

## A NEW SPECIES OF *XENIMPIA* FROM MADAGASCAR (GEOMETRIDAE)

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**ABSTRACT.** The new species *Xenimpia clenchi* is described from Madagascar. It is compared with the two other known endemic species in the genus, *X. trizonata* and *X. fletcheri*.

Two species of the genus *Xenimpia* W. Warren (1895) are known from Madagascar: *X. trizonata* (Saalmüller) 1891 (= *trivittata* P. Mabille 1900) and *X. fletcheri* Herbulot, 1954 (Herbulot 1957: 247). A third species is described here. This new species is dedicated to the memory of my friend and colleague, Harry K. Clench of the Carnegie Museum.

### *Xenimpia clenchi* Viette, new species

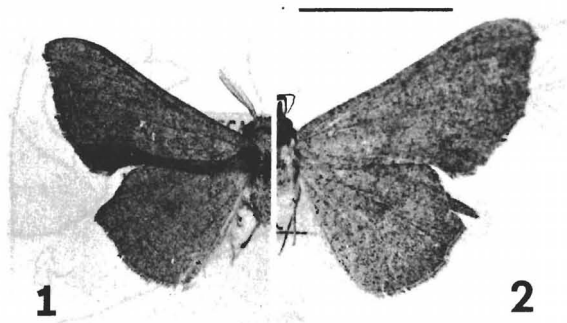
Figs. 1-4

**Forewing** length (base to apex) Holotype ♂, 17 mm; Paratype ♀, 18 mm.

**Male.** Antennae long bipéctinated, buff. Labial palpi brown grey, with the third segment darker. Head, patagia, tegulae and thorax light grey. Abdomen dark grey speckled with brown. Legs grey with the external site of the fore tibiae brown; tibiae and segments of the tarsi thin and lengthened.

Fore- and hind-wings uniformly dark grey slightly irrorated with brown. A yellowish brown patch at the end of the discoidal cell. Cilia concolorous with the ground. Outer margin of the hindwings with a very short tail at vein M<sub>1</sub>. Underside almost identical to upperside, but the ground color is paler.

**Male genitalia.** Eighth abdominal tergite with two caudal and lateral points. Uncus triangular to the base, typical in its distal part. Vinculum with a short saccus. Valvae showing externally a dorsal arm and a ventral lengthened lobe; apex of the arm with



FIGS. 1-2. *Xenimpia clenchi*, new species. 1, Holotype ♂; 2, Paratype ♀. Scale line = 1 cm. Photograph by M. Franey.

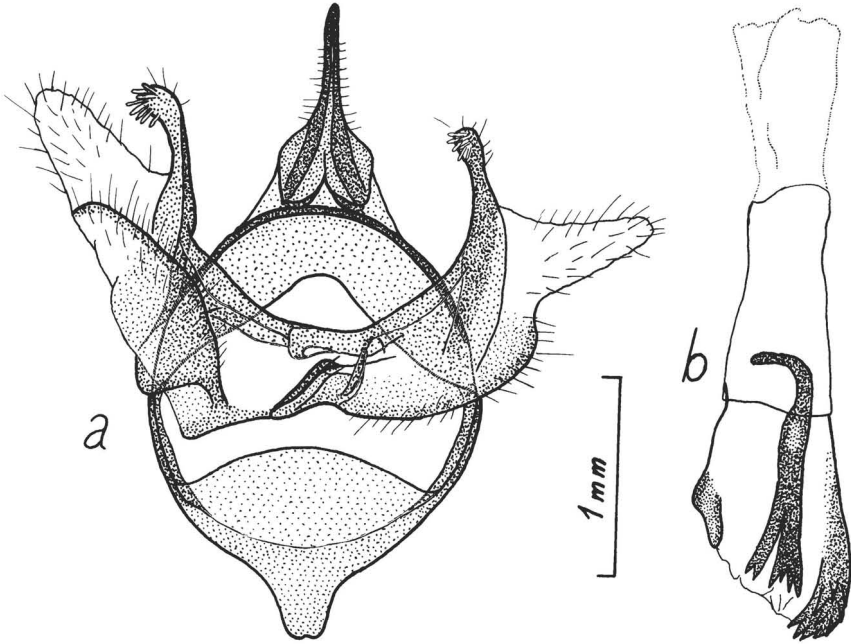


FIG. 3. a, ♂ genitalia and b, aedeagus of Holotype specimen of *Xenimbia clenchi*, new species. Drawing by J. Boudinot.

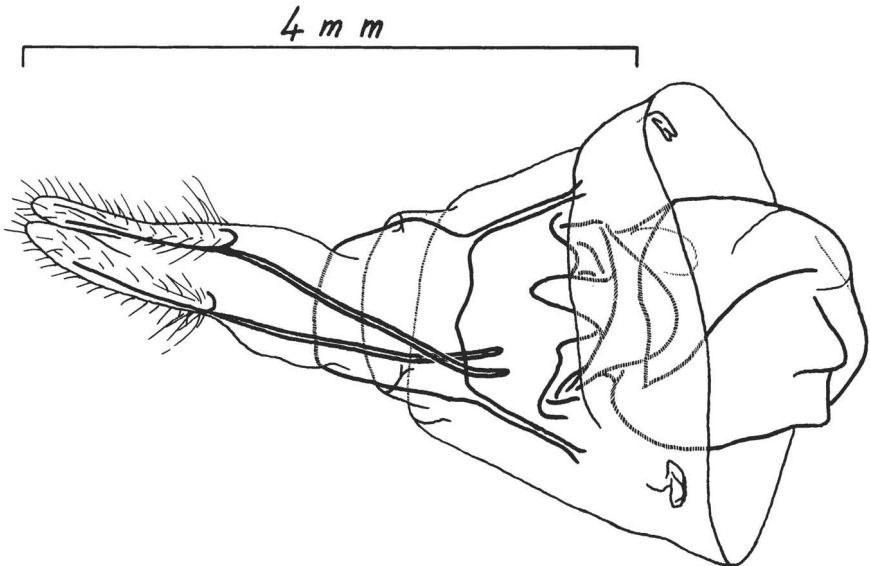


FIG. 4. ♀ genitalia of Paratype specimen of *Xenimbia clenchi*, new species. Drawing by J. Boudinot.

short spines. Aedeagus stout, enlarged and flattened in its distal half, heavily chitinized on the sides and membranous in part. A strong cornutus proximally bent and distally bifid; every part is toothed at the apex.

**Female.** Antennae serrate. Similar to male, but the ground color of the forewings is paler and, in the forewings, the postmedial band is indicated by some yellowish brown spots. Underside paler than upperside, with the outer yellowish spots more distinct and pointed out on the hindwings.

**Female genitalia.** Papillae anales slightly sclerotized, narrow and lengthened. Posterior apophyses twice as long as the anterior apophyses. Eight abdominal tergite sclerotized, funnel shaped, with a small tongue in the middle. Ductus bursae very short. Corpus bursae slightly sclerotized, spheroid.

**Holotype** ♂. Madagascar Centre, massif de l'Iremo, Haute Ikoly,  $\frac{4}{5}$  km NW of col de l'Iremo, 1600 m, 16/20 Feb. 1974 (P. Viette & A. Peyrieras) (genitalia slide, P. Viette no. 5638).

**Paratype** ♀. Madagascar Centre, Ambatofinandrahana, 1180 m, 27 Aug. 1957 (P. Griveaud) (genitalia slide, P. Viette no. 5639).

Both in collection of Museum National d'Histoire Naturelle (Entomologie), Paris.

**Remarks.** *X. clenchi* is, based on its wing pattern, close to *X. misogyna* Carcasson (1962: 60), from Kenya. It differs by the uniform ground color, which in *X. misogyna* is olive buff with a paler area in the middle of the hindwings.

Based on the male genitalia, *X. clenchi* is allied to *X. fletcheri* Herbulot (1954: 120), from Madagascar, but the appearance of these two species is entirely different. *X. fletcheri* is a sexually dimorphic species.

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