

SMITHSONIAN MISCELLANEOUS COLLECTIONS
VOLUME 101, NUMBER 8

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FROM THE ETHIOPIAN REGION

BY
T. D. A. COCKERELL
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(PUBLICATION 3649)

CITY OF WASHINGTON
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INTRODUCTION

The bees now recorded are a part of a collection received from the British Museum, to which they will be returned after the war. The hylaeid bees, with short tongues, are considered primitive, and yet are differentiated into numerous groups showing striking modifications. As V. B. Popov, of Leningrad, has recently set forth in some detail, the holarctic species can be divided into a considerable number of groups or subgenera. In Australia and Africa, however, there is much more diversity, and no one has questioned the recognition of several Australian genera, the characters of which are (with the exception of some more recently described) set forth by Meade-Waldo in *Genera Insectorum*, 1923. However, the species usually referred to *Prosopis* or *Hylaeus* are themselves diverse and will no doubt eventually be split up into a series of genera. J. C. Bridwell (*Proc. Hawaiian Ent. Soc.*, vol. 4, June 1919) has made a beginning of this as regards the African species, recognizing a new genus *Nothylaeus* for the species *heraldicus*, *junodi*, *braunsi*, *rubrifacialis*, *sansibaricus*, *nyassanus*, *binotatus*, *magrettii*, *gigas*, *peringueyi*, and *yoruba*. *Anylaeus* is a new subgenus of *Nothylaeus* for *aberrans* and *dentiferellus*. *Metylaeus* is a new genus for *cribratus*, *catalaucoides*, and *scutispina*. *Deranchylaeus* is a new subgenus of *Hylaeus*, including the rest of the species of the Ethiopian region. Thus while in the related family Colletidae true *Colletes* is well represented in South Africa, the Ethiopian region has a peculiar hylaeid fauna of its own, although it is not so distinct as that of Australia.

In working over these bees, I have not found it easy to classify them into genera and subgenera and so have recorded as *Hylaeus* numerous species which do not belong to that genus in the restricted sense. Following and extending the methods of Bridwell, some student should reclassify the Hylaeidae of the world, including the numerous African species which were unknown to Bridwell. This undertaking is not now possible, owing to the disturbed condition of

the world, and in any case it will be difficult to assemble in any one place a sufficient collection for the purpose.

I give a list of the names proposed for African species (excluding those of the Palearctic portion), and a key to the separation of the species discussed in this paper.

NAMES PROPOSED FOR AFRICAN SPECIES

Those marked with an asterisk are described or recorded in the present paper.

- aberrans* Bridwell, 1919
abjunctus Cockerell, 1936
absonulus Cockerell, 1936
albonasatus Strand, 1912
alfkeni Friese, 1913
xanthopus Alfken, 1914
**ameliac*, new species
arnoldi Friese, 1913
**aterrimus* Friese, 1911
quinquedentatus Friese
atriceps Friese, 1911
atriceps major Strand, 1912
bequaertianus Bridwell, 1919
bevsi Cockerell, 1917
binotatus Alfken, 1914
braunsi Alfken, 1905
braunsi fumata Strand, 1912
braunsi nigricans Friese, 1913
buyssoi Vachal, 1899
**capicola* Alfken, 1914
catalaucoides Bridwell, 1919
clavigera Cockerell, 1936
cribratus Bridwell, 1919
**curvicarinatus* Cameron, 1905
robertianus Cameron, 1906
**dentiferellus* Strand, 1912
dregei Strand, 1912
**flaviscutum* Alfken, 1914
vau Cockerell, 1936
fortis Cockerell, 1936
gabonicus Vachal, 1899
gaullei Vachal
gigas Friese, 1911
graaffi Cockerell, 1936
haygoodi Bridwell, 1919
heraldicus Smith, 1853
abyssinica Alfken, 1905
rubriplagiatus Cameron, 1905
heraldicus maculipes Cockerell, 1936
heraldicus rufipictus Strand, 1912
**immarginatus* Alfken, 1914
**junodi* Friese, 1911
rufipedoides Strand, 1911
**junodi montacuti*, new variety
**junodi rhodesicus*, new subspecies
kasindensis Cockerell, 1936
krebsianus Strand, 1912
leucolippus Friese, 1913
libericus Cockerell, 1936
lightfooti Bridwell, 1919
lineaticeps Friese, 1913
**magnificus*, new species
magretti Vachal, 1892
**melanosoma* Cockerell, 1920
**microstictus*, new species
**namaquensis*, new species
**neavei*, new species
nyassanus Strand, 1912
ogilviei Cockerell, 1932
**perater* Cockerell, 1936
perdensus Cockerell, 1936
peringueyi Bridwell, 1919
**pondonis*, new species
promontorii Meade-Waldo, 1923
longulus Friese, 1913 (preoccupied)
**proteae*, new species
punctiferus Cockerell, 1936
reditus Cockerell, 1936
rhodognathus Cockerell, 1936
rubrifascialis Strand, 1912
rugiceps Friese, 1921
rugipuncta Alfken, 1914
sanctus Cockerell, 1936
sansibaricus Strand, 1912
scutispina Alfken, 1914
simplex Bingham, 1923
simprior Meade-Waldo, 1923
**simpsoni*, new species
**simulans*, new species
**subfortis*, new species

<i>sublucens</i> Cockerell, 1936	<i>uelleburgensis</i> Strand, 1912
* <i>subreclitus</i> , new species	<i>ugandicus</i> Cockerell, 1939
<i>tenis</i> Alfken, 1914	* <i>untalicus</i> Cockerell, 1936
<i>tenis dominae</i> Cockerell, 1936	<i>varians</i> Cockerell, 1936
<i>tinctulus</i> Cockerell, 1932	* <i>xanthostoma</i> Alfken, 1914
<i>tinctulus extensicornis</i> Cockerell, 1936	<i>yoruba</i> Bridwell, 1919

KEY TO SPECIES DISCUSSED IN THIS PAPER

- Abdomen at least partly red.....1
 Abdomen not at all red.....10
1. Clypeus yellow or yellowish white, the lateral margins sometimes dark.....2
 Clypeus with middle third, or not much more, yellow.....7
2. Scutellum entirely black; legs and tegulae red.....*neavei*, new species
 Scutellum with light spots.....3
3. Small species; face marks yellowish white; postscutellum with two teeth...4
 Larger species; face marks yellow; postscutellum unarmed.....5
4. First tergite almost entirely red (Okahandja).....*dentiferellus* Strand
 First tergite black, red only at sides (Durban).....*dentiferellus* Strand
5. Supraclypeal mark a little broader than long
 junodi rhodesicus, new subspecies, female
 Supraclypeal mark much longer than broad.....6
6. Lower end of lateral marks contiguous with clypeal yellow
 junodi rhodesicus, new subspecies, male
 Lower end of lateral marks well separated from clypeal yellow
 junodi Friese, male
7. Mesonotum red; no light spots on scutellum.....*simpsoni*, new species
 Mesonotum black.....8
8. Second abdominal tergite red; sides of clypeus red
 junodi rhodesicus, new subspecies
 Second tergite black, the first red.....9
9. Supraclypeal mark higher than broad.....*junodi v. montacuti*, new variety
 Supraclypeal mark not higher than broad.....*junodi* Friese
10. Abdomen steel blue.....*magnificus*, new species
 Abdomen black.....11
11. Face with three light stripes.....12
 Face all light.....15
 Clypeal region and mouth red.....*xanthostoma* Alfken
 Clypeus black, or with a minute light spot.....27
12. Supraclypeal mark present; larger species.....13
 Supraclypeal mark absent; smaller species.....14
13. With paired spines on abdomen.....*aterrimus* Friese
 Without such spines.....*pondonis*, new species
14. Clypeus with a large cuneiform white mark.....*capicola* Alfken
 Clypeus with only a light stripe.....*capicola* Alfken
15. Larger species, about 10 mm. long.....16
 Much smaller.....18
16. Lateral face marks elongate and attenuate above; face pale yellow
 fortis Cockerell
 Lateral face marks shorter, not attenuate above; face chrome yellow.....17

2. Tubercles partly white (Port St. John, Turner, 9).....sp.
 Tubercles black (Katberg) (Turner, 7).....sp.
3. (Smaller than *H. melanosoma*, and with clear wings)
- Front dull (Katberg; Mossel Bay).....sp.
 Sides of front shining (Worcester; Matjesfontein).....sp.

The unnamed species in this key are, with the exception of the last two, represented by single specimens, and they are best left unnamed for the present. They are all small, without striking characters.

NOTHYLAEUS SUBFORTIS, new species

Male.—Length about 10.5 mm.; robust, black, with no red, and no light marks on scutellum; labrum black, mandibles obscurely reddish at end; face pale lemon yellow, shining, the yellow including clypeus, supraclypeal mark (which is hat-shaped, narrowed and truncate, not at all notched, above), and lateral marks, which form broad triangles with the base on orbit, and the inner sides about equal; frontal keels strong, somewhat arched outward; antennae entirely black; mesonotum dull, very coarsely punctured; scutellum moderately shining, with very large punctures, and a strong median groove; area of metathorax with very coarse irregular rugae; pronotum with two widely separated yellow spots above, and a large part of tubercles yellow; tegulae black; wings dilute fuliginous; basal nervure falling short of nervulus; first recurrent joining first cubital cell some distance from end, second recurrent going very slightly beyond outer intercubitus; legs black, the front tibiae and small joints of hind tarsi a little reddish; abdomen very finely punctured, the apical margin of first tergite, and all of second, shining; no hair bands; third sternite with a strong curved transverse callus.

East Africa: 150-200 miles west of Kambove, 3,500-4,500 feet, October 15, 1907 (S. A. Neave).

Closely allied to *N. fortis* Cockerell, but differing by the broader, more shining face, its color more orange, the lateral face marks less attenuated above; the mesonotum more robust and more coarsely sculptured. *N. fortis* was described from the Belgian Congo, but Neave took three in the Bugoma Forest, Uganda, 3,700 feet, December 1-5, 1911; and in the Mabira Forest, Chagwe, Uganda, 3,500-3,800 feet, July 1911, he took one *N. fortis* and one *N. ugandicus* (Cockerell). I described *N. ugandicus* under *Hylaeus*, and suggested at the time that *N. fortis* should also be so referred. As more species come to light, it is hard to define the genera precisely, but certainly those insects are nearer to *Nothylaeus* than to typical *Hylaeus*.

NOTHYLAEUS JUNODI (Friese)

Turner took both sexes at Mossel Bay and Queenstown, and a female at Ceres. In one of the Mossel Bay females the clypeal mark is broadened at the lower end.

NOTHYLAEUS JUNODI RHODESICUS, new subspecies

Length about 7 mm.; head and thorax dull black, the face largely yellow; first tergite red, second obscurely red in female, and red at extreme base in male; two transverse yellow spots on scutellum; legs red.

Female (type).—Labrum and mandibles dull red; face marks dull yellow; clypeus yellow with a broad red band down each side; supraclypeal mark large, somewhat broader than long; lateral face marks running about halfway up sides of front, the upper end greatly narrowed; antennae red, the scape with a yellow line in front, flagellum dusky above; vertex dull, but a shining spot above each eye; pronotum red, including tubercles, but collar yellow; scutellum shining, but mesonotum dull; area of metathorax large, coarsely sculptured only at basal middle; tegulae red; wings clear, stigma and nervures brown; basal nervure falling short of nervulus; first recurrent nervure joining first submarginal cell some distance before end; first and second tergites with a band of white pubescence on each side of apical margin. The yellow spots on scutellum are separated by a linear interval.

Male.—Similar but more slender; clypeus pale yellow with a black bar on each side, failing at lower end, so that the clypeal yellow meets the lateral marks; supraclypeal mark much longer than broad; scape entirely red; abdomen without tubercles, the venter shining.

South Rhodesia (Matabeleland); Lonely Mine (H. Swale).

Both sexes taken June 1, the type male, June 4, 1913. I separated this from *N. junodi* (Friese) as follows:

- | | |
|---|--|
| Clypeus yellow except at sides..... | 1 |
| Clypeus with middle third, or not much more, yellow..... | 3 |
| 1. Supraclypeal mark a little broader than long | |
| junodi rhodesicus Cockerell (type), female | |
| Supraclypeal mark longer than broad..... | 2 |
| 2. Lower end of lateral marks contiguous with clypeal yellow | |
| junodi rhodesicus Cockerell, male | |
| Lower end of lateral marks well separated from clypeal yellow | |
| junodi (Friese), male | |
| 3. Second tergite red; sides of clypeus red.. | junodi rhodesicus Cockerell, female |
| Second tergite black; first red..... | 4 |

mesonotum dull, very coarsely punctured; area of metathorax very coarsely sculptured, the ridges shining; tegulae pale red, with a white spot; wings hyaline, faintly dusky, stigma and nervures brown; basal nervure falling a little short of nervulus, first recurrent nervure joining first cubital cell not far from end; legs red with a blackish suffusion, front legs with a large white mark on basal half, and the basitarsi white; abdomen mainly dull, but first tergite polished; hind margins of first two tergites with fringes of white hair, interrupted in middle.

Portuguese East Africa: Porto Amelia (F. V. Beste).

Perhaps to go in *Nothylaeus*, but not a typical member of that genus. It will be known by the very small size, wherein it resembles *H. melanosoma* (Cockerell), but the antennae are not as long as in that species, and the markings are very different. From various small species it is known by the spots on the scutellum. The microscope shows that the supraclypeal mark is trilobed at upper end, and the mandibles are red. The trilobed upper end of supraclypeal mark recalls *H. dentiferellus* (Strand).

HYLAEUS MICROSTICTUS, new species

Female.—Length nearly 7 mm.; black, including legs, but with white markings as follows, rather broad bands along inner orbits, the lower end about level with lower end of eye, the upper rather less than halfway up front, strong band on collar, interrupted in middle, and large spot on the otherwise black tegulae; tubercles black, the margin ciliate with short white hairs; flagellum obscure reddish beneath; face broad; clypeus with a shining transverse well-defined semilunar depression, and on each side of it an obtuse longitudinal ridge; front dull; vertex a little shining, well punctured; mesonotum and scutellum dullish (not at all polished), very closely and minutely punctured; metathorax entirely dull, the area rugulose; wings dusky, stigma and nervures brown; basal nervure meeting nervulus; first recurrent ending some distance before end of the very long first cubital cell; abdomen shining, with a short band of white hair sublaterally on each side of margin of first and second tergites; first tergite very finely punctured.

Cape Province; Mossel Bay, March-April 1930, and October 26-31, 1933, three specimens (R. E. Turner, 7, in part).

Belongs to the *H. dregei* group, and is easily distinguished by the finely punctured first tergite, white band on collar, dusky wings, and black tubercles. *H. lineaticeps* (Friese), of which I possess only the

male, has yellow markings, and the thorax above evidently shining. The female *H. lineaticeps* has the collar entirely black.

HYLAEUS CURVICARINATUS (Cameron)

Cape Province: Swellendam, November 1933, 3 males (R. E. Turner).

HYLAEUS NEAVEI, new species

Male.—Length about 9 mm.; robust, black, with the face dull pale orange, and the sides and base of first tergite broadly red; the tubercles, legs, extreme apex of abdomen, and subapical region beneath, also red; tegulae shining clear red; wings clear hyaline, stigma dilute brown. Face broad; supraclypeal mark quadrate, broader than long; lateral marks attenuate above, coning to a sharp point not on orbit; antennae red, the flagellum dusky above; mesonotum dullish, coarsely punctured; scutellum shining between the large punctures, contrasting with mesonotum; area of metathorax coarsely wrinkled, but shining; posterior face of metathorax with a conspicuous shining channel in middle; basal nervure falling short of nervulus; first recurrent meeting intercubitus; second recurrent joining second cubital cell a little before end; abdomen dullish; first tergite with an apical band of white tomentum on each side; third sternite with a pair of sublateral ridges; sixth red, with prominent corners.

East Africa: Southeast slopes of Mount Kenya, 6,000-7,000 feet, February 3-12, 1911 (S. A. Neave).

Closely allied to the much smaller *bevisi* (Cockerell), from Natal, but the mesonotum is much more coarsely punctured than in that insect. These bees should perhaps go in *Nothylaeus*.

HYLAEUS MAGNIFICUS, new species

Male.—Length about 9.5 mm.; rather slender, with long antennae; head, thorax, abdomen, femora, and tibiae bright steel blue, or perhaps better described as purple; mouth parts typical for *Hylaeus*; clypeus with a large conical creamy-white mark, varying much in size; antennae black, the flagellum obscurely brownish beneath; thorax without light markings; mesonotum dull and finely punctured; scutellum more shining, but still finely punctured; area of metathorax large, poorly defined, appearing rugulose; tegulae purple; wings variably dusky, sometimes quite dark; basal nervure falling a little short of nervulus; first recurrent nervure joining first cubital

cell a variable distance from end; abdomen shining, without hair bands; venter simple.

East Africa: East foot and slopes of Aberdare Mountains, 7,000-8,500 feet, February 24-27, 1911 (S. A. Neave).

Very distinct by its purple color, which recalls some of the Australian Hylaeidae. Four specimens were collected.

HYLAEUS ATERRIMUS (Friese)

Pondoland: Port St. John, two females, October 1923, one male January 1924. (R. E. Turner, 3).

One female is labeled "on *Protca*, 1,200 feet." I have female *H. aterrimus* from Bulawayo and Hope Fountain, South Rhodesia, from the Rhodesia Museum.

HYLAEUS PONDONIS, new species

Male.—Length about 7 mm.; in most respects exactly like *H. aterrimus*, but less robust; the third sternite with a strong dentiform process in the middle, but the paired processes, above and below, entirely lacking; pale clypeal band very slender, its upper end not nearly as wide as base of supraclypeal mark; lateral face marks more slender above; scutellum more shining.

Pondoland: Port St. John, October 1923 (R. E. Turner).

According to Alfken, and I believe correctly, the *Prosopis quinquedentata* Friese is to be considered the true male of *H. aterrimus*. The male which Friese doubtfully referred to *H. aterrimus* is probably *H. pondonis*. But it will be noticed that at Port St. John, Turner took female *H. aterrimus* and male *H. pondonis* in October; male *aterrimus* (agreeing with *Prosopis quinquedentata*) in January. Is it possible that we have two species, easily separated in the male, but alike in the female sex?

HYLAEUS CAPICOLA (Alfken)

Male.—About 4.5 mm. long; black, with very long antennae, the flagellum obscurely reddish beneath; eyes large, and orbits strongly converging below; clypeus dull white, with a broad black band down each side; no supraclypeal mark; lateral face marks well developed, but narrow, bandlike, widely separated from clypeal mark; labrum and mandibles black; mesonotum finely punctured, somewhat shining; no light markings on thorax; tegulae black; wings grayish, iridescent; legs black, tarsi brownish, a light stripe on front tibiae; abdomen narrow, shining.

Female.—About 6.5 mm. long; clypeus with a slender median stripe; lateral marks long slender bands, not diverging from orbits; collar yellowish white, and tubercles margined with the same color; first and second tergites with slight marginal hair bands at sides. The flagellum is obscure brown beneath. The stigma is black, and the nervures are dark.

Pondoland: Port St. John, females, January, April, and May, 1924; male, June 1923 (Turner).

The male resembles *H. melanosoma* (Cockerell) closely, differing by the broad black band along each side of clypeus. The female is easily known from *H. melanosoma* by the three stripes on face. Alfken knew only the female.

HYLAEUS SIMPSONI, new species

Female.—Length about 8 mm.; robust, head (including antennae), thorax, abdomen, and legs light ferruginous; face marks dull cream color, as follows: broad median stripe on clypeus, broadest at upper end, supraclypeal mark, broader than long, long but narrow lateral face marks, extending far up sides of front, and a small transverse mark on each side of clypeus near margin, contiguous with the lower end of clypeal mark (which is curved under eye), but not reaching median band; collar pale yellow, but tubercles red; scutellum without light marks; mandibles shining, very broad, the apex sharply pointed but not much elongate; front and mesonotum dull, scutellum shining; postscutellum large; area of metathorax not very large, wrinkled at base; tegulae red; wings hyaline, stigma red; basal nervure falling short of nervulus; first recurrent nervure meeting intercubitus; first tergite with a conspicuous band of white tomentum at each side before margin; broad margins of second and third tergites pallid with fine pubescence.

Gambia: Bathurst, March 3, 1911 (J. J. Simpson).

Perhaps this should go in *Nothylaeus*, but it is not typical of that genus. I wondered whether the uniform red color could be due to immaturity, but there is no evidence of this. Aside from the red color, which is unique, the markings suggest *Nothylaeus junodi* (Friese), though differing in detail; for example, there are light marks on the scutellum of *N. junodi*.

HYLAEUS PROTEAE, new species

Male.—Length 7.5 to 9 mm.; black with no red, and no spots on scutellum; clypeus shining black, with middle of upper part de-

pressed; face marks white; supraclypeal mark triangular, well developed; lateral face marks broad at level of upper end of clypeus, narrowed to an obtuse point above, below abruptly narrowed, and ending in a hooklike point next to upper part of clypeus, or coming to an acute angle below; scape enormous, globose, intense black, shining; flagellum dull orange beneath, black above; mesonotum and scutellum shining, well punctured; area of metathorax strongly wrinkled; collar white, but tubercles black; tegulae black, with a large white spot; wings hyaline, faintly dusky, stigma very dark brown; basal nervure falling short of nervulus; first recurrent nervure meeting intercubitus; legs black; abdomen with first two tergites shining, the third duller; margin of first tergite with white hair at sides; no dorsal tubercles, but third sternite produced into a large (but variable) flaplike structure.

Pondoland: Port St. John, 10 specimens (R. E. Turner).

The holotype is marked "on *Protea*, 1,200 feet," October 1923. All were taken in October, except one in January 1924. Related to *H. aterrimus* (Friese), but differing greatly in the structure of the abdomen. The face markings recall *H. uelleburgensis* Strand.

HYLAEUS NAMAQUENSIS, new species

Female (type).—Length about 6 mm.; black, the face all black except a large broadly triangular mark on each side at level of upper end of clypeus; flagellum red beneath; collar narrowly margined with white, but tubercles black; hind tibiae with a large yellowish-white mark near base; front tibia reddish in front, and with a pale spot at base; second and following tergites with bands of pure white hair. Head broad; clypeus strongly punctured, conspicuously shining at sides; mesonotum and scutellum polished and strongly punctured; postscutellum shining, but metathorax entirely dull; tegulae subhyaline, with a light spot; wings clear hyaline, stigma and nervures brown; basal nervure meeting nervulus; first recurrent nervure meeting intercubitus; abdomen shining, first tergite duller and strongly punctured, contrasting with the second.

Male.—Length about 5.5 mm.; more slender; labrum and mandibles black, but face entirely lemon yellow, with a large and very long supraclypeal mark, and broad lateral marks ending very obtusely about halfway up sides of front; scape with a slight spot at end; basitarsi white, and small joints pale reddish; tubercles black as in the female.

South-West Africa: Aus, January 1930, 11 females, 10 females (R. E. Turner, 10).

Compared with *H. curvicarinatus* (Cameron) the male has the lateral face marks much broader above, and the supraclypeal mark much longer. *H. promontorii* (Meade-Waldo) and *H. alfkeni* (Friese) have the female face all black.

HYLAEUS FLAVISCUTUM (Alfken)

H. vau Cockerell, 1936, is the male of this species.

Turner collected nine females and five males at Aus, December 1929, and a female at Aliwal North, January 1923.

HYLAEUS IMMARGINATUS (Alfken)

Lion's Head, Cape Town, both sexes, May 1920 (Turner).

Two of the males have the light color of clypeus extending above the inner level of lateral marks, thus simulating a supraclypeal mark. Apparently this is only a variety.

HYLAEUS MELANOSOMA (Cockerell)

Pondoland: Port St. John, May, June, July, August, December, 1923 (R. E. Turner).

Described from Durban and Knysna; Port St. John is between these localities.

HYLAEUS PERATER (Cockerell)

This was described from Tshibinda, Belgian Congo, but was also taken in South Rhodesia.

The following description is based on specimens from Abyssinia, and gives details concerning the structure of the male, not given in the original account.

Male.—Length about 5.5 mm., anterior wing 4.7; entirely black, including legs, antennae, and tegulae; wings dilute brownish, clear at base, stigma dark brown; face broad, but eyes strongly converging below; clypeus long, strongly punctured, narrowed above; scape strongly swollen and highly polished; mesonotum minutely punctured, dull, a little shining on disk, and with three short shining lines; scutellum well punctured, shining; postscutellum large, with a few long hairs at each side; area of metathorax with strong wavy rugae; posterior truncation dull, with a cuneiform shining area in middle; basal nervure falling a little short of nervulus; first recurrent joining apical corner of first cubital cell; abdomen dullish, very

minutely punctured, with a marginal fringe of white hair, not always present, at sides of first tergite. The black of the abdomen seems to have a slight bluish tint, so slight as to be possibly illusory.

Female.—Somewhat larger and more robust, the scape normal; flagellum very faintly brownish beneath.

Abyssinia; two males and a female. Donated by R. E. Turner, but evidently not collected by him.

· HYLAEUS SIMULANS, new species

Female.—Length nearly 7 mm.; black, with white markings as follows: narrow lateral bands along orbits, a small spot in middle of lower part of clypeus in holotype, but not in the others, continuous band on collar, and spot on tegulae; tubercles black, the margin ciliate; wings dusky, basal nervure falling a trifle short of nervulus, first recurrent meeting intercubitus. This is part of Turner's No. 7, which also includes *H. microstictus*. The two species do at first sight seem to be very much alike, but the present insect lacks the clypeal pit and has a narrower face. As in *H. microstictus*, the front tergite is very minutely punctured. The clypeal spot suggests *H. immarginatus* (Alfken), which differs at once by the black collar, and the distinctly shining mesonotum, with strong well-separated punctures.

Cape Province: Mossel Bay (type locality), six, March 1922, March-April 1932, April 1933 (R. E. Turner); Katberg, 4,000 feet, November 14-26, 1932 (Turner).

HYLAEUS SUBREDITUS, new species

Female.—Length about 6.7 mm.; black, robust, with a large transverse shining clypeal pit; no light markings anywhere, except short lateral marks next to orbits at level of antennae, and a small spot on tegulae; wings dusky. In almost all respects this agrees with *H. reditus* Cockerell; it has the first tergite excessively minutely and closely punctured, and a conspicuous line of white hairs sublaterally on margin of first and second tergites. It is larger and more robust than *H. reditus*, and the mesonotum and scutellum, seen from above, are entirely dull, whereas in *H. reditus* the sides of disk of scutellum, and corresponding areas on hind part of mesonotum are polished and shining. The sides of the metathorax are dull.

Cape Province: Somerset East, November 1930 (R. E. Turner, 12).

In addition to the type, there is another like it, and a third, smaller, specimen, with clearer wings. This last looks much more like *H. redivus*, but it is not that species, and for the present I regard it (as did Turner) as a variation of *H. subreditus*.

Turner has given the same number (12) to a male from Somerset East, November 1930, and I accept it as the male of *H. subreditus*, without any more proof than the general similarity, the identical date, and Turner's opinion. It is about 5.5 mm. long, with dusky, highly iridescent wings. In my table in American Museum Novitates, No. 847, p. 9, 1936, it runs to *H. abjunctus* Cockerell, having the face creamy white, and the hind tibiae black. The first abdominal sternite, seen in lateral view, shows a strong protuberance. From *H. abjunctus* it differs thus: inner corners of lateral face marks opposite middle of supraclypeal mark; flagellum very obscurely reddish beneath; mesothorax and scutellum hardly shining, the punctures not evident under a lens; basitarsi not white. The basal nervure nearly meets the intercubitus, and the first recurrent joins the first cubital cell near the end. The tegulae are entirely black, the scape is swollen, but not excessively so, and is very finely punctured at upper end. The microscope shows the mesonotum to be strongly, extremely densely, punctured, the punctures tending to run in transverse lines. If this is *H. subreditus*, it appears to belong with the smaller variety, which it superficially resembles very closely.

HYLAEUS XANTHOSTOMA (Alfken)

Female.—Length about 5 mm.; slender, black, with the clypeus and the region of the mouth red, not yellow as the name given by Alfken would imply. The type locality is Sunday River in South Africa. Turner took six females at Okahandja, December 1927 and March 1928. The same species has been reported from the Belgian Congo and Nigeria. The male is described from Stanleyville; no South African males have been seen. One female was taken by Turner at Umtata, Transkei, February-March 1923. This has an altitude of 2,300 feet.