

**A NEW SPECIES OF *LEPTOMETOPA* (DIPTERA, MILICHIIDAE)  
FROM MADAGASCAR POLLINATING  
*CEROPEGIA* (ASCLEPIADACEAE)**

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*Abstract.*—*Leptometopa nilssoni* Sabrosky, new species, is described from Madagascar. Apparently this is the first published record of the genus from that island.

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A new species of the milichiid genus *Leptometopa* is described to make the name available for L. Anders Nilsson of the Institute of Systematic Botany, Uppsala University, Sweden, who investigated the pollination of *Ceropegia albisepta* Jum. & H. Perr. (Asclepiadaceae) in Madagascar. Pollinaria from this plant were found attached to the proboscis of flies entrapped in the trap flowers. This paper appears to be the first published record of *Leptometopa* from Madagascar.

***Leptometopa nilssoni* Sabrosky,  
NEW SPECIES**

Polished black species, with black halteres and a pteropleural (anepimeral) bristle.

Female.—Almost entirely shining black, except for white epistomal triangle on lower part of face, palpus, proboscis, and stalk of halter yellowish to brownish, halter knob dull black, mid and hind tarsi yellowish, and wing pale with yellowish to whitish-yellow veins.

Head with frons highly polished but microscopically striate; 2 interfrontal rows with weak interfrontal hairs in tiny punctures, otherwise scarcely evident; cheek polished, its height  $\frac{1}{4}$  that of an eye and less than breadth of third antennal segment, lower

margin with a row of 5 long setae that increase slightly in length toward a slightly longer and stronger vibrissa; chaetotaxy as usual for genus: inner and outer vertical, postocellar, and ocellar pairs of bristles, and on each side of frons 2 laterocline orbital (upper) and 2 mesocline frontal (lower) bristles, all approximately same length and strength.

Mesoscutum only moderately covered with hairs, in about 12 rows; scutellum bare; mesopleuron (anepisternum) with fine hairs on posterior portion; chaetotaxy: 1 humeral, 1+1 notopleural, 1 supra-alar, 1 post-alar, 1 dorsocentral and 1 pteropleural (anepimeral) pairs of bristles, and 1 basal and 1 apical pairs of scutellar bristles.

Hind tibia broadening from slender base to apex, at its widest about three times as broad as basal portion, distal half posterodorsally with broad yellowish tibial organ.

Wing as usual for genus, with two costal breaks, costa extending to 4th vein(M) slightly beyond apex of wing, crossveins well separated, and anal vein not extended beyond anal cell; vein 4(M) converging slightly toward preceding vein (R 4+5), narrowing cell toward apical margin of wing and making the 4th section of costa slightly shorter than the 3rd.

Length.—1.25–1.5 mm.

Holotype and two paratypes.—All females, Madagascar Centre; Mandraka, April 6, 1985 (L. A. Nilsson), in flowers of *Ceropogia albisepta*. Type series deposited in the U.S. National Museum of Natural History, by courtesy of the collector.

The polished black head and body of *L. nilsoni*, so unlike the densely gray microtomentose type species, *Leptometopa latipes* (Meigen), at first glance suggest a species of the genus *Madiza*. However, there are polished black species in the genus, notably the Nearctic *Leptometopa halteralis* (Cocquillet). Moreover, some intermediate species neatly bridge the gap between polished and microtomentose species. *Leptometopa beardleyi* Hardy and Delfinado from the Hawaiian Islands has a polished black head but gray microtomentose thorax, although the latter is not as densely gray as in *latipes* and therefore appears darker. Also, *Leptometopa albipennis* (Lamb) from the Seychelles has the head and most of the thorax polished black but the scutellum is

brownish microtomentose. The latter combination of characters is also found in an undescribed species from New South Wales, Australia, but its relationship to *albipennis* has not been studied. Incidentally, *L. albipennis* shows other differences from *nilsoni*, such as having the frons reddish anteriorly, knob of halter whitish yellow, and wing very milky white.

Males are not available, unfortunately, because the peculiarly broadened hind tibia in that sex is peculiar to the genus *Leptometopa*. However, the head of the female is characteristic of *Leptometopa*, with the lunule extending ventrad as a wedge-shaped divider between deeply-set antennae, its apex nearly touching the apex of the triangular epistomal area of the lower face. Furthermore, a pteropleural (anepimeral) bristle is present, a common, although not universal, feature of *Leptometopa*.

The specific name, a noun in the genitive case, is dedicated to L. Anders Nilsson, the botanist who collected the specimens.