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XXIV.—Exotic Muscaridæ (Diptera).—III.* By J. R. MALLOCH, Urbana, Ill., U.S.A.

AFRICAN SPECIES,

Subfamily PHAONIINÆ.

Genus TRUPHEOPYGUS, nov.

Generic characters.—Similar to Helina, R.-D. Differs from that genus in having the frons about one-third of the head-width; the abdomen subcylindrical, slightly tapered apically, the genitalia entirely concealed when the abdomen is viewed from the side or above; the fifth sternite deeply cleft in centre; hind tibia with one or more postero-dorsal bristles at middle; prescutellar acrostichals absent; scutellum flattened above; preapical scutellars absent.

Genotype, the following species.

Trupheopygus testaceus, sp. n.

Male.—Pale testaceous yellow. Frons brown; antennæ fuscous. Thoracic dorsum with four pale brown vittæ anteriorly, and a patch of grey pruinescence between the dorsocentrals posteriorly which extends to disc of scutellum. Abdomen with an indistinct pair of brown spots on second

* For Part I., see Ann. & Mag. Nat. Hist. (9) vii., Feb. 1921, pp. 161–173; Part II., *ibid.*, May 1921, pp. 420–431.
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tergite, and an even less distinct pair on third. Tarsi fuscous. Cross-veins narrowly brown.

Each orbit with four or five long bristles; ocellar bristles very long; arista long-haired. Presutural acrostichals absent; postsutural dorso-centrals 3; both intra-alars long; prealar absent; sternopleurals 1:1:1; hypopleura bare. First and second tergites each with a long bristle on side, third and fourth with long bristles on posterior margins, and the fourth with a median series; basal portion of hypopygium with some bristles; fifth sternite with two bristles on each side at base of incision. Fore tibia with one antero-dorsal and one posterior bristle; mid-tibia with one antero-dorsal and two postero-dorsal bristles; hind femur with some short, widely placed bristles on antero-ventral surface, and one long one before apex; hind tibia with one or two antero-ventral, two antero-dorsal, and one strong postero-dorsal median bristle. Costal thorn long; veins 3 and 4 parallel apically. Lower calyptra not very large.

Length 6 mm.

Type, Embu, Kenya Colony, 20. ii. 1914 (G. St. Orde Browne).

Genus Spilaria, S. & D.

This genus is distinguished from its nearest allies by the possession of the following characters :- Hypopleura with a vertical series of fine hairs below the metathoracic spiracle; both intra-alar bristles strong, the anterior one in line with or almost in line with the anterior dorso-central bristle; eyes distinctly hairy, generally conspicuously so.

All these characters apply also to another genus, Euspilaria, gen. nov., which may be differentiated from Spilaria as follows :---

Hypopygium of male small, not prominent, generally almost concealed, the fifth sternite not deeply cleft, basal sternite generally with some hairs; præscutellar acrostichals present; scutellum in both sexes with the hairs continued down over sides and sometimes invading the ventral surface; parafacials bare in both sexes Spilaria, S. & D.

Hypopygium of male large, prominently exposed, the fifth sternite deeply cleft, basal sternite bare; prescutellar acrostichals absent; scutellum in both sexes with the hairs continued down over sides and sometimes invading ventral surface; parafacials in female with some setulose hairs in a series which is continued below apex of second segment Euspilaria, gen. nov.

Key to Species of Spilaria.

1.	Third antennal segment about four times as long
	as second
	Third antennal segment not over 2.5 as long as
	second
2.	Palpi yellow; both cross-veins of wings con-
	spicuously infuscated, the outer one nearly
	straight; tibiæ entirely pale
	Palpi black; cross-veins of wings very indis-
	tinctly infuscated, the outer one distinctly
	bent in middle; tibiæ infuscated at bases
3.	Outer cross-vein of wing distinctly, but not con-
	spicuously, bent in middle, evenly infuscated
	throughout; margin of upper calyptra pale;
	scutellum not pale below at apex; palpi
	black,
	Outer cross-vein of wing almost S-shaped, with
	a punctiform black mark at each extremity;
	margin of upper calyptra fuscous; scutellum
	yellowish below at apex; palpi black

africana, sp. n.

punctifer, Malloch.

mollis, Stein.

2.

3.

trinubilifera, sp.n.

Spilaria mollis (Stein).

Spilogaster mollis, Stein, Berl. ent. Zeitschr. li. p. 55 (1906). Mydæa hirticeps, Stein, Ann. Mus. Nat. Hung. xi. p. 486 (1913).

I have before me specimens of this species from Estcourt (8), Ulundi (1), and Durban (1), Natal, and Pretoria (1).

Spilaria punctifer, Malloch.

I have seen two specimens of this species, in addition to the type. One from Chirinda, Southern Rhodesia, and the other from Angola, Benguella.

Spilaria africana, sp. n.

Female.—Similar in colour to punctifer, Malloch. Differs in having the cross-veins of the wings very inconspicuously darkened, the palpi black, and the bases of the tibiæ slightly infuscated.

The fore tibia has only one posterior median bristle, and the outer cross-vein is distinctly, but not conspicuously, bent in middle. Otherwise as *punctifer*.

Length 7.5 mm.

Type, Mt. Mlanje, Nyasaland, 23. viii. 1913 (S. A. Neave).

One specimen in poor condition.

Spilaria trinubilifera, sp. n.

Female.—Darker than punctifer, with a slight bluish-grey tinge. The head is entirely black, the tibia are blackened at bases, the extreme tips of femora are blackened, and the infuscation on outer cross-vein is in the form of two spots, one at each extremity of the vein.

The third antennal segment is about 2.5 times as long as second, and the outer cross-vein is very conspicuously curved, almost **S**-shaped.

Length 7-7.5 mm.

Type, Kijabe, Kenya Colony, in bamboo forest 7000-8000 feet (W. J. Radford). Paratype, Mau Forest, Kenya Colony, 8000 feet (H. A. Bodeker).

Genus Euspilaria, nov.

In addition to the characters listed on a preceding page for the differentiation of this genus, it may be pertinent to state that the abdomen of the male is more slender than that of any species of *Spilaria* known to me, and the parafacials wider.

Genotype, the following species.

Euspilaria fuscorufa, sp. n.

Male and female.—Black, shining, with dense dark grey pruinescence. Head entirely black. Thorax broadly rufous on sides of dorsum and on at least the upper half of pleura and the margins of scutellum, the disc of mesonotum fuscous, quadrivittate. Abdomen without distinct markings. Legs in female rufous ; tips of femora and all tarsi black ; the tibiæ slightly infuscated ; in male the femora are more extensively blackened, the fore pair almost entirely so, and the tibiæ are much darker. Wings clear, both crossveins conspicuously blackened, the outer one with two separated spots, one at each extremity. Calyptræ and halteres yellowish.

Male.—Eyes densely haired; narrowest part of frons a little wider than distance across posterior ocelli; orbits bristled to middle; parafacial at base of antennæ wider than third antennal segment, narrowed below; face concave in profile; arista long plumose. Thorax without strong presutural acrostichals, with three pairs of postsutural dorsocentrals, and the sternopleurals 2:2; prealar bristle very short ; hypopleura with the usual hairs below spiracle. Abdomen narrow, subcylindrical; upper hypopygial forceps rather long, acute at apex ; basal sternite bare; fifth sternite with a deep V-shaped incision. Fore tibia with a long fine median posterior bristle; fore tarsus longer than tibia; mid-femur with a series of long bristles on posteroventral surface; mid-tibia with four long posterior bristles; hind femur with long bristles on apical half of anteroventral surface, the series duplicated in part; posteroventral surface bare; hind tibia with some long bristles on apical half of antero-ventral and antero-dorsal surfaces, some of them invading the anterior surface. Outer crossvein almost S-shaped; veins 3 and 4 divergent at apices.

Female.—Frons less than one-third of the head-width at vertex, widened anteriorly; a series of setulæ descending on parafacial below apex of second antennal segment. Legs with stouter and shorter bristles than in male, the hind tibia with one antero-ventral and two antero-dorsal bristles.

Length 7-8 mm.

Type, male, and allotype, north of Mt. Kenia, 18. ii. 1911, 8300 feet. Paratype, male, west of Mt. Kenia, 19-20. ii. 1911, 6500-7250 feet (*T. J. Ander.on*).

The African species *Mydæa nemoralis*, Stein, probably belongs to the genus *Spilaria*, and may be separated from the species listed in this paper by its having four pairs of postsutural dorso-ventral bristles, and the cross-veins not noticeably infuscated. Stein has placed his species as a synonym of *mulcata*, Giglio-Tos, a Mexican species, but I am inclined to doubt this. I have not seen *nemoralis*, Stein.

Genus Idiopygus, nov.

Generic characters.—Similar to Helina, R.-D. Differs in having the superior and inferior hypopygial forceps of male long and slender, and the fifth sternite very deeply cleft in middle of posterior margin, giving it the appearance of having two long latero-posterior processes, the general habitus of the hypopygium similar to that of some species of *Cænosia* and *Pygophora*. The fourth visible tergite of female is not chitinised and transverse at apex, but depressed and somewhat membranous, sometimes notched in centre of posterior margin. The anterior intra-alar bristle is absent or distinctly caudad of the anterior postsutural dorsocentral. Hypopleura either bare or with some minute hairs in centre ; scutellum always bare on sides and ventrally ; hind tibia in female with two or three short postero-dorsal bristles.

Genotype, Spilogaster hirtipes, Macquart.

Key to Species.

1.	Males	2.
	Females	5.
2.	Hind tibia remarkably dilated as in some	
	species of bees; fore tibia with remarkably	
	long strong hairs ventrally; mesosternum	
	with a long stout process which is directed	
	downward and armed at apex with a dense	
	clump of blackbackwardly directed bristles.	hirtip
	Hind tibia normal, not noticeably dilated;	
	mesosternum butlittle produced downward.	3.
3.	Hypopleura bare; fore and hind tibiæ rather	
	densely long-haired ventrally; anterior	
	intra-alar bristle absent; eyes separated	
	by at least one-third of the head-width;	
	each orbit with five equally long, strong	
	bristles which are equally spaced	villipe
	Hypopleura with a few very short hairs in middle below spiracle; fore and hind tibin	
	middle below spiracle; fore and hind tibiæ with very short hairs; anterior intra-alar	
	present; eyes separated by about one-fifth	
	of the head-width; each orbit with a wide	
	space at centre without bristles	4.
4.	Hind trochanters with very fine hairs	hirtiv
	Hind trochanters with dense, short, stout,	
	rectangularly bent bristles	troch
5.	Legs largely reddish yellow; fourth tergite	
	but little depressed at apex in centre; fore	
	tibia with one posterior and two antero-	
	dorsal bristles	hirti
	Legs entirely black; fourth abdominal tergite	0
0	very noticeably depressed in centre at apex.	6.
6.	Anterior intra-alar bristle absent; fore tibia	
	with one posterior and two antero-dorsal	
	bristles	villip
	Anterior intra-alar bristle present; fore tibia with two antero-dorsal bristles, the	[tri
	nosterior bristle absent	hirtin

hirtipes, Macquart.

villipes, sp. n.

4. hirtiventris, sp. n.

trochanteratus, sp. n.

hirtipes, Macquart.

villipes, sp. n., or [trimaculata, Stein.

hirtiventris, sp. n.

Idiopygus hirtipes (Macquart).

Spilogaster hirtipes, Macquart, Dipt. exot., Suppl. 1, p. 202 (1846).

I give a description of this remarkable species, as the original is very short and deals only with the male. The legs are stated by Macquart to be entirely black, but they are not so in the specimens before me.

Male and female.—Black, subopaque, densely grey pruinescent. Head entirely black. Thorax with four brown vittæ anteriorly and a central one posteriorly, the latter extending over disc of scutellum. Abdomen with a pair of fuscous spots on each tergite from 1 to 4 inclusive, those on 2 and 3 much larger than the others; apices of processes of fifth sternite yellowish, glossy. Legs black, basal two-thirds of mid and hind femora and the extreme knee-joints in male reddish yellow; the mid and hind femora, except at apices above, base of fore tibia, and nearly all of mid and hind pairs reddish yellow in female. Wings clear, three conspicuous black spots on disc, one on inner cross-vein, and one on each extremity of outer cross-vein. Calyptræ and halteres yellowish.

Male.-Narrowest part of frons about twice as wide as distance across posterior ocelli; three bristles on anterior third of each orbit; arista plumose. Thorax with three pairs of postsutural dorso-central bristles; anterior intraalar present; sternopleurals 1:2. Abdomen subcylindrical, fourth tergite with strong bristles at apex and middle; fifth very short, bare in centre ; sixth very long, bulbous, with many setulæ; superior and inferior forceps very long, the superior pair slender, the inferior pair dilated apically; third and fourth sternites very short and broad, processes of fifth very long, tapered to a point, directed slightly downward at apex. Bristles at apex of processes of mesosternum flexed at apices. Fore femur with strong bristles on entire surface postero-ventrally; fore tibia with remarkably long dense bristly hairs on entire length of postero-ventral and ventral surfaces; mid-tibia with two posterior bristles; basal segment of mid-tarsus dilated at apex and armed with a tuft of dense brown hairs at tip, the posterior surface with some long setulose hairs; hind femur with an entire series of long bristles on antero-ventral surface; a group of short erect bristles at base on posterior surface, two erect bristles which are closely placed at middle, and a comb-like series of about thirteen short bristles at apex on posteroventral surface; hind tibia very conspicuously dilated at or slightly beyond middle, the dilated portion compressed, furnished with rather dense hairs on anterior surface, and with a few short bristles, the apex slightly produced and with two long bristles under tip; anterior surface of basal segment of hind tarsus with some long setulose hairs. Outer cross-vein slightly curved.

Female.-Frons over one-third of the head-width; each

orbit with four bristles, the upper two directed backward. Fourth tergite without bristles at apex, the tip but little depressed in centre. Hind tibia with one antero-ventral, two antero-dorsal, and two postero-dorsal bristles.

Length 6.5-7.5 mm.

Six males, Ngare Narok, Masai Reserve, Kenya Colony, 31. xiii. 1913, about 6000 feet (*Capt. A. O. Luckman*); one female, west of Mt. Kenia, 19, 20. ii. 1911, 6500– 7250 feet (*T. J. Anderson*); one female, North Nyasa, 30. viii. 1909 (*Dr. J. B. Davey*).

Idiopygus villipes, sp. n.

Male.-Black, marked as hirtipes. The legs entirely blackish.

Differs from *hirtipes* in having the eyes separated by over one-third of the head-width and the orbits, as stated in the key. The intra-alar bristle is absent. Fore femur with long fine hairs at base of postero-ventral and on ventral surface, and some long bristles on apical half of posteroventral surface; fore tibia with the ventral hairs much longer than the tibial diameter, no posterior median bristle present; mid-legs missing; hind femur thickened, with long fine hairs ventrally and some long bristles on apical half of antero-ventral surface; hind tibia not dilated, slightly produced at apex ventrally, with numerous fine hairs as on fore tibia, and two antero-dorsal and two postero-dorsal bristles.

Length 7.5 mm.

Type, Lagari, Kenya Colony, 1. iii.-21. v. 1900 (C. S. Betton).

A female which is either that of this species or trimaculata, Stein, has the thoracic characters of this species. The mesosternum is carried downward more pronouncedly than in the male of villipes, a character which would indicate a greater protuberance in the male of the species to which it belongs, which leads me to believe that it is trimaculata. The specimen was taken on Mt. Mlanje, Nyasaland, 27. xi. 1912 (S. A. Neave).

Idiopygus hirtiventris, sp. n.

Male and female.—Black, marked as in the two preceding species, but the median vitta on mesonotum is not continued on to disc of scutellum. Legs entirely black.

Male.—Frons as in hirtipes, but with a long bristle on each orbit in line with anterior ocellus. Anterior intra-

Mr. J. R. Malloch on Exotic Muscaridæ.

alar strong. Abdomen cylindrical, fourth visible tergite depressed in centre at apex, fifth almost concealed, sixth almost as long as fourth, setulose; sternites with long, rather dense hairs, the processes of fifth rounded at apices, densely long-haired on their entire length. Fore femur with long bristles on entire length of postero-ventral surface ; fore tibia without conspicuous hairs, antero-dorsal surface with two short bristles, the posterior bristle absent; mesosternum slightly produced downwardly and armed at apices with a dense brush or tuft of stiff black bristles which are curved caudad; mid-legs missing; hind femur stout, with long hairs ventrally and some stout bristles on apical half of antero-ventral surface, the postero-ventral surface with one or two bristles beyond middle; hind tibia slender, produced into a blunt process at tip ventrally, antero-dorsal surface with two bristles, postero-dorsal surface bare.

Female.—Differs from the male in having the hind tibia simple at apex, and the postero-dorsal surface with three short bristles. The fourth tergite is more conspicuously depressed at apex than in the other species, presenting the appearance of having a Y-shaped slit in centre of posterior margin.

Length 5-6 mm.

Type, male, allotype, and one female paratype, Mt. Mlanje, Nyasaland, 14. xi. 1913, 6500 feet (S. A. Neave).

Idiopygus trochanteratus, sp. n.

Male.—Similar to the preceding species. Differs in having the spots on dorsum of abdomen very small, only the pairs on tergites 2 and 3 and the one in centre of sixth distinct.

The abdomen has fewer and shorter hairs on the sternites than in *hirtiventris*, and the hind trochanters are armed with a dense tuft of short stout bristles, the apices of which are flexed backwardly, whereas in the preceding species there are only fine hairs present. The mid-femur has fine bristles on basal half of the ventral and antero-ventral surfaces, which increase very much in length from base apicad. In other respects as *hirtiventris*.

Length 6.5 mm.

Type, Ulundi, Natal, ix. 1896, 5000-6500 feet (G. A. K. Marshall).

In addition to the species listed herein, Mydæa mirabilis, Stein, evidently belongs to this genus.

Subfamily CENOSIINE.

Genus BREVICOSTA, nov.

Generic characters.—Closely resembles Cænosia, Meigen. Differs in having the arista moderately long-haired, ocellar bristles not longer than the postvertical pair; fore tibia unarmed at middle, mid-tibia unarmed at middle on anterior surface, hind tibia with two antero-dorsal and two postero-dorsal bristles, and the costal vein not extending beyond apex of third vein and with short black setulæ to beyond apex of second vein.

Genotype, the following species.

Brevicosta africana, sp. n.

Female.—Head black, densely whitish pruinescent, the interfrontalia, when seen from in front, less densely pruinescent than orbits and frontal triangle; antennæ yellowish, second segment largely brown; palpi yellowish, infuscated apically. Thorax black, densely grey pruinescent, not distinctly vittate, but darker along the lines of dorsocentrals. Abdomen black, densely grey pruinescent, with three black spots on each tergite, the median spots forming an almost complete vitta; apices of tergites 2 to 4 narrowly, of 5 broadly yellowish. Legs entirely yellowish. Wings clear. Calyptræ brownish yellow. Halteres yellow.

Frons at vertex less than one-fourth of the head-width, widened anteriorly; frontal triangle narrow, extending to anterior margin of frons; arista with its longest hairs about as long as width of third antennal segment, the latter extending about two-thirds of the way to mouth-margin. Acrostichals in two sories; dorso-centrals 1:3; lower stigmatal bristle minute or absent. Mid-tibia with one posterior bristle; hind tibia with one antero-ventral, two antero-dorsal, and two postero-dorsal bristles, the apical one of the two antero-dorsal bristles very long. Veins 3 and 4 divergent apically. Lower calyptra little larger than upper. Length 3 mm.

Type, Zungeru, Northern Nigeria, xi. 1910 (Dr. J. W. Scott-Macfie).

ASIATIC SPECIES.

Subfamily PHAONIINÆ.

Phaonia atronitens, sp. n.

Male.—Black, shining. Frons, orbits, face, and cheeks with white pruinescence. Thorax indistinctly vittate, the dorsum with faint greyish pruinescence. Abdomen slightly greyish pruinescent, with a black dorso-central vitta which is slightly dilated at apex of each tergite. Legs black. Wings clear, veins fuscous, paler basally. Calyptræ white. Halteres fuscous.

Eves densely long-haired; narrowest part of frons a little wider than distance across posterior ocelli; orbits with long fine bristles almost to anterior ocellus; interfrontalia distinct on its entire length; third antennal segment at least three times as long as second, its apex extending almost to mouth; arista with its longest hairs nearly as long as width of third antennal segment; parafacial not as wide at base of antennæ as width of third antennal segment. narrowed below; cheek as high as width of third antennal segment; palpi slender; proboscis stout and short. Thorax with three or four pairs of very fine, long presutural acrostichal bristles; prealar absent; postsutural dorso-centrals 3. Abdomen narrowly ovate; hypopygium small, concealed; fifth sternite with a broad rounded posterior emargination; each sternite, including fifth, with a long fine bristle at each side apically. Fore tibia unarmed at middle; fore tarsus slender, much longer than tibia; mid-tibia with two or three postero-dorsal bristles; hind femur with a series of fine bristles on antero-ventral surface, and some shorter bristles on basal half of postero-ventral; hind tibia with two anterodorsal and three or four antero-ventral bristles, the calcar Costal thorn small; veins 3 and 4 divergent short. apically.

Female.—Differs from the male in having the eyes very short-haired, and the frons over one-third of the head-width.

Length 5-6 mm.

Type, male, allotype, and four male paratypes, Gulmarg, Kashmir, 1913, 8500 feet (F. W. Thomson).

Pogonomyia fumipennis, sp. n.

Male.-Black, shining. Head with whitish pruinescence

on parafacials and face. Thorax not vittate, with slight brownish pruinescence. Abdomen with brownish-grey pruinescence on sides of each tergite. Legs black. Wings infuscated, most noticeably so at bases. Calyptræ white. Halteres black.

Eyes separated by a little less than width across posterior ocelli: orbits setulose almost to anterior ocellus; parafacial as wide as third antennal segment; mouth-margin produced; cheek rather densely setulose below, the upwardly curved bristles moderately numerous; longest hairs on arista distinctly longer than its basal diameter. Thorax with three pairs of postsutural dorso-central bristles; prealar very long. Abdomen elongate, narrow, almost parallelsided, and slightly depressed; hypopygium small. Fore tibia with one posterior and two or three postero-ventral bristles; fore tarsus slender, much longer than tibia; midfemur on both antero-ventral and postero-ventral surfaces with long fine bristles almost to apex; mid-tibia with three or four postero-dorsal and postero-ventral bristles; hind femur slender, with a series of long bristles on entire antero-ventral surface, the postero-ventral surface bare except near base; hind tibia slightly produced at apex ventrally, with a short curved bristle near tip of produced part, the anterior and antero-ventral surfaces with rather dense setulose hairs, some of which are stronger than others, the postero-dorsal surface with three or four long bristles. Wings larger than in most species of the genus.

Length 5-6 mm.

Type and three paratypes, Gulmarg, Kashmir, 1913, 8500 feet (F. W. Thomson).

This species has the same habitus as P. tetra, Meigen.

Subfamily ANTHOMYIINE.

Pegomyia atroapicata, sp. n.

Male.—Black, slightly shining, densely grey pruinescent. Head, including antennæ and palpi black, orbits, face, and cheeks with silvery pruinescence. Thorax indistinctly vittate, the lateral margins whitish pruinescent. Abdomen with a black dorso-ventral vitta, and, when seen from the side, lateral blackish checkerings. Legs yellow, fore femora, apices of mid and hind femora, and all tarsi black, bases of mid-tibiæ slightly infuscated. Wings clear. Calyptræ white. Halteres yellow.

Eyes almost contiguous below anterior ocellus; inter-

frontalia obliterated on upper half; orbits setulose on lower half; arista pubescent; cheeks very narrow, with strong marginal bristles. Thorax with three pairs of short presutural acrostichals; prealar very long. Abdomen subcylindrical; hypopygium small; processes of fifth sternite of moderate length, almost bare on basal half, with a few strong bristles apically. Fore tibia with one antero-dorsal and two posterior bristles; mid-femur with one bristle at base on ventral surface; mid-tibia with one antero-dorsal and four irregularly arranged posterior bristles; hind femur with an antero-ventral series of sparse bristles and two or three bristles on basal half of postero-ventral surface; hind tibia with two postero-dorsal, one antero-ventral, and three antero-dorsal bristles, and an extra bristle on posterior surface basad of middle. Veins 3 and 4 subparallel apically. Calvptræ subequal.

Female.—Frons about one-third of the head-width, lower supra-orbital bristle directed forward; cruciate bristles absent.

Length 7 mm.

Type, male, allotype, and one male and one female paratype, Gulmarg, Kashmir, 1913, 8500 feet (F. W. Thomson).

This species differs from its allies in the colour of the legs and in having an extra bristle on the posterior surface of the hind tibia.

AUSTRALASIAN SPECIES.

Subfamily PHAONIINÆ.

Myiospila flavicans, sp. n.

Female.—Testaceous yellow, slightly shining. Head fuscous, orbits, face, and cheeks with white pruinescence; palpi fuscous; antennæ yellow, second segment darker. Thoracic dorsum with four reddish vittæ, the intervening spaces yellowish pruinescent. Dorsum of abdomen with very faint traces of a pair of spots on tergites 2 and 3. Tarsi barely darker than tibiæ. Wings clear, veins yellow, darker apically. Calyptræ and halteres yellow.

Eyes with microscopic hairs; frons at vertex about onefifth of the head-width, nearly twice as wide anteriorly; interfrontalia with a pair of weak cruciate bristles; anterior orbital bristle much stronger than the others; arista long plumose. Thorax without differentiated presutural acrostichal bristles; postsutural dorso-centrals 4; prealar bristle very short; sternopleurals 1:2; hypopleura bare. Basal abdominal sternite bare; seventh sternite with a pair of short stout bristles at apex. Fore tibia unarmed at middle; mid-tibia with two posterior bristles; hind femur with a few bristles on apical half of antero-ventral surface; hind tibia with one antero-dorsal and two weak antero-ventral bristles. Third wing-vein with some rather strong setulæ at base; fourth vein but slightly curved forward at apex.

Length 8 mm.

Type, South Queensland, 1911 (Dr. T. L. Bancroft). One specimen.

This is the only species of this genus known to me which is pale in colour. It is apparently a typical species of *Myiospila*, possessing the wing-characters of the genotype and the cruciate interfrontal bristles as well as the ventral bristles near apex of abdomen, which this genus has in common with *Mydæa* in the female sex.

Genus Idiohelina, nov.

Generic characters.—Belongs to the subfamily Phaoniinæ, and is closely related to *Helina*, Robineau-Desvoidy. Differs from all allied genera known to me in having the marginal cell of uniform width almost to its apex, whereas in other genera it is gradually narrowed from apex of first vein to its apex, the apical balf of the cell being narrowly wedgeshaped. The scutellum has some fine hairs below at apex a character almost invariably found in Anthomyiinæ, but rarely in Phaoniinæ. In other respects as *Helina*. Prealar absent.

Genotype, the following species.

Idiochelina nubeculosa, sp. n.

Female.—Testaceous yellow, shining. Third antennal segment and the abdomen largely fuscous. Wings yellowish, cross-veins conspicuously infuscated, apices of wings with a faint fuscous cloud.

Frons about two-fifths of the head-width; orbits not differentiated, each with about five unequal-sized bristles; face almost vertical; parafacial not as wide as third antennal segment, at middle half as wide as height of cheek; arista with sparse long hairs; antennæ extending to three-fourths the length of face; palpi normal. Thorax without any strong presutural acrostichal bristles; postsutural dorsocentrals 3; sternopleurals 1:2. Fore tibia without a median posterior bristle; mid-tibia with one posterior

median bristle; hind femur with one preapical anteroventral bristle; hind tibia with one antero-ventral and one antero-dorsal bristle, the postero-dorsal surface sometimes with a weak setula. Outer cross-vein straight. Lower calyptra not much larger than upper.

Length 5-6.5 mm.

Type, Wanganui, New Zealand, 20. iii. 1920. Paratype, topotypical.

Subfamily CENOSIINE.

Pygophora minuta, sp. n.

Male.—Black, densely pale grey pruinescent. Interfrontalia pale yellowish testaceous; antennæ yellowish, third segment brown except at base; palpi yellow. Thorax not vittate. Abdomen black, basal tergite except in middle, apices of tergites 2 and 3, sides of all tergites, hypopygium, and entire venter yellowish testaceous. Legs entirely yellow. Calyptræ and halteres yellowish. Wings clear, veins pale.

Frons at vertex about one-fifth of the head-width, widened anteriorly ; each orbit with the normal four bristles, the upper one very weak, the next two not so closely placed as in the genotype ; third antennal segment extending almost to mouth-margin, about three times as long as second ; arista plumose at base, bare apically. Thoracic chætotaxy normal. Abdomen compressed apically ; third, fourth, and fifth tergites each with a number of flattened bristles resembling minute feathers on sides, those on fourth much larger than on third and fifth ; processes of fifth sternite bare, longer than wide and but little dilated at apices ; the processes at base of excavation very short, barely stalked. Antero-dorsal bristles on fore tibia very short and weak ; all tibial bristles as in genotype, but much weaker. Last section of fourth wing-vein nearly twice as long as penultimate.

Length 3.5 mm.

Type, Kuranda, North Queensland, 21. vi.-24. viii. 1913, 1100 feet (R. E. Turner).

This species is the smallest of the genus known to me. It has no protuberance at apex of hind tibia on ventral surface, but is a true *Pygophora*, and may be separated from its allies by the peculiar flat bristles on sides of the abdomen.



Malloch, John Russell. 1921. "Exotic Muscaridae (Diptera).—III." *The Annals and magazine of natural history; zoology, botany, and geology* 8, 225–239.

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