

Tineid Moths Collected by Dr. J. Szunyoghy in Tanganyika in 1960 (Lepidoptera)

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DR. J. SZUNYOGHY, Keeper of Mammals of the Hungarian Natural History Museum, Budapest, participated in a Hungarian zoological expedition, hunting big game in Tanganyika, in January–March, 1960. While working in the evenings and part of the nights at his numerous research tasks, J. SZUNYOGHY still found time to collect, at my request, also the small moths which flew to his lamp in the camp. Most of the moths belonged, of course, to a variety of families, but a rather considerable number of specimens belonging to the family Tineidae were also caught. The specimens have been papered and preserved in very good condition, and later mounted and set in Budapest.

The material was collected in three camps in the savanna region of Tanganyika, namely Nata, Arusha, and Seronera. The identification of the collected specimens is as follows.

Ceratophaga PETERSEN, 1957

Ceratophaga lichmodes (MEYRICK, 1921) comb. n. Since the species was based on a single male specimen (*Tinea lichmodes* n. sp., Ann. Transv. Mus., 1921, p. 130), and as displayed by the series at my disposal this animal has a rather wide latitude of variation as to colour and pattern, I submit here a more extensive description.

Head, thorax, scapulae, anal tuft deep ochreous, head occasionally shaded with rufous, collar with deep brown. Fore wing ochreous with a slight golden yellowish tinge, shoulder margined dark brown from base to $\frac{1}{4}$. One female specimen with a strong purple suffusion, from base to apex and from costa of cell to nearly dorsum; thus ochreous basic color restricted merely to costal area. This purplish suffusion present in various extent and depth on most specimens, but it can also be entirely absent as witnessed by one animal and the type-specimen. Cilia as basic colour. Hind wing medium to dark grey; cilia light yellowish ochreous. Antennae dark fuscous, abdomen light fuscous dorsally.

Male genital organ (fig. 1.): uncus and gnathos large, elongated; tegumen and vinculum relatively broad; valvae broadly spoon-shaped and hardly curved apically, without any distinguishable process; base of saccus very wide and high, saccus strong. Aedoeagus straight also basally, mantica expressed, penis with long rows of small, spiniform cornuti. Female genital organ (fig. 2.): ostium highly sclerotized, V-shaped, introitus chalciform, ductus bursae relatively narrow, strongly sclerotized to almost bursa, bursa sacculiform, without signa.

The species stands nearest to *C. xanthastis* (MEYRICK, 1908), described from the Transvaal, but its valva bears a circular, slightly raised area medially, and its aedeagus is curved

and strongly broadened basally; female with wider and also a membranous (not sclerotized) ductus bursae. *C. luridula* (MEYRICK, 1932) has a strongly bent valva apically, aedeagus bulbous basally, and the single holotype specimen was described from a height of about 12–13,000 feet (a. s. l.), from Ethiopia. *C. nephelotorna* (Meyrick, 1932) is utterly different also externally, being golden yellow of a brilliant shine.

Examined material: 4 males and 2 females, "23–27 February 1960, Tanganyika, B. E. Africa" (gen. prep. 1795); and "28. II. 1960, Seronera, Tanganyika, B. E. Africa" (gen. prep. 7914).

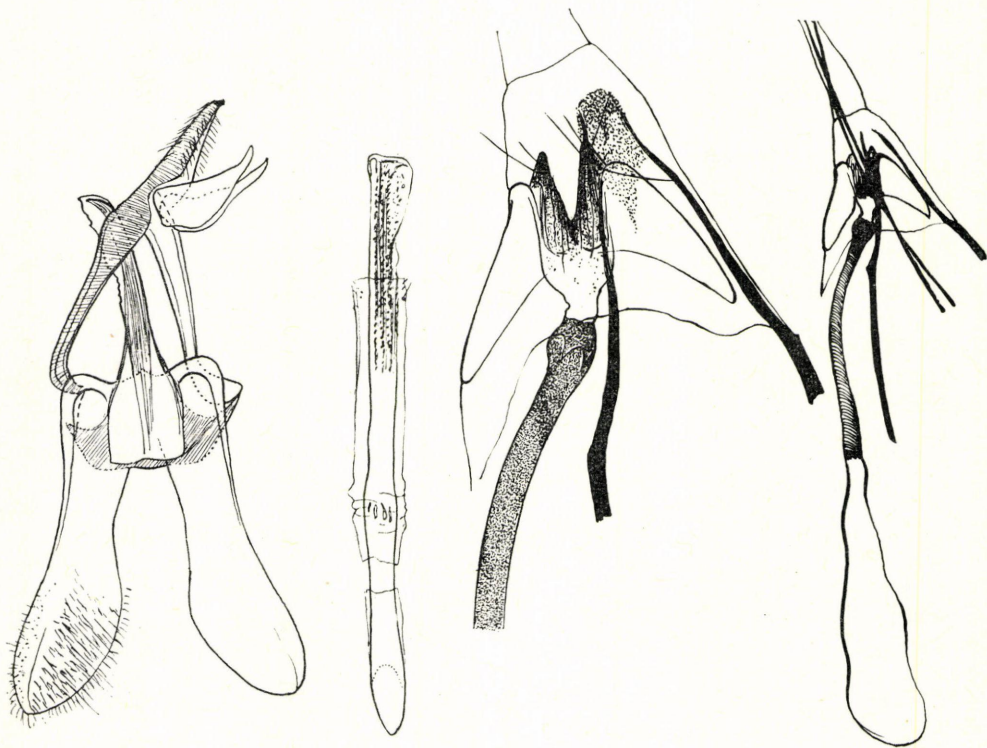


Fig. 1. *Ceratophaga lichmodes* (Meyr.), male, ventrally (everted), gen. prep. 1795. — Fig. 2. *Ceratophaga lichmodes* (Meyr.) female, ventrally, ostium and ductus also of a greater magnification, gen. prep. 1794.

Monopis HÜBNER, 1825

Monopis megalodelta MEYRICK, 1908. — One male specimen from Nata, 20. II. 1960 (gen. prep. 1828). The species seems to be widely distributed in the Ethiopian Region.

Perissomastix WARREN ROTHSCHILD, 1905

(= *Malacyntis* MEYRICK, 1908; *Catabola* DURRANT, 1913; *Psolarcha* MEYRICK, 1933).

Perissomastix damnificella (ZELLER, 1854). (= *Tineola ochropsamma* MEYRICK, 1908; line priority over = *Tineola marcescens* MEYRICK, 1908; nov. syn.) — Two well preserved male specimens from Nata, 18 and 23 February, 1960 (gen. prep. 1827 and 1822, respectively). The taxon presents a case history highly characteristic of the confusion in African Tineids. ZELLER's single type-specimen was examined by VIETTE in 1954, a whole hundred

years after the publication of its description. VIETTE also published a figure of the genital organ (Arkiv för Zoologi, 8, 1954, p. 533, Fig. 1), but, since it was imbedded in a ventral aspect, (gen. prep. 2864, VIETTE), it did not reveal the all-important lateral structure of the uncus. I have remounted the organ in a lateral position, and found that ZELLER's taxon represents also two of MEYRICK's tineid taxa, namely *ochropsamma* and *marcescens*, both described on the basis of a single specimen, from Natal and Kenya, respectively, and also on the same page (Proc. Zool. Soc., London, 1908, p. 739). I have examined both types in the British Museum (Natural History), and found their conspecificity established (gen. prep. 10.313 and 10.312, respectively). To complete the ventral aspect of the species as figured by VIETTE, I give herewith the lateral view, of *ochropsamma* MEYRICK, 1908 (Fig. 3). As is to be seen, the species belongs to the subgenus *Crassicornella* AGENJO, 1952.



Fig. 3. *Perissomastix ochropsamma* (MEYRICK, 1908), lectotype male, laterally, gen. prep. 10, 313: Brit. Mus. (Nat. Hist.)

***Perissomastix christinae* sp. n.** — Alar expanse: 28–30 mm. Head orange, antennae greyish yellowish-white, scapulae, thorax, fore wings shining (sericeous) ivory yellow; costa of fore wing from base to $1/4$ as well as cilia of both fore and hind wings light yellowish; hind wing whitish grey.

Female genital organ (Fig. 4.): genital plates with strong spines; introitus vaginae small, ductus relatively narrow, not sclerotized, without any special structure, bursa small.

The taxon stands nearest to *P. adamasta* (MEYRICK, 1909) from the Transvaal, but its introitus is much longer, the ductus almost twice wider.

Type material: Holotype female: "Nata, B. E. Africa, Tanganyika, 22. II. 1960 (gen. prep. 1975)"; paratype female: "Seronger, B. E. Africa, Tanganyika, 28. II. 1960".

In a material received from the German Entomological Institute, Berlin-Friedrichshagen, I found 2 male specimens of the new taxon, sent to the above institute by Dr. JANSE from Pretoria. The specimens have been identified as "*Tinea tragoptila* MEYRICK" by Dr. Janse. I include them as paratypes in the present description, and characterize the male sex as follows:

Male genital organ (Fig. 5.): uncus deeply forked distally, ventral branch softer, hairy, dorsal branch lower, strongly chitinized, attenuating to a sharp point; uncus flaps bearing a shorter, strong, spiniform process medio-dorsally inside, and a conspicuous straight line from almost tip of ventral branch to middle of uncus also inside; lower (proximal) half of uncus semicircular, projecting dorsally; aedeagus long, narrow, attenuating, dorsal branch supporting anal opening; valvae narrowly subtriangular, apically pointed.

The data of the two paratype males are: "3 (and 5, respectively), I. 18, Umtali, Rhodesia, A. J. T. JANSE; *T. tragoptila* MEYR. (gen. prep. 1995)".

Holotype and paratypes in the Collection of the Hungarian Natural History Museum, Budapest, and one paratype in the German Entomological Institute, Berlin-Friedrichshagen.

I dedicate the new taxon to my daughter for her assistance rendered in the clerical work connected with my revision of the tineids of the Ethiopian Region.

***Episcardia* RAGONOT, 1895**

(= *Cylicobathra* MEYRICK, 1920; Voyage de Ch. ALLAUD et R. JEANNEL en Afrique Oriental, II, Microlepidoptera, p. 100), syn. nov.

Episcardia chionarga (MEYRICK, 1920) (= *Tinea leucomima* MEYRICK, 1921, Ann. Transvaal Mus., 8, p. 129), syn. nov. — Two male specimens from 22 and 23 February, Nata (gen. prep. 1288).

The genus *Cylicobathra* MEYRICK, 1920, must be considered as a junior synonym of *Episcardia* RAGONOT, 1895. The genital structure is in all essentials the same in both taxa. The two slight differences, namely the presence of the eyecap and some deviations in the female genital structure of the former, do not warrant a distinct genus, the more so as there are apparently transitional forms among the numerous

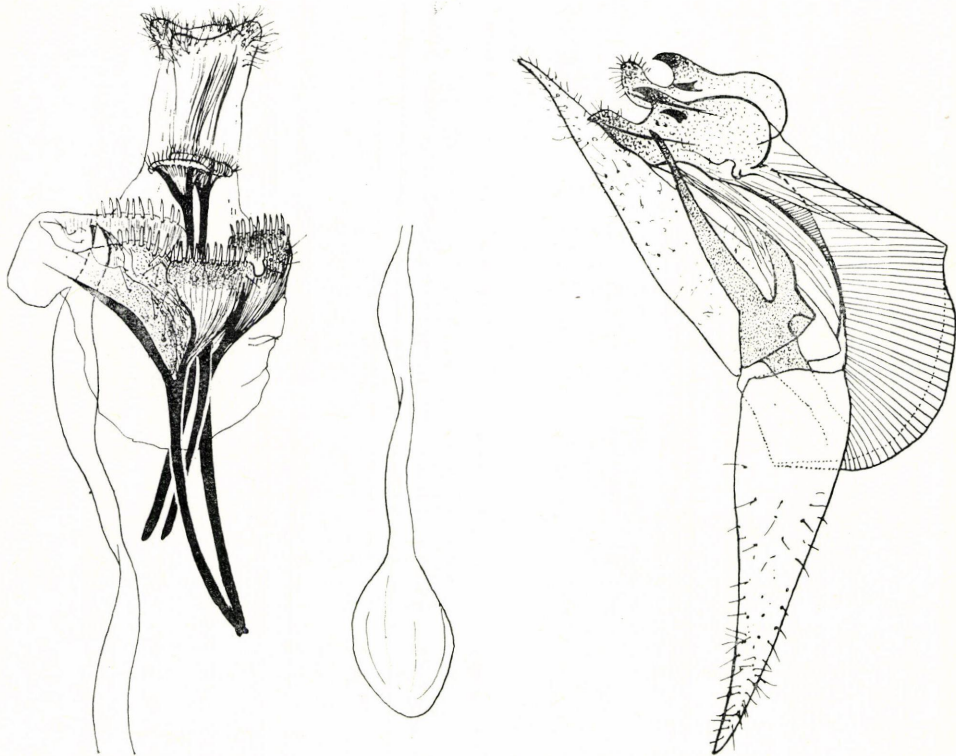


Fig. 4. *Perissomastix christinae* sp. n., holotype, female, laterally, part of ductus and bursa removed, gen. prep. 1975. Fig. 5. *Perissomastix christinae* sp. n. paratype, male, laterally, valvae opened, gen. prep. 1955.

species referable to the latter (e. g. *argocoma* MEYRICK, 1914). *Cylicobathra* MEYR., could, at best, be upheld as a subgenus, but the final decision in this regard will turn on the yet hardly known females of the genus in question.

Episcardia leucastis (MEYRICK, 1908). — Three male specimens from 23, 26, and 27, February, Nata (gen. prep. 1289, and 1799).

Hapsifera ZELLER, 1847

(= *Paraptica* MEYRICK, 1917, Ann. South Afr. Mus., 17, p. 15;

= *Ptochoglyptis* MEYRICK, 1938, Institut des Parcs Nat. Congo Belge, fasc. 14, p. 27); syn. nov.

Hapsifera revoluta MEYRICK, 1914. (= *Hapsifera arithmetis* MEYRICK, 1933, Exot. Microl., 4, p. 414) syn. nov. — A series of 18 specimens from Arusha, between 3 and 11 March (gen. prep. 1308, 1323, and 1324). A common and widely distributed species in East Africa.

Hapsifera hilaris sp. n. — Alar expanse: 20–35 mm. Head, antennae, labial palpi, scapulae, thorax light greyish yellow, labial palpi, scapulae and thorax usually with a dense irroration of dark fuscous. Basic color of fore wing light greyish yellow, pattern dark fuscous to blackish: a spot on shoulder, a larger blotch at $\frac{1}{4}$, forming an obliquely transversal stripe with two spots in cell and fold, 3 other spots on costa, fol-

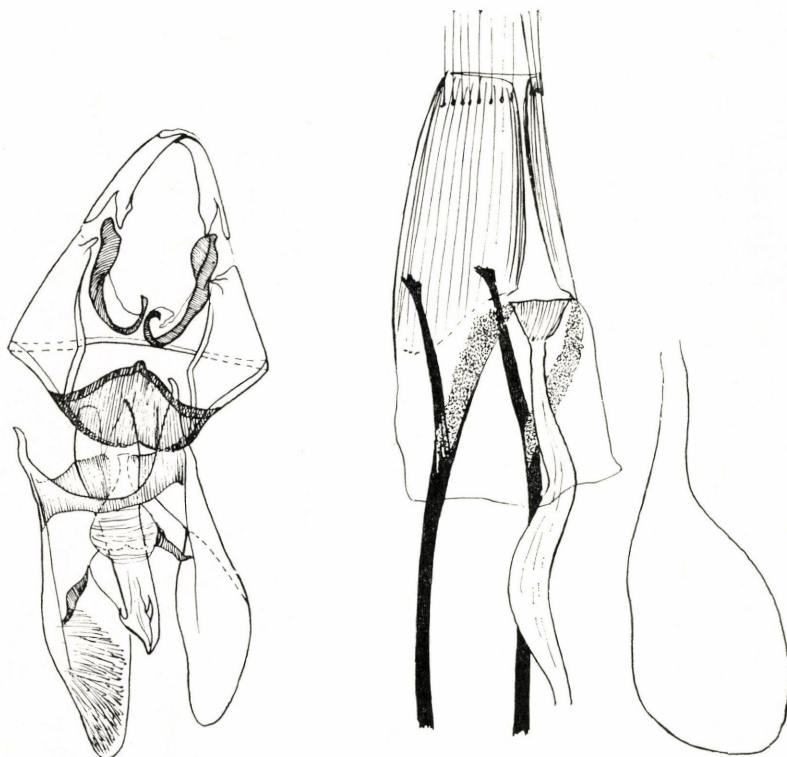


Fig. 6. *Hapsifera hilaris* sp. n., holotype, male, ventrally (everted), gen. prep. 1974. — Fig. 7. *Hapsifera hilaris* sp. n., paratype, female, lateroventrally, part of ductus and bursa removed, gen. prep. 1973.

lowed by 3 further elongated spots in cilia and one in apex, a costally concave stripe from third costal spot to second spot in cilia, its bottom slightly above tornus, 3 spots in cilia along termen and one in tornus, one at end of fold and discoidal double spots in concave stripe. Transversally spots backed by light, erect scales. Cilia concolorous with wing, bearing numerous fuscous scales. Hind wing medium grey, coarsely scaled; cilia yellowish grey. Abdomen shiny, yellowish.

Male genital organ (Fig. 6.): gnathos-arms narrow, ribbon-shaped, slowly attenuating to truncate apex, involuted; saccus wide, high, subtriangular; aedeagus large, wide, basally bulbous, apically with two recurved barbs (sagittate).

Female genital organ (Fig. 7.): hairs of genital plates long, introitus vaginae chalyceoid, truncate, ductus smooth, hardly sclerotized, proximally narrow, distally widening then again narrowing to bursa, without any signum (!).

Genitally, the new species stands nearest to *glebata* MEYRICK, 1908, from East Africa, but its gnathos is still narrower, flagelliform, aedeagus short, apically glabrous (not sagittate). There is also some superficial external resemblance.

Type material: holotype: „Tanganyika, B. E. Africa, Nata, 22. II. 1960 (gen. prep. 1974)”; 7 paratypes, also from Nata, between 19 and 26 February (gen. prep. 1444, 1973); and one paratype from Seronera, 28. II. 1960.

Scalidomia WALSINGHAM, 1891

I submit here the description of the genital structure of this valid genus, distinct from *Hapsifera* Z.

Closely related to *Hapsifera* Z., and different by structure of genital organ: gnathos-arms apically fused, strongly sclerotized (hence organ cannot be opened dorsoventrally as in *Hapsifera* Z.), valvae + anellus + aedeagus immovably fused together, aedeagus narrow, long, simple. The organ is to be imbedded in a lateral position. Female genital organ differing from *Hapsifera* Z. by hardly discernible, simple introitus vaginae, narrow ductus, and a strongly sclerotized, subscrobiculate, variously shaped transversal band on genital plates.

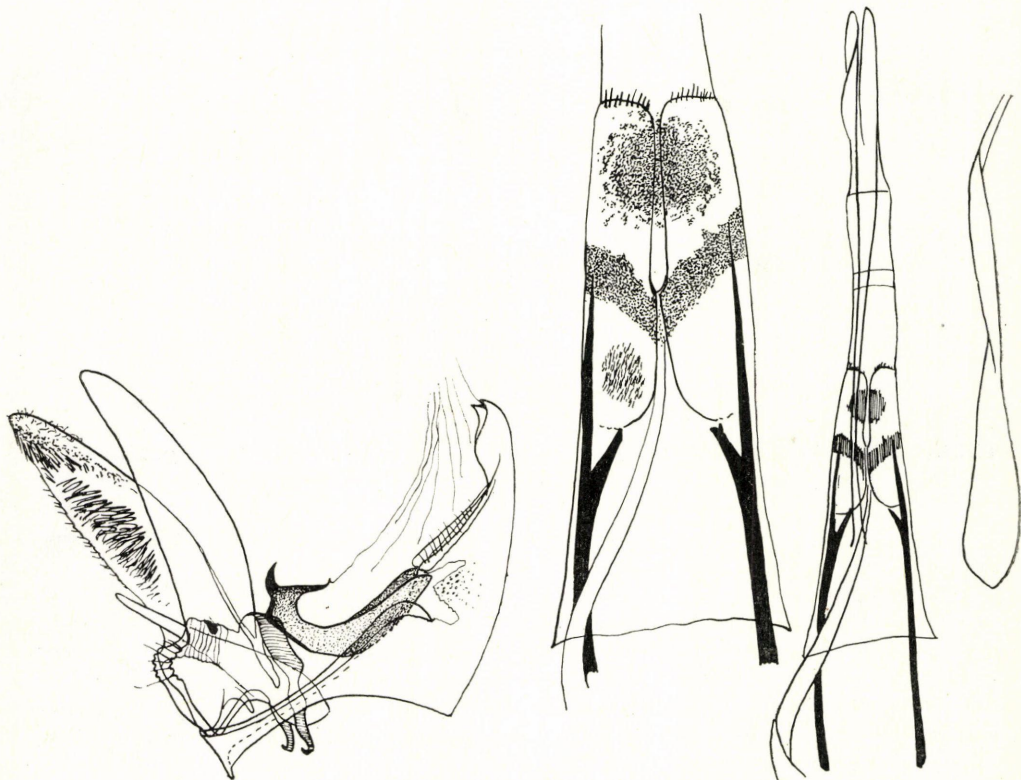


Fig. 8. *Scalidomia estimata* sp. n., paratype, male, laterally, gen. prep. 1949. Fig. 9. *Scalidomia estimata* sp. n., paratype, female, ventrally, part of ductus and bursa removed, region of ostium also of a greater magnification, gen. prep. 1963.

Externally, the species are highly similar to each other, the pattern represented by two oblique striae across fore wings (one at $1/4$, and one at $2/3$, to middle of dorsum and tornus, respectively); basic color yellowish, pattern brownish.

Scalidomia horridella (WALKER, 1863). — A single male specimen from Arusha, 18 February (gen. prep. 1421).

Exotaxa estimata sp. n. — Alar expanse: 20–24 mm. Face, labial palpi inside yellowish; vertex, nape, collar, scapulae, thorax, labial palpi outside dark fuscous with some yellow scales, caudal portion of thorax yellowish, with 3 erect bunches of fuscous scales (one in middle and one each on both sides); fore wing light yellowish with some reddish-brown irroration: pattern dark fuscous: base, costa from base to $1/3$, first oblique stripe from $2/3$ to middle of dorsum, second stripe (even more oblique) from $1/4$ to behind tornus, irregular dark spots at base of cilia around apex: oblique stripes backed in cell and fold as well as on dorsum by erect bunches of blackish and yellowish scales, characteristic also of *Hapsifera* Z. and other allied genera. Cilia yellowish, basally with numerous fuscous scales and two blackish lines: in middle and apically. Hind wing greyish yellow, veins darker, cilia yellowish, with a broad basal stripe.

Male genital organ (Fig. 8): uncus, tegumen as in *Hapsifera* Z., gnathos arms highly sclerotized, fused apically, there extended laterally into a sharp, recurving, horn-like process ventrally and a horizontal, recumbent portion dorsally; valvae rather narrow, mantica fused to transtillae, aedeagus relatively short, attenuating apically, almost straight, saccus very small.

Female genital organ (Fig. 9): introitus vaginae very narrow, genital plates with V-shaped scrobiculate band and a large, circular blotch dorsally, plates finely hairy, ductus simple, narrow, almost without any transition into elongate bursa without any signum.

The new species differs from its nearest ally, *Exotaxa platyloxa* (MEYRICK, 1930) (= *Hapsifera burgeoni* GHESQUIERE, 1942; syn. nov), by the shorter aedeagus, shorter saccus, and the quite differently shaped gnathos.

Type material: holotype: „Arusha, B. E. Africa, Tanganyika, 3. III. 1960 (gen. prep. 1882)”; 14 paratypes from Ethiopia, collected by Ö. Kovács (III. 1912, Marako; 19. II. 1911, Dire-Daua), R. E. ELLISON (21. 3. 1938, Harrar), F. SCHÄUFFELE (3 males, 1 female, gen. prep. 1949, 1963, from 11. 1958, 1900 m, Kaffa), and W. RICHTER (6 males, from 5–29. I. 1960, Jimma, 1779 m., and 4–12. II. 1960, Jerga Alem, and 10. 4. 1960, 1610 m, Konso), respectively. The types are deposited in the Hungarian Natural History Museum and W. RICHTER's Collection in Stuttgart, Germany.

The species seems to be distributed at higher elevations in NE Africa (Ethiopia), probably reaching its southern limits in the hilly regions of Tanganyika.

Autochthonus WALSINGHAM, 1891

The genus was based on a single female specimen, and the taxon had not been met with since the time of its description. FLETCHER (1929) considered it as a synonym of *Hapsifera* Z., but it was found now, by the fortunate capture of a male specimen by J. SZUNYOGHY, that the genus is distinct and valid.

Autochthonus chalybiellus WLSM. The male genital organ (Fig. 10), and thus also the genus, are characterized by a low tegumen with a small, bifid uncus and erect, narrow, nearly adpressed gnathos, compact, broad and simple valvae, narrow and small vinculum (yet high and sinuous ventrally), a strongly sclerotized and very long, rod-like saccus, and similar but membranous aedoeagus with extremely small cornuti. The single male specimen was caught in Nata, 18. II. 1960 (gen. prep. 1796).

Pachypsaltis MEYRICK, 1914

Pachypsaltis megalopa MEYRICK, 1915. — The genus, established for a Formosan species, includes also two African taxa, one of which, caught also by J. SZUNYOGHY, is widely distributed in Eastern Africa. Three male specimens were collected in Nata (27. II. 1960) and Seronera (28. II. 1960, gen. prep. 1443 and 1976).

Theatrissa MEYRICK, 1917

(= *Pectitinea* AMSEL, 1953, Bull. Inst. fr. Afr. noire, **15**, p. 1451–1452), syn. nov.

Theatrissa szunyoghyi sp. n. — Alar expanse: 15–18 mm. Head, antennae and thorax black, face and brush of labial palpi yellowish; basic colour of fore wing white, pattern black and leaden-silvery, rather complicated: a black area from $\frac{1}{4}$ of dorsum to more than $\frac{1}{2}$ of costa, enveloping also base and thus leaving only a large, triangular space, white, bordered distally by a black, oblique stripe from $\frac{2}{3}$ of costa to $\frac{1}{2}$ of termen and backed extensively by a leaden-silvery quadrangular area (carrying 3 erect leaden-silvery tufts of scales, immediately backed by a white one in cell and another one in fold basally; these two latter situated already in white area), apical area again white with a large, circular black blotch in apex; cilia two rows of silvery leaden scales. Hind wing white with hardly any greyish shade; cilia yellowish. Abdomen yellowish grey, anal tuft whitish.



Fig. 10. *Autochthonus chalybiellus* WALSINGHAM, 1891, male, ventro-laterally, aedoeag, gen. prep. 1796. Fig. 11. *Theatrissa szunyoghyi* sp. n., holotype, male, laterally, right valva ally, gen. prep. 1823.

Male genital organ (Fig. 11): uncus beak-shaped, erect, strongly sclerotized similarly to apically fused uncus, tegumen wide, vinculum bridge-shaped, valva spatulate, broad, anal section of intestine and mantica similarly strong, rugose, aedoeagus slightly sinuous with numerous small serrations apically, apex and vesica complicated, hardly interpretable; saccus also beak-like, small.

The new species stands considerably isolated, as regards external appearances, from all known congeners (*subnigrata* MEYRICK, 1917; *chloroptera* MEYRICK, 1920; *albonigrella* (Am- sel, 1953)), which, again, can hardly be distinguished from one another by the external morphological characters alone (cf. AMSEL, l. c., fig. 15 a, a photograph of *albonigrella*). Concerning the genital organ, the almost semicircular valva and the thick, complicated aedoeagus separates it sufficiently from the allied taxa.

Type material: Holotype: „Nata, Tanganyika, B. E. Africa, 20. II. 1960 (gen. prep. 1823)”; 2 paratypes of same data, but 23 February, 1960.

