitidissima Kovalev, 1978	To.
obscuritarsis Collin, 1953	Sk, Sm, Go, Sö, Dr, Vb*, Ås.
palposa Zetterstedt, 1847	Sk, Sm,Vb.
patens Collin, 1953	Sk, Ha, Sm, Ds, Sö, Up, Vr, Dr, Vb, Sm*.
peregrina Becker, 1895	Sk, Sm.
postica Collin, 1953	Sk.
ragnari Hackman, 1956	Sm, Sö, Up, Vs*, Hs, Jä*, Vb, Ly, To.
scutellaris Rondani, 1874	Sk, Sm, Öl*, Ög, Jä*, Ån*, To*.
spicata MacGowan, 2008	Vb, Dr*, Sm*.
stackelbergi Czerny, 1934	Sm, Ög, Up, Dr.
subneatosa Kovalev, 1974	Sk, Sm, Up, Dr, Vb*.
sylvatica Beling, 1873	Sk, Bl*, Ha, Sm, Go*, Öl*, Ög, Sö, Up, Vs, Dr*, Ån, Vb.
tarsata Fallén, 1820	Sk, Sm, Öl, Go, Ög*, Sö
tenuicornis Kovalev, 1978	Sm.
ultima Collin, 1953	Sk, Sm, Öl, Up.
xylophila Kovalev, 1978	Vb.
zetterstedti Becker, 1902	Sk*, Sm, Ög*, Sö, Up, Dr, Ån, Vb*, Nb, Ly*, To.
SILBA Macquart, 1851	
fumosa (Egger, 1862)	Sk, Ha, Sm, Öl, Go.

** new species record * new province record

Notes on added species

***Dasiops noctuinus* (Morge)**

A single female was found in Malaise trap samples from, Lule lappmark, Gällivare kommun, Ätnarova försökspark, Pelttovaara, *Vaccinium vitis-idaea* pine wood. N67°03.103´ E20°23.154´ (=Trap ID 48) 08.vii–29.vii.2004 (=coll. event ID 1208), altitude 428m. This little known species was originally described from Kungur, perm Krai, Russia (Kovalev & Morge 1984) and there is a subsequent record from Bohemia, Czech Republic (Maca 1997). Morge (1959) states that the larvae develop under the bark of conifers.

***Lonchaea bruggeri* Morge**

A published record of this species occurring in Sweden was overlooked in the previous checklist. In the original type description Morge (1967 p.155) states that he had seen a male specimen of *L. bruggeri* from Mörsil in Jämtland. Morge noted that the specimen was in the Becker collection of the Zoological Museum of the Humboldt University in Berlin, now the Museum für Naturkunde, but interestingly it does not appear on the list of Lonchaeidae in the collections sent to me by the curator in 2009. This species has previously been recorded from France, Germany, Switzerland, Austria, Czech Republic, Slovakia and Russia (MacGowan 2019)

***Lonchaea defecta* McAlpine**

A single female was found in a Malaise trap located on Lichen pine heath habitat in Vindelns kommun, Svartbergets trail park, Åheden, Västerbotten. The trap sample was collected between 5th and 29th August 2004. *L. defecta* is a Holarctic species and has been previously recorded from Canada, Finland, European Russia, Siberia and the Russian far east (Kovalev & Morge 1984).

***Lonchaea helvetica* MacGowan.**

3 specimens were identified by Sven Hellqvist from material collected in window traps on oak trunks at 3 sites in southern Sweden – Skåne: Helsingborg: Hjälmshult, 15.v–10.vi.2014, 1♂, leg. P. Linder. Småland: Nybro: Ekenäs S Allgunnen, 4.vii–2.ix.2014, 1♂, leg. J.Hedin and Värnamo: Brunnstorps NR, 25.v–2.vii.2014, 1♂, leg. M. Gustafsson. *L. helvetica* was previously known only from Switzerland and the Czech Republic.

***Lonchaea hyalipennis* Zetterstedt.**

This species was overlooked in the previous checklist as there were 5 specimens under this name in the collections of the Swedish Museum of Natural History. All the specimens were old with little or no data attached. There were 2 males, 1 from Blekinge and 1 from *Öland* with 2 females from *Östergötland* and 1 from Gotland. After re-examination of these specimens for this checklist only the male from Blekinge proved to be a specimen of *L. hyalipennis* (specimen NHRS-BYWS000002782) the others belonging to different taxa.

Zetterstedt (1847, p2350) states that his type description is based in a Danish specimen and that the species was not known to him from Sweden, however the location of the type specimen is unknown. This species has previously been recorded from France, Germany, Switzerland and the Czech Republic (MacGowan 2019)

New synonomy

The synonym *Lonchaea affinis* Malloch, 1920 = (*Lonchaea laxa* Collin, 1953) is established.

Species whose status requires confirmation

***Lonchaea sororcula* Hackman,1956.**

There is a single specimen determined as *Lonchaea sororcula* Hackman, 1956 in the collections of the Museum of Evolution. Uppsala captured at Ekudden, Upsalla on 29th July 1868.. The specimen is a female and although generally in good condition there is some damage to the setae on the apical segment of the aculeus, a feature which is useful in species level identification.

L. sororcula is apparently a rare species being first described from a single male taken in Finland (Hackman 1956). Further specimens of both sexes were taken in the Tuva region of Russia in 1973, which allowed the first description of the female (Kovalev 1976).More recently in 2007 and 2008 2 females were from the Krkonose Mountains in the Czech Republic (Maca et al. 2016)

L. sororcula is very similar to the common *L. affinis* and examination of the male genitalia is usually required to confirm identity. The single female in Upsalla agrees with the species description in having the basal 2 tarsomeres of the legs yellow, (most frequently only the basal tarsomere is yellow

in *L. affinis*), 2–3 setae on the proepimeron and a shorter antennal postpedicel than *L. affinis*. But both Hackman (1956) and Kovalev (1976) mention that *L. sororcula* has setulae present on the orbital plates – the Upsalla specimen does not have these.

On the basis of only a female example being available and with it not agreeing fully with the previous descriptions *L. sororcula* is not at present not included in the Swedish checklist. A similar situation arose with *L. sororcula* when compiling the Swiss Lonchaeidae checklist (MacGowan & Bächli 2016) and a similar decision was taken. *L. sororcula* may indeed be a rare species throughout its range although there is a possibility that it has been overlooked in previous studies due to its close similarity to *L. affinis*.

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References

Collin, J.E. 1953 A Revision of the British (and notes on other) species of Lonchaeidae (Diptera). – Transactions of the Society of British Entomology 11: 181–207.

Hackman, W. 1956 The Lonchaeidae (Dipt.) of Eastern Fennoscandia. – Notulae Entomologicae 36: 89–115.

Kovalev, V.G. 1976. Faunistic and ecological material on flies of the genus *Lonchaea* (Diptera, Lonchaeidae) from Tuva. – Entomologicheskoe Obozrenie 55: 934–945.

Kovalev, V. G. & Morge, G. 1984: Family Lonchaeidae. In Soós, Á. & Papp, L. (eds): Catalogue of Palaearctic Diptera. Micropezidae – Agromyzidae 9. Akadémiai Kiadó, Budapest.

Máca, J. 1997. New and interesting records of Lonchaeidae (Diptera) from the Czech and Slovak Republics. – Folia Facultatis scientiarum naturalium Universitatis Masarykianae Brunensis, Biologica 95: 107 - 110.

Máca, J., Barták, M. & Vanëk J. 2016: Kopinatkovití (Diptera, Lonchaeidae) č*eské* č*ásti* Krkonoš. Lance flies (Diptera, Lonchaeidae) in the Czech part of the Krkonoše Mts. – Opera Corcontica 53: 211–218.

MacGowan, I. 2015. A Review and Checklist of Swedish Lonchaeidae (Diptera). [En översikt och checklista för svenska stjärtflugor (Lonchaeidae, Diptera).] – Entomologisk Tidskrift 136 (4): 165–172.

MacGowan, I. 2019. *Lonchaeidae online*. Available at: http://lonchaeidae.myspecies.info (accessed 20 October 2019).

MacGowan, I. & Bächli, G. 2016. New species of Lonchaeidae from Switzerland and Serbia with a revised checklist of the Swiss fauna. – Mitteilungen der Schweizerischen Entomologischen Gesellschaft 89: 169–176.

Morge, G. 1967. Die Lonchaeidae und Pallopteridae Österreichs und der angrenzenden Gebiete. 2 Teil. Die Pallopteridae. – Naturkundliches Jahrbuch der Stadt Linz (Linz) 13: 141–212

Zetterstedt, J.W. 1847. Diptera Scandinaviæ disposita et descripta. Volume: t.5–6 (1846–1847). Officina Lundbergiana, Lundae.

Sammanfattning

Släktet *Earomyia* Zetterstedt, 1842 är en av de till antalet mindre släktena i familjen Lonchaeidae med 23 arter kända i världen, varav 11 från Europa. Liksom i många andra släkten i familjen särskiljs arterna med säkerhet vanligtvis med hjälp av karaktärer i de hanliga genitalierna. Vid studier av prover från Svenska Malaisefälleprojektet upptäcktes individer av *Earomyia* som inte kunde bestämmas utifrån litteraturen. Individerna liknade mest *Earomyia virilis* Collin, 1953 men skiljer sig med avseende på behåring i ansiktet samt struktur i de hanliga genitalierna. Ytterliggare material av denna hittills obeskrivna art lånades från Biologiska muséet vid Lunds universitet. Här beskrivs en ny art, *Earomyia argenta* **sp. nov.**, från Sverige. De diagnostistiska skillnaderna mellan denna och andra närbesläktade arter diskuteras, och en uppdaterad cheklista och provinskatalog över svenska Lonchaeidae presenteras. Totalt finns det i dag 66 kända arter i Sverige fördelat på 7 släkten.