

# Lampoterma viride (Thomson) from Finland (Hymenoptera: Pteromalidae)

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Lampoterma viride (Thomson, 1876) has been found in southern Finland: South Häme: Janakkala on the pine bog of Suurisuo. Characters of both sexes are described.

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### Introduction

Thomson (1876) described from Skåne in Sweden the female of a new pteromalid species as Metastenus viridis. Graham (1956) noted that Thomson's species differs from the characters of Metastenus Walker and created a new genus Lampoterma for it. Later Graham described a second species, Lampoterma bianellatum from England and Ireland, and presented a key to the females and males of the two species (Graham 1969). Bouček & Rasplus (1991) included the genus in their key to West Palaearctic genera of Pteromalidae, and gave two figures of the female of L. viride (the body and forewing in dorsal view, and antenna in lateral view). Recently two new species, Lampoterma ceutorhynchae and L. yoncae, were described from Turkey by Doğanlar (2018). Doğanlar also published new descriptions and a key to the females of four Western Palaearctic species of the genus. The genus has a Holarctic distribution; in North America it is represented by at least one unidentified species from California, USA (Bouček & Heydon 1997).

Lampoterma viride has been recorded from the following European countries: United Kingdom: England (Graham 1969) and Scotland (Dale-Skey et al. 2016), Moldova (Bouček 1965), Czechia (Bouček 1968), Germany (Vidal 2001), Hungary (Szelényi 1983), The Netherlands (Gijswijt (2003), Spain (Garrido Torres & Nieves-Aldrey 1999), and Sweden [Skåne, Blekinge, Uppland and Härjedalen] Thomson (1876), Hedqvist (2003).

Lampoterma viride has now been found as a new species to Finland. Characters of both sexes are here described based on the Finnish material.

#### Material

Lampoterma viride (Thomson, 1876). Finland (total 15  $\stackrel{\triangleleft}{\circ}$  22  $\stackrel{\triangleleft}{\circ}$  2): South Häme: Janakkala, Leppälammi (WGS84 60.985°N 24.775°E), 11 July 2014 1  $\stackrel{\triangleleft}{\circ}$ , V. Vikberg leg.; Janakkala, Suurisuo (WGS84 60.989°N 24.811°E), 4 July 1981 3  $\stackrel{\triangleleft}{\circ}$  3  $\stackrel{\triangleleft}{\circ}$  9 July 2014 1  $\stackrel{\triangleleft}{\circ}$  3  $\stackrel{\triangleleft}{\circ}$  9, 13 July 2014 9  $\stackrel{\triangleleft}{\circ}$  13  $\stackrel{\triangleleft}{\circ}$  4 August

2015 1  $\,^{\circ}$ , 21 June 2018 2  $\,^{\circ}$  $_{\circ}$ 0 1  $\,^{\circ}$ , leg. V. Vikberg. The specimens are deposited in the Finnish Museum of Natural History (Luomus) and in the private collection of the author.

### Characters of the female

Finnish females (Fig. 1–2) are 1.40–1.80 mm long. Antenna with three anelli and five funicular segments. Pedicel 1.8 times as long as wide in lateral view. Third anellus longer than two previous. Antennal flagellum strongly clavate, funicular segments transverse, F1 0.8x, F2–F3 0.7x, F4–5 0.6 x as long as wide. Clava slightly longer than three previous funicular segments together, 1.6 times as long as wide. Fore wing with marginal vein 1.45 as long as stigmal vein, postmarginal vein 1.16 as long as marginal vein. Propodeum medially 0.23 times as long as scutellum. Gaster 1.6 times as long as mesosoma.

Head in dorsal view 1.17-1.37 times as broad as the mesoscutum, 2.05-2.14 times as broad as long, POL = 1.5-2.0 x OOL.

Eyes separated by about 1.3 times their own length. Malar space 0.43 eye height. Mouth 2.0 times as long as malar space. Clypeus faintly reticulate, anteriorly smooth, anterolaterally with some weak striae which converge toward truncate lower margin. Both mandibles with three teeth. Antennal scape about 0.70 times as long as an eye; pedicel about 1.9 times as long as broad; combined length of pedicel and flagellum 0.94–1.05 times as long as width of head, three anelli, third anellus thicker than others, in some specimens with one sensilla laterally, funiculus slightly clavate, its segments transverse; clava 2.4 times as long as broad, slightly shorter than three preceding segments together. Flagellum with subdecumbent setae, which are shorter than the width of segments bearing them.

Pronotum dorsally very short and almost smooth. Propodeum without plicae, sloping to sides from median carina, medially 0.28 times as long as scutellum, callus with nine setae, lateral three inclined backwards, others erect.



**Figure 1.** Female of *Lampoterma viride* (Thomson). Dorsal view. Photographed by Pekka Malinen. Specimen identifier http://id.luomus. fi/GL.9168.

**Kuva 1.** *Lampoterma viride* (Thomson) -naaras. Päältä. Valokuvannut Pekka Malinen. Yksilötunnus http://id.luomus.fi/GL.9168.

Fore wing 2.2 times as long as wide. Distal half of basal cell pilose. Marginal vein 1.54–1.85 times as long as stigmal vein. Postmarginal vein 1.10-1.36 times as long as marginal vein.

Gaster lanceolate, acuminate, 2.04–2.44 times as long as mesosoma, 2.9–4.4 times as long as wide. Tip of hypopygium at 0.46 the length of the gaster.

## Characters of the male

Finnish males (Fig. 3–4) are 1.05–1.30 mm long (one dwarfish only 0.8 mm).

Head in dorsal view 2.03-2.1 times as wide as long, 1.3-1.37 times as wide as mesoscutum. POL = 1.64-2.0 x OOL.

Eyes separated by 1.25 times their own length. Malar space 0.41 times as long as eye height. Antennal scape about 0.68–0.73 times as long as an eye; pedicel about 1.6 times as long as broad; combined length of pedicel and flagellum 1.0–1.2 times as long as width of head, three anelli, funiculus nearly



**Figure 2.** Female of *Lampoterma viride* (Thomson). Lateral view. Photographed by Pekka Malinen. Specimen identifier http://id.luomus. fi/GL.9168.

**Kuva 2.** *Lampoterma viride* (Thomson) -naaras. Sivulta. Valokuvannut Pekka Malinen. Yksilötunnus http://id.luomus.fi/GL.9168.

filiform, its segments slightly transverse to slightly longer than wide; clava about 2.5 times as long as broad, slightly shorter than three preceding segments together, slightly pointed apically. Flagellum covered with pale setae which are a little shorter than the width of segments bearing them, setae stand out at an angle of  $30^{\circ}$  to  $45^{\circ}$ .

Prepectus narrow, rather strongly reticulate. Propodeum medially 0.41 times as long as scutellum, median carina distinct.

Fore wing 2.1 times as long as wide. Marginal vein 1.33–1.52 times as long as stigmal vein, postmarginal vein 1.12–1.35 times as long as marginal vein.

Gaster oblong, 1.96–2.1 times as long as wide, 1.05–1.18 times as long as mesosoma, depressed dorsally, with a strong median plica ventrally.

### Discussion

The female of *Metastenus viridis* was described by Thomson (1876: 206). The main body colour was described as bright green, thorax as blue-green, abdomen dark green. Legs with metallic lustre, knees, tarsi, tibiae apically and anterior tibiae almost wholly pale yellow.

Thomson (1876) gave the body length of the female as 2 mm. The lectotype of *Metastenus viridis* has been photographed and its length is 1.62 mm, and the body of five paralectotypes (all females) are 1.53, 1.53, 1.55, 1.64 & 1.67 mm long, so 2 mm is a little too much.

Some characters of the males described by Graham (1969: 688) were obviously based on specimens from Britain (no lo-



**Figure 3.** Male of *Lampoterma viride* (Thomson). Dorsal view. Photographed by Pekka Malinen. Specimen identifier http://id.luomus. fi/GL.9169.

**Kuva 3.** *Lampoterma viride* (Thomson) -koiras. Päältä. Valokuvannut Pekka Malinen. Yksilötunnus http://id.luomus.fi/GL.9169.

calities were mentioned). The body length was not mentioned. The male of *Lampoterma viride* (three anelli) is missing in his key to most European genera (males).

Doğanlar (2018) made a description of the female based on two drawings of the female in in Bouček & Rasplus (1991), and he gave the characters of the male based on Graham (1969) and its body length as 2 mm, which was the body length of the female given by Thomson (1876).

Lampoterma viride is found in marshy areas. Its host is not known. Lampoterma bianellatum has been reared in Northamptonshire, England from inflorescence galls of Wachtliella caricis (Loew) (Diptera: Cecidomyiidae) on Carex otrubae Podp (Askew & Harris 2017). In the bog Suurisuo, Janakkala many species of Carex are growing, so possibly some species of gall midges could prove to be its host. Lampoterma ceutorhynchae from Turkey was reared from galls of Ceutorhynchus assimilis Payk. (Coleoptera: Curculionidae) on Lepidium draba L. (Doğanlar 2018).



**Figure 4.** Male of *Lampoterma viride* (Thomson). Lateral view. Photographed by Pekka Malinen. Specimen identifier http://id.luomus. fi/GL.9169.

**Kuva 4.** *Lampoterma viride* (Thomson) -koiras. Sivulta. Valokuvannut Pekka Malinen.Yksilötunnus http://id.luomus.fi/GL.9169.

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# Tiivistelmä

Pteromalidae-heimon kiilupistiäinen *Lampoterma viride* on löydetty Janakkalan Suurisuolta Suomelle uutena. Lajin naaraan ja koiraan tuntomerkkejä esitetään suomalaisten yksilöiden perusteella. Lajin biologia on tuntematon, mutta läheinen laji Brittein saarilta on kasvatettu äkämäsääsken äkämistä revonsaralta *Carex otrubae* Podp.

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