

No. XIV.—THE ORNEODIDÆ AND PTEROPHORIDÆ OF THE
SEYCHELLES EXPEDITION.

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(Communicated by J. STANLEY GARDINER, *M.A., F.R.S., F.L.S.*)

(With 4 Text-figures.)

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THE present paper deals with the Orneodidæ and Pterophoridæ collected in 1908-09 by Mr. Hugh Scott and Mr. J. C. F. Fryer in the Seychelles and Aldabra, and includes examples of ten species, of which four are here described as novelties. Of these groups of Lepidoptera we now know eight species which occur in the Seychelles and three which are found in Aldabra, as against three only which had been previously recorded from the Seychelles, none having been recorded from Aldabra before.

Family **ORNEODIDÆ.**

(1) *Orneodes seychellensis*, sp. n.

♂ ♀. Exp. 11 mm.—Palpi porrect, long, second joint thickly and roughly scaled, with projecting apical scale-tuft; third joint filiform, about half length of second (without scale-tuft); second joint blackish fuscous, third white, black at extreme base and broadly

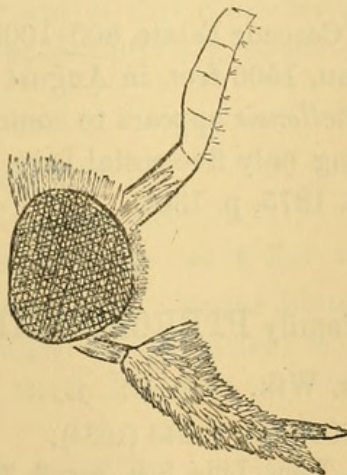


Fig. 1.—*Orneodes seychellensis*. Profile view of head.

banded with black before apex. Head ochreous-grey, frons blackish fuscous. Antennæ finely ciliated (about $\frac{1}{2}$), ochreous-grey, dotted with black externally. Thorax grey-white,

minutely irrorated with blackish and with a transverse blackish line across prothorax. Abdomen grey-white mottled with pale fuscous, incisions of segments indicated in pale fuscous.

Legs greyish, mottled with blackish. Mid-tibia dilated apically with a scale-tuft and emitting a pair of black-banded spurs, of which the inner is the longer. Posterior tibia with dorsal scale-tufts at $\frac{1}{2}$ and apex, emitting two pairs of long spurs, banded with blackish at $\frac{1}{3}$ and $\frac{2}{3}$ of their length, and of which the inner spurs are the longer, and proximal pair longer than distal. Posterior tarsi more or less blackish dorsally towards bases of joints.

Fore wing cleft into six linear segments; first cleft to about $\frac{1}{3}$, second nearly to base, third to about $\frac{2}{5}$, fourth to about $\frac{1}{5}$, fifth to about $\frac{1}{6}$. Grey-white, irrorated and mottled with dark fuscous: first segment with costa narrowly blackish on basal third, cut by five approximately equal and equidistant blackish-fuscous, white-margined bars, of which the first is before cleft and second and fifth do not reach hinder margin of segment; second to fourth segments crossed beyond $\frac{1}{2}$ by a broad blackish bar, preceded and followed by white; on fifth segment this bar is rather narrower, more inwardly oblique, and is shifted basewards to slightly within $\frac{1}{2}$; on sixth segment this bar is moved still nearer the base; second to sixth segments beyond black bar fuscous-grey minutely irrorated with blackish, with two white patches, first broad and displaced baseward on third segment, second narrow, subterminal, extreme tips of segments blackish; on sixth segment first white patch is followed by a small area of blackish suffusion. Cilia on termen (tips of segments) whitish with a blackish central bar; within clefts fuscous, blackish opposite black bars and inner white bar, conspicuously white opposite outer white bar and both white margins of black bar.

Hind wing cleft into six linear segments: fuscous grey irrorated with blackish, cut by about four equidistant narrow white bars; cilia pale fuscous, white opposite, narrowly blackish on either side of, white bars.

Type (♂) in Brit. Mus.

Seven specimens from Mahé (Cascade Estate, 800–1000 feet, and Morne Blanc, 1000 feet) and Silhouette (Mount Pot-à-eau, 1500 feet, in August and September).

Of described species, *O. seychellensis* appears to come nearest to *O. butleri*, Wlgn., but is easily differentiated by having only five costal bars, whereas *butleri* is stated to have six (Köngl. Vet.-Ak. Förhandl. 1875, p. 130).

Family PTEROPHORIDÆ.

(2) *Buckleria defectalis*, Wlk.

Pterophorus defectalis, Walker, Cat. xxx. p. 943 (1864).

Trichoptilus defectalis, Fletcher, Trans. Linn. Soc., ser. 2, Zool. xiii. (1909) p. 146.

Seychelles.—Fourteen specimens from Bird and Dennis Islands. Not previously recorded from the Seychelles group, although this species may reasonably be expected to occur in any low, sandy, littoral area in these islands.

Aldabra.—Two specimens from Picard Island are unusually large, but I do not notice any points of specific distinction. In Ceylon the individuals of this species are very variable in size.

Distribution.—Southern United States; West Indies; Peru; West, South, and East Africa; Mauritius; Farquhar Island; Amirantes; Coetivy; Chagos Islands; Ceylon; India; China; New Guinea; N.E. Australia; Hawaii.

(3) *Buckleria wahlbergi*, Zell.

Pterophorus wahlbergi, Zell. Linn. Ent. vi. p. 346 (1852).

Trichoptilus wahlbergi, Fletcher, Spol. Zeylan. vi. 27, t. A. fig. 10 (1909).

Seychelles.—Two specimens from Mahé (Cascade Estate and Morne Blanc).

Distribution.—This species is widely distributed, being known from South Africa, St. Helena (? introduced), India, Ceylon, and Queensland.

Observation.—The long tuft on the second palpal joint of this species is quite characteristic and is very similar to the structure of the palpi seen in the *distans* group

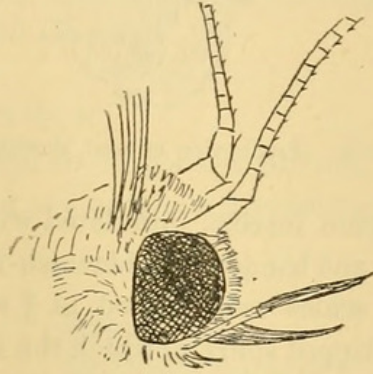


Fig. 2.—*Buckleria wahlbergi*, Zell. Side view of head, showing peculiar tuft on second palpal joint.

of the genus *Oxyptilus*. On account of this character *B. wahlbergi* will probably have to be removed from the genus *Buckleria*, but it seems premature to do so before the early stages are known.

(4) *Sphenarches caffer*, Zell.

Oxyptilus caffer, Zell. Linn. Ent. vi. p. 348 (1852).

Sphenarches caffer, Fletcher, Trans. Linn. Soc., ser. 2, Zool. xiii. (1909) p. 313.

Seychelles.—Two specimens from Mahé: Morne Blanc and Cascade Estate.

Distribution.—West and South Africa; Seychelles; Maldives; Ceylon; India; Burma; Japan; Sumatra; Queensland; North Australia.

(5) *Platyptilia pusillidactyla*, Wlk.

Oxyptilus pusillidactylus, Walker, Cat. xxx. p. 933 (1864).

Platyptilia pusillidactyla, Fletcher, Trans. Linn. Soc., ser. 2, Zool. xiii. (1909) p. 313.

Seychelles.—This species is not represented in the present collection, but I took a

single example in the Botanical Garden at Port Victoria, Mahé, on 31st October, 1905, during the 'Sealark' Expedition.

Distribution.—West Indies; India; Ceylon; Hongkong; Honolulu.

(6) *Platyptilia claripicta*, sp. n.

♂. Exp. 15 mm.—Palpi ascending, reaching above vertex, second joint triangularly dilated with rough scales, third joint short; ochreous-fuscous, third joint banded with reddish-fuscous before apex. Head greyish-fuscous, vertex with projecting cone of scales.

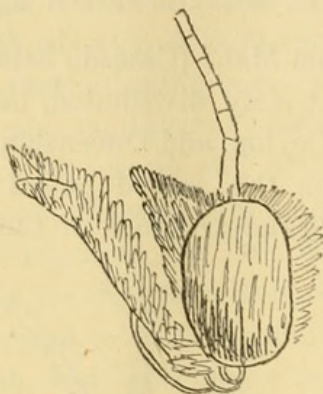


Fig. 3.—*Platyptilia claripicta*. Profile view of head, showing palpus and frontal tuft.

Antennæ minutely ciliated; pale fuscous annulated with blackish. Thorax greyish-fuscous. Legs greyish, striated and banded with blackish-fuscous. Posterior tibia dilated at apex with blackish-fuscous scales and banded at $\frac{2}{3}$ with blackish-fuscous, emitting two pairs of moderate blackish-tipped spurs, of which the inner are the longer. Posterior tarsus blackish-fuscous on apical half of first joint, other joints narrowly dark fuscous apically.

Fore wing cleft from about $\frac{3}{4}$: first segment parallel-sided, apex acute, termen sub-falcate, posterior angle well-marked; second segment as broad basally as first, expanded posteriorly, both angles well marked but slightly rounded off, termen subsinuately convex: whitish-grey with a more or less fuscous or ochreous tinge and minutely irrorated with blackish-fuscous, most apparent along basal half of costa and on dorsal region; a longitudinal small blackish subcostal spot at $\frac{2}{5}$; a large blackish costal triangle before $\frac{3}{4}$, its apex running obliquely into basal half of second segment, its outer edge straight to base of cleft (which it does not touch) and clearly defined; first segment with some fuscous suffusion on costa beyond $\frac{1}{2}$, sometimes reaching across segment, its outer fifth (except at apex) dark fuscous edged internally with blackish; second segment suffused with light fuscous, its outer fifth dark fuscous edged internally by blackish and preceded by a narrow whitish line parallel to termen. Cilia on costa blackish to $\frac{3}{4}$, pale fuscous before apex; on termen whitish, basally black preceded by fuscous; within cleft greyish, blackish opposite terminal suffusion; on dorsum greyish with a few scattered black scales intermixed, some black scales scarcely forming a small black scale-tooth at $\frac{2}{3}$ and a blackish wisp tornally.

Hind wing cleft from about $\frac{2}{5}$ and $\frac{1}{6}$: first segment dilated posteriorly, spatulate, apex rounded, blunt; second segment slightly dilated posteriorly, subtriangular, apex very acute, termen slightly concave, hinder angle distinct; third segment sublinear, tornus almost obsolete: fuscous-grey. Cilia greyish or pale fuscous; around apex blackish; darker on termen of second segment; on dorsum whitish, dark fuscous subternally, with a few scattered black scales throughout and a moderate black scale-tooth at $\frac{1}{2}$.

Type (♂) in Brit. Mus.

Three examples from Seychelles: Mahé (Cascade Estate) and Silhouette (Mare aux Cochons, 1700 feet).

A handsome and distinct little species in which the black costal triangle stands out conspicuously as in *Plat. albida* and its North American relatives.

(7) *Platyptilia brachymorpha*, Meyr.

Platyptilia brachymorpha, Meyr. Trans. Entom. Soc. 1888, p. 240; Fletcher, Spol. Zeylan. vi. p. 12, t. A. f. 3 (1909).

Eight specimens from Aldabra.

Distribution.—This is a widely-distributed species which has been recorded from South Africa, Syria, India, Ceylon, and Hawaii.

(8) *Platyptilia dimorpha*, sp. n.

♂ 14–15, ♀ 17–18 mm.—Palpi short, porrect, filiform, third joint scarcely half length of second; fuscous-grey. Head and antennæ greyish-fuscous. Thorax in ♂ fuscous, in

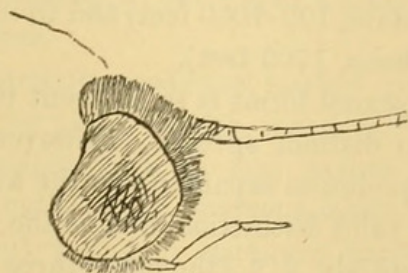


Fig. 4.—*Platyptilia dimorpha*. Side view of head.

♀ dark fuscous; in both sexes the patagia are lighter and metathoracic region pale sulphur-yellow. Abdomen long and slender (in ♂ as long as fore wing, in ♀ rather shorter), pale yellowish basally, fuscous posteriorly; in ♂ with fuscous-grey apical tuft. Legs greyish lined with blackish-fuscous; very long and slender; posterior tibia as long as abdomen, slightly dilated with minute blackish spines at $\frac{3}{5}$ and apex and emitting two pairs of long slender black-tipped spurs, of which the inner are slightly the longer. Posterior tarsi very long; first tarsal joint suffused with blackish-fuscous, longer than joints 2–5 together.

Fore wing cleft from about $\frac{2}{3}$, first segment parallel-sided, apex acute, termen oblique, posterior angle rather rounded, distinct; second segment posteriorly slightly dilated, fore angle acute and slightly produced, termen oblique, tornus rather rounded: in ♂ ochreous-whitish, in ♀ dark fuscous slightly reddish tinged: in both sexes with markings as follows:—a small longitudinal blackish subdorsal streak at $\frac{1}{4}$, a blackish discal dot at $\frac{1}{3}$,

costal area suffused with blackish to $\frac{3}{4}$, whence the suffusion is sometimes produced downwards to a small blackish spot lying within and above base of cleft, a similar black spot lies on lower corner of base of cleft, and these two spots sometimes tend to be connected by blackish suffusion, a few scattered blackish scales in disc between $\frac{1}{3}$ and $\frac{2}{3}$; first segment cut at about $\frac{4}{5}$ by a narrow transverse white line, not parallel to termen, preceded by a patch of blackish suffusion most evident on costa and sometimes extended inwards along hinder margin to base of cleft; second segment cut by a transverse white subterminal line, parallel to termen, usually preceded by blackish suffusion. Cilia on costa blackish except for a short distance beyond $\frac{3}{4}$ and before apex, where they are of the ground-colour of wing; on termen whitish, with a small black scale-tooth at fore angle of second segment and small black teeth slightly before posterior angle of both segments; within cleft grey-white (pale fuscous in ♀), blackish-fuscous subterminally; on dorsum whitish with a slight admixture of blackish, with slight black scale-teeth beyond $\frac{1}{2}$ and at about $\frac{3}{4}$ and a rather larger pretornal tooth; cilia around tornus blackish.

Hind wing cleft from about $\frac{1}{2}$ to $\frac{1}{6}$: first segment subspatulate, apex acute, termen oblique, posterior angle well marked; second segment parallel-sided, apex very acute, termen very oblique and very slightly concave, posterior angle traceable; third segment sublinear, tornus obsolete: greyish-fuscous in ♂, dark fuscous in ♀. Cilia greyish in ♂, dark fuscous in ♀; first two segments with small wisps of darker basal scales at both angles; on dorsum without any scale-tooth or heavy scales.

Type (♂) and cotype (♀) in Brit. Mus.

Twenty-three specimens (14 ♂, 9 ♀) from the Seychelles from Mahé (Morne Blanc, 800–1000 feet, and Cascade Estate, 100–1000 feet) and from Silhouette (Mount Pot-à-eau, 1500 feet, and Mare aux Cochons, 1700 feet).

The appearance of the two sexual forms is so different that at first I separated up the specimens as belonging to two distinct species. However, beyond colour and a slight difference in size—the dark specimens expanding on the average about 2 mm. more than the light—I can perceive no valid distinction, and as the light specimens are all ♂♂, whilst of the dark six are certainly ♀♀ (the other three have their abdomina missing), I think it may be assumed that we have to deal with a single species only. In one case I find a ♂ (light) and ♀ (dark) pinned on to one stage; these two specimens were both captured on Mount Pot-à-eau (Silhouette) and were possibly taken *in copulâ*, though there is no record to that effect.

It is quite unusual to find sexual dimorphism in the coloration of the wings amongst members of this family*, and I have therefore considered the name *dimorpha* an especially suitable one.

In several respects this species resembles a *Stenoptilia*, but the possession of scale-tufts in dorsal cilia of fore wing (though not in hind wing) appears to place it more naturally amongst the *Platyptiliae*, although it might be placed with almost equal propriety in either genus or in a new genus intermediate between these two.

From other points of view this species is an interesting one, and we may regard it as a

* In the New Zealand species *Stenoptilia charadrias*, Meyr., the sexes are differently coloured and might readily be taken for distinct species, but, as noted above, such a case is unusual in this family.

form truly endemic to the Seychelles and perhaps also a relic of an archaic type from which the Stenoptilid and Platyptilid Plumes, both universally distributed groups, have diverged along different lines of development.

(9) *Exelastis liophanes*, Meyr.

Marasmarcha liophanes, Meyr. Trans. Entom. Soc. p. 19 (1886).

Exelastis liophanes, Fletcher, Spol. Zeylan. vi. p. 33, t. A. fig. 12 (1909).

Leioptilus griseodactylus, Hofm. Zoolog. xxix.

Seychelles.—Twenty specimens from Mahé (Cascade, 800–1000 feet, and Morne Blanc, 800–1000 feet), Silhouette (Mt. Pot-à-eau, 1500 feet, and Mare aux Cochons, 1500–1700 feet), Frigate Island, and Long Island.

Distribution.—Barbadoes; Natal; Réunion; Seychelles; Ceylon; China (Fuchau); Bismarck Archipelago. Probably still more widely distributed, but inconspicuous and easily overlooked.

(10) *Pterophorus aldabrensis*, sp. n.

♀. Expanse about 17 mm. (wings not expanded).—Palpi short (less than 1), filiform, whitish-ochreous; terminal joint short, acuminate. Head pale ochreous, whitish between the antennæ; vertex with a few erected hairs. Antennæ whitish. Thorax pale ochreous. Abdomen pale ochreous, with indistinct ochreous dorsal and subdorsal lines. Fore leg and mid leg ochreous-whitish, femora and tibiæ lined with dark fuscous. Hind leg ochreous-whitish; tibial spurs unequal, proximal pair from beyond $\frac{2}{3}$, long, inner spur longer than outer, distal pair from apex, outer spur slightly shorter than inner, which is shorter than outer proximal spur.

Fore wing cleft from $\frac{3}{5}$, segments moderate, acutely pointed, second rather falcate: pale ochreous, whitish-ochreous along hinder margins of segments; a dark fuscous spot at base of cleft and indistinct dark fuscous dashes along hinder margin of both segments at about $\frac{3}{4}$ of their length. Cilia ochreous-whitish.

Hind wing cleft from about $\frac{1}{2}$ and $\frac{1}{5}$, segments narrow, acutely pointed, slightly falcate: whitish-ochreous, extremities of segments tipped with dark fuscous. Cilia ochreous-whitish.

Type in Brit. Mus. A single example from Aldabra in 1908 (*J. C. F. Fryer*).

This species appears to be nearly allied to *P. timidus*, Meyr. (Trans. Entom. Soc. 1907, p. 494), from Natal, and perhaps represents a local race of that species. It differs, however, from *P. timidus* in the absence of any greyish tinge in the fore wing and in the fact that the dot on the cleft is single instead of being obsolete in the middle so as to form two smaller dots.



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