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A review of Afrotropical *Ancylorhynchus* Berthold, 1827 (Diptera: Asilidae: Stenopogoninae)

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ABSTRACT

The Afrotropical representatives of *Ancylorhynchus* Berthold, 1827 are reviewed. Two species-groups (*reynaudii* & *nomadus*) incorporating 29 species are recognised.

New combination: *Dasypogon humeralis* Wiedemann, 1821 is transferred to *Pegesimallus* Loew, 1858 (Dasypogoninae) resulting in the new combination *Pegesimallus humeralis* (Wiedemann, 1821).

New name: *Ancylorhynchus variegatus* (Bigot, 1879), a junior homonym of *Dasypogon variabilis* Wiedemann, 1817 (junior synonym of *Ancylorhynchus glaucius* (Rossi, 1790)), is provided with the new name *Ancylorhynchus variabilis*.

Previously described species considered valid within *Ancylorhynchus*: *cruciger* (Loew, 1858); *elbaiensis* Efflatoun, 1937; *fulvicollis* (Bigot, 1879); *funebris* Bromley, 1936; *hylaeiformis* Speiser, 1910; *insignis* Bromley, 1936; *magnificus* Bromley, 1936; *nomadus* (Wiedemann, 1828); *nyukinus* Speiser, 1910; *oldroydi* Lindner, 1961; *pretoriensis* Bromley, 1936; *prunus* Oldroyd, 1974; *reynaudii* (Macquart, 1838); *susurrus* (Karsch, 1879); *tricolor* (Loew, 1863); *unifasciatus* (Loew, 1858).

New synonyms: *Ancylorrhynchus crux* Bezzi, 1908 = *cruciger*; *Ancylorrhynchus zonalis* Bromley, 1936 = *fulvicollis*; *Pegesimallus tapulus* (Walker, 1849) = *P. humeralis*; *Ancylorrhynchus striatus* Oldroyd, 1970 = *hylaeiformis*; *Xiphocerus quadrimaculatus* Loew, 1858 = *reynaudii*; *Xyphocerus maculatus* Bigot, 1879 & *Ancylorrhynchus braunsi* Bromley, 1936 = *tricolor*; *Ancylorrhynchus munroi* Bromley, 1936 = *unifasciatus*.

New species: *dilobion* (South Africa); *doryphorus* (Tanzania); *feijeni* (Mozambique, South Africa); *gessi* (Namibia); *greatheadi* (Eritrea); *phelpsi* (Zimbabwe); *similis* (Côte d'Ivoire, Ghana); *simpsoni* (Nigeria); *snowi* (Gambia); *sokokensis* (Kenya); *whiteheadi* (South Africa); *zophos* (South Africa).

Keys and illustrations are provided as identification aids while maps and tables accompany comments relating to distribution, phenology and biology.

KEY WORDS: Afrotropical, Asilidae, *Ancylorhynchus*, *Pegesimallus*, taxonomy, new species, new synonymy, new combinations, distribution.

INTRODUCTION

Ancylorhynchus Berthold, 1827 is an immediately recognisable and attractive genus of stenopogonine Asilidae (Fig. 1). Most species are colourful, rather wasp-like flies, and all are characterised by the possession of a distinctive recurved proboscis. The genus is widely distributed with representatives being found in four zoogeographical regions. While the majority of the more than 40 described species is Afrotropical, Oldroyd (1980) recording 25 valid names in the Afrotropical Catalogue, others are known from the Palaearctic (Lehr (1988) catalogued 13 species), the Australasian and Oceanian regions (Daniels (1989) catalogued four species) and the Oriental Region (Oldroyd (1975) catalogued three species).

This review is confined to the Afrotropical fauna for which the taxonomic history can be briefly summarised as follows; the names provided being those used in the original publications:

Wiedemann (1821) – Described *Dasypogon humeralis* from South Africa ('Prom. bon. sp.', Cape of Good Hope).

Berthold (1827) – Described the genus *Ancylorhynchus*.

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Fig. 1. *Ancylorhynchus variabilis* nom. n., entire ♀ (Hotazel).

Wiedemann (1828) – Described *Dasypogon Nomada* of unknown provenance ('Vaterland?').

Macquart (1838) – Provided a brief generic description, using the name *Xiphocera*, and the description of *Xiphocera reynaudii* from the south-western parts of South Africa (i.e. 'Du Cap').

Walker (1854) – Listed a female of *Dasypogon Nomada* amongst specimens in the British Museum (The Natural History Museum, London).

Loew (1858) – Described three South African species, *Xiphocerus cruciger* and *unifasciatus* from 'Caffraria' (eastern part of the country) and *quadrimaculatus* from 'Cap. B. Sp.' (Cape of Good Hope, now part of the Western Cape Province).

Loew (1860) – Repeated his descriptions of *Xiphocerus cruciger*, *quadrimaculatus* and *unifasciatus* from South Africa, giving far more comprehensive information.

Loew (1863) – Described *Xiphocerus tricolor* based on material from Bloemfontein (in the Free State Province of South Africa), inexplicably listing *Xiphocera Reynaudii* Macquart as a synonym.

Van Der Wulp (1870) – Inferred that *Dasypogon Nomada* should be assigned to *Scylaticus* Loew, 1858.

Bigot (1879) – Described three South African species, *Xyphocerus maculatus* and *variegatus* from 'Cap. B. Sp.' (= Cape of Good Hope), and *fulvicollis* from 'Natal' (present day KwaZulu-Natal Province).

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Karsch (1879) – Described *Xiphocerus susurrus* on material from the 'Loango-Expedition in Chinchoxo' (present day Angola).

Bezzi (1908) – Described *Ancylorrhynchus crux* from 'du Congo belge' (DR Congo).

Kertész (1909) – Catalogued world species of *Ancylorrhynchus* including the following 10 Afrotropical species: *cruciger*, *fulvicollis*, *humeralis*, *maculatus*, *quadrimaculatus*, *susurrus*, *tricolor* (with *Reynaudii* as synonym), *unifasciatus*, *variegatus*. He listed *Nomada* under *Scylaticus* (following Wulp) and did not include *crux* (described in the previous year).

Speiser (1910) – Described two Tanzanian species, *Ancylorhynchus hylaeiformis* and *nyukinus* from material collected by Sjöstedt's Kilimandjaro-Meru Expedition.

Curran (1934) – Described *Ancylorrhynchus apicalis* from 'Southern Rhodesia' (Zimbabwe).

Bromley (1936) – Briefly discussed the genus, providing a key to 12 South African species – previously described (*cruciger*, *fortipes*, *quadrimaculatus*, *unifasciatus*) and new (*braunsi*, *funebris*, *insignis*, *magnificus*, *munroi*, *pretoriensis*, *splendens*, *zonalis*). In addition to describing eight new species he provided new records for *quadimaculatus* and *fortipes*. *Note*: This mention of *fortipes* is the first in the literature relating to *Ancylorhynchus* (see discussion under *fulvicollis*).

Efflatoun (1937) – Provided a generic description of *Ancylorrhynchus* as well as the description of *Ancylorrhynchus elbaiensis* from Gebel Elba, a mountain in an area of southern Egypt currently believed by the Sudanese government to belong to Sudan (see discussion under *elbaiensis*).

Lindner (1961) – Described *Ancylorhynchus oldroydi* from Dar-es-Salaam, Tanzania.

Hull (1962) – Provided a good generic description of *Ancylorrhynchus* listing all known species. Those listed as Ethiopian (Afrotropical) were: *apicalis*, *braunsi*, *cruciger*, *crux*, *fortipes*, *fulvicollis*, *funebris*, *humeralis*, *hyaeiformis* [sic = *hylaeiformis*], *insignis*, *maculatus*, *magnificus*, *munroi*, *nomada*, *nynkinensis* [sic = *nyukinus*], *pretoriensis*, *quadrimaculatus*, *reynaudii*, *splendens*, *susurrus*, *tricolor*, *tricolor reynaudii*, *unifasciatus*, *variegatus*, *zonalis*. In addition he listed, amongst the Palaearctic species, *elbaiensis* (see discussion below).

Oldroyd (1970) – Described *Ancylorrhynchus striatus* from Urundi (present day Burundi), recorded *crux* from the same country, and provided a key to 23 Afrotropical species (*apicalis*, *braunsi*, *cruciger*, *crux*, *fulvicollis*, *funebris*, *humeralis*, *hylaeformis* [sic, = *hylaeiformis*], *insignis*, *maculatus*, *magnificus*, *munroi*, *nomada*, *nyukinus*, *pretoriensis*, *quadrimaculatus*, *reynaudii*, *splendens*, *striatus*, *susurrus*, *unifasciatus*, *variegatus*, *zonalis*).

Oldroyd (1974) – Discussed *Ancylorrhynchus* and provided a key to 17 South African species, including a new species (*prunus* from Mozambique): *braunsi*, *cruciger*, *crux*, *fulvicollis*, *funebris*, *humeralis*, *insignis*, *maculatus*, *magnificus*, *munroi*, *pretoriensis*, *prunus*, *quadrimaculatus*, *tricolor*, *unifasciatus*, *variegatus*, *zonalis*.

Oldroyd (1980) – Catalogued the Afrotropical *Ancylorhynchus* species listing 25 valid names and two synonyms as follows: *braunsi*, *cruciger*, *crux* (with *apicalis* and *splendens* as synonyms), *elbaiensis*, *fulvicollis*, *funebris*, *humeralis*, *hylaeiformis*, *insignis*, *maculatus*, *magnificus*, *munroi*, *nomadus*, *nyukinus*, *oldroydi*, *pretoriensis*, *prunus*, *quadrimaculatus*, *reynaudii*, *striatus*, *susurrus*, *tricolor*, *unifasciatus*, *variegatus*, *zonalis*.

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Londt (1994) – Provided a key to the Afrotropical stenopogonine genera that included *Ancylorhynchus*.

Londt (1999) – Produced an updated key to Afrotropical stenopogonine genera that also included *Ancylorhynchus*.

Dikow (2009*a*, *b*) – Undertook cladistical analyses on the Asilidae in which he included specimens identified as *Ancylorhynchus fulvicollis*.

There were, therefore, 28 specific names found in the literature relating to the Afrotropical *Ancylorhynchus* fauna prior to the commencement of this study. These are the 25 species recognised by Oldroyd (1980), together with the two synonyms listed for *crux*, and the enigmatic *fortipes* (see discussion of this name under *fulvicollis* below).

This study proved frustrating in a number of respects, the main reason being the difficulty experienced in locating and accessing type material. While the types of many were traced and studied, one (*elbaiensis*) proved impossible to borrow while the repositories of three others could not be ascertained (*nomadus*, *reynaudii* and *tricolor*). Unfortunately, these represent some of the oldest known species and would have been particularly useful in sorting out various taxonomic issues. I am reluctant to accept that these three types should be considered lost as it remains possible that they could have been mislaid or that they may be housed in collections I have not consulted. In the absence of these types I have been obliged to make taxonomic decisions that may eventually prove incorrect. However, should the missing holotypes never be found, my decisions would stabilise the taxonomy—although it would probably become necessary for neotypes to be designated. Another frustration experienced related to poor communication and the lack of experienced personnel at some institutions. It had been my intention to study as many specimens as possible, but I failed to do this as some institutions did not respond appropriately to my requests for assistance. Despite these limitations I managed to study a total of 485 specimens and to discover a dozen new species.

MATERIAL AND METHODS

Specimens

Material cited in this study is housed in the institutions listed below. Abbreviations usually follow Arnett and Samuelson (1986). The curators that kindly assisted me are named in brackets following the name of the institution concerned.

AMGS – Albany Museum, Grahamstown, South Africa (A. Kirk-Spriggs).
AMNH – American Museum of Natural History, New York, USA (D. Grimaldi).
BMNH – The Natural History Museum, London, UK (E. McAlister).
BMSA – National Museum, Bloemfontein, South Africa (A. Kirk-Spriggs).
CASC – California Academy of Sciences, San Francisco, USA (C. Griswold).
CODI – Personal Collection of Dr T. Dikow (T. Dikow).
DMSA – Durban Natural Science Museum, South Africa (K. Williams).
ESEC – Entomological Society of Egypt Collection, Cairo, Egypt (H. Badrawy).
ISNB – Institut Royal des Sciences Naturelles de Belgique, Bruxelles, Belgium (P. Grootaert).
MCSN – Museo Civico di Storia Naturale, Genova, Italy (F. Penati).
MNHN – Museum National d'Histoire Naturelle, Paris, France (C. Daugeron).
MRAC – Musée Royal de l'Afrique Centrale, Tervuren, Belgium (E. De Coninck).
NHRS – Naturhistoriska Riksmuseet, Stockholm, Sweden (B. Viklund).

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NMSA – KwaZulu-Natal Museum, Pietermaritzburg, South Africa (M. Mostovski).
OXUM – Oxford University Museum of Natural History, Oxford, UK (D. Mann).
SAMC – South African Museum, Cape Town, South Africa (M. Cochrane).
SANC – National Collection of Insects, Pretoria, South Africa (R. Urban).
SMNS – Staatliches Museum für Naturkunde Stuttgart, Stuttgart, Germany (H.-P. Tschorsnig).
UZMD – Zoologisk Museum, Copenhagen, Denmark (T. Pape).
ZMHB – Museum für Naturkunde, Berlin, Germany (J. Ziegler).
ZSMC – Zoologische Staatssammlung, München, Germany (B. Stock).

Label data

In recognition of the value of detailed lists of material examined (Dikow *et al.* 2009), a standard format has been employed when recording label information. All important label data are reproduced as they appear on labels (except that upper case words may be transposed into upper and lower case). For multiple labels each label is demarcated by the use of single inverted commas while each line of data is separated by a spaced slash (i.e. /). Data that appear on the reverse side of a label are preceded by a '~' symbol. In some instances the colour of a label is provided in square brackets. Square brackets are also used when useful additional information, or comment, not found on labels, is provided. In this regard, coordinates are usually given when these, or a quarter-degree grid reference, do not appear on a label. Coordinates provided are usually for the populated place or geographic feature mentioned immediately before the added note (no attempt is made to estimate coordinates for collecting sites recorded as being a certain distance from a populated place). The use of question marks usually indicates unknown or questionable information. All specimens are arranged in geographical order according to latitude and within alphabetically ordered countries.

Descriptive passages

A brief generic diagnosis is provided. If a fuller description is required, that of Hull (1962) may be consulted. Species descriptions, although brief, are usually based on type specimens, and focus chiefly on characteristics that are considered reasonably helpful in the separation of species. As there is considerable variation in coloration, setal number and size, information relating to these characters should be interpreted with circumspection. Of particular significance is the development of the antennal stylus. In general, it is composed of one or two basal 'segments' followed by a sensory 'seta-like' element. In *Ancylorhynchus* there are two different conditions, a state where there is a single basal 'segment' tipped with a pit enclosing the sensory element, and a state where the 'segment' is missing and the pit-enclosed sensory structure is located at the distal tip of the postpedicel (see discussion at end of the paper). Perhaps the most important diagnostic features relate to the shapes of male genital structures. In order to fully view and study the male genitalia, these need to be excised, softened through maceration in KOH and extruded. However, once familiar with features useful in differentiating species it is possible, in most instances, to see these in well preserved dry-mounted specimens.

Final illustrations were prepared from pencil drawings and do not usually depict setae unless these are considered of possible diagnostic value.

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Measurements were taken as follows. Antenna: The lengths of scape, pedicel, postpedicel, and stylus (when a basal 'segment' is present) were measured. In order to standardise the illustrations of antennae every effort was made to depict the left hand side antenna in lateral aspect (outer view). In some instances this was not possible and it was necessary to depict the right antenna. When this was done the illustration was reversed in order to facilitate comparison. Wing: The length is measured from the humeral crossvein to the tip, while breadth is measured at the broadest level. When photographing wings every effort was made to avoid removing wings from a specimens. This was possible when the wing could be viewed without other structures obscuring it. This was not always possible and so it was sometimes necessary to remove the wing, which was then placed between two glass slides in order to achieve the best results. Detached wings were then reattached using clear nail varnish. Standard abbreviations are usually used, chiefly in accordance with McAlpine (1981), and are listed as follows: *aed* – aedeagus, *anatg* – anatergites, *anepm* – anepimeron, *anepst* – anepisternum, *cerc* – cercus/cerci, *cx* – coxa/coxae (1 – pro-, 2 – meso-, 3 – metathoracic), *dc* – dorsocentral setae, *epand* – epandrium/epandrial, *fem* – femur/femora (1 – pro-, 2 – meso-, 3 – metathoracic), *goncx* – gonocoxite (with outer and inner lobes), *gonst* – gonostylus, *hypd* – hypandrium, *kepst* – katepisternum, *ktg* – katatergite, *mes pnot* – mesopostnotum, *npl* – notopleural setae, *pal* – postalar setae, *proct* – proctiger, *r–m* – radial-medial crossvein, Rs – radial sector, S – sternite(s), *spal* – supra-alar setae, T – tergite(s), *tar* – tarsus/tarsi (1 – prothoracic, 2 – mesothoracic, 3 – metathoracic), *tib* – tibia/tibiae (1 – pro-, 2 – meso-, 3 – metathoracic), *tro* – trochanter/trochanters (1 – pro-, 2 – meso-, 3 – metathoracic).

Distribution

The Afrotropical Region may be conveniently split up into six subregions. *Ancylorhynchus* is known from four of these subregions (Table 1) and these subregions are used when discussing species distribution.

Southern Africa: Botswana, Lesotho, Mozambique (S of Zambezi), Namibia, South Africa, Swaziland, Zimbabwe.

Central Africa: Angola, Cameroon, Central African Republic, Chad, Congo, The Democratic Republic of Congo (subsequently referred to as DR Congo), Equatorial Guinea (including Bioko I.), Gabon, Malawi, Zambia.

East Africa: Burundi, Djibouti, Eritrea, Ethiopia, Kenya, Mozambique (N of Zambezi), Rwanda, Somalia, Sudan, Tanzania, Uganda.

Southern Arabia: Yemen (including Socotra, Abdelkuri).

West Africa: Benin, Burkina Faso, Côte d'Ivoire, The Gambia (subsequently referred to as Gambia), Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, Togo.

Indian Ocean islands: Aldabra, Amirante, Comoros, Cosmoledo, Madagascar, Mauritius, Réunion, Seychelles, Tromelin.

Biology

Very little is known about the biology of any species. In some instances labels assist in suggesting the kind of habitat involved at the time of collecting. Vegetation maps in various publications were used to gain some insights into habitats that may have been

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TABLE 1

The distribution of *Ancylorhynchus* species by subregion and country. Abbreviations: Ang – Angola, Bot – Botswana, Bur – Burundi, Cot – Côte d'Ivoire, DRC – Democratic Republic of Congo, Eri – Eritrea, Gam – Gambia, Gha – Ghana, Ken – Kenya, Les – Lesotho, Mal – Malawi, Moz – Mozambique, Nam – Namibia, Nig – Nigeria, RSA – Republic of South Africa, Som – Somalia, Sud – Sudan, Swa – Swaziland, Tan – Tanzania, Zam – Zambia, Zim – Zimbabwe.

	SOUTHERN							CENTRAL				EAST						WEST			
Species	**Bot**	**Les**	**Moz**	**Nam**	**RSA**	**Swa**	**Zim**	**Ang**	**Mal**	**DRC**	**Zam**	**Bur**	**Eri**	**Ken**	**Som**	**Sud**	**Tan**	**Cot**	**Gam**	**Gha**	**Nig**
cruciger	●	-	●	●	●	●	●	-	●	●	●	●	-	●	●	-	●	-	-	-	-
dilobion	-	-	-	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
doryphoros	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-	-	-	-
elbaiensis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-	-	-	-	-
feijeni	-	-	●	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
fulvicollis	-	-	-	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
funebris	-	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
gessi	-	-	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
greatheadi	-	-	-	-	-	-	-	-	-	-	-	-	●	-	-	-	-	-	-	-	-
hylaeiformis	-	-	-	-	-	-	-	-	-	-	-	●	-	●	-	-	●	-	-	-	-
insignis	-	-	-	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
magnificus	-	-	●	●	●	-	●	-	●	-	-	-	-	●	-	-	-	-	-	-	-
nomadus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
nyukinus	-	-	-	-	-	-	-	-	-	-	-	-	-	●	●	-	●	-	-	-	-
oldroydi	-	-	-	-	-	-	-	-	-	-	●	-	-	-	-	-	●	-	-	-	-

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TABLE 1 *(continued)*

The distribution of *Ancylorhynchus* species by subregion and country. Abbreviations: Ang – Angola, Bot – Botswana, Bur – Burundi, Cot – Côte d'Ivoire, DRC – Democratic Republic of Congo, Eri – Eritrea, Gam – Gambia, Gha – Ghana, Ken – Kenya, Les – Lesotho, Mal – Malawi, Moz – Mozambique, Nam – Namibia, Nig – Nigeria, RSA – Republic of South Africa, Som – Somalia, Sud – Sudan, Swa – Swaziland, Tan – Tanzania, Zam – Zambia, Zim – Zimbabwe.

	SOUTHERN							CENTRAL				EAST						WEST			
Species	**Bot**	**Les**	**Moz**	**Nam**	**RSA**	**Swa**	**Zim**	**Ang**	**Mal**	**DRC**	**Zam**	**Bur**	**Eri**	**Ken**	**Som**	**Sud**	**Tan**	**Cot**	**Gam**	**Gha**	**Nig**
phelpsi	-	-	-	-	-	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-
pretoriensis	-	-	-	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
prunus	-	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
reynaudii	-	-	-	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
similis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-	●	-
simpsoni	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●
snowi	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-	-
sokokensis	-	-	-	-	-	-	-	-	-	-	-	-	-	●	-	-	-	-	-	-	-
susurrus	-	-	-	-	-	-	-	●	-	●	-	-	-	-	-	-	-	-	-	-	-
tricolor	-	●	-	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
unifasciatus	-	-	-	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
variabilis	-	●	-	●	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
whiteheadi	-	-	-	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
zophos	-	-	-	-	●	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1	2	5	4	13	1	3	1	2	2	2	2	1	5	2	1	5	1	1	1	2

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occupied by the collected specimens. Of particular value in this regard is the book by Van Wyk and Smith (2001) which deals with regions of floristic endemism in southern Africa.

TAXONOMY

Genus *Ancylorhynchus* Berthold, 1827

Ancylorhinque Latreille, 1825: 490. Vernacular name.
Ancylorhynchus: Berthold 1827: 498 (Latinisation of *Ancylorhinque* Latreille). Type species: *Asilus glaucius* Rossi, 1790, by subsequent designation (Engel 1930: 363). [*Ancylorhynchus* originally proposed without included species: Engel's designation from first six included species (Bezzi 1903: 117–118).]
Xiphocera Macquart, 1834: 279. Type species: *Xiphocera percheronii* Macquart, 1834.
Enchocera Blanchard, 1840, nom. nud.
Elasmocera Rondani, 1846. Type species: *Elasmocera cingulata* Rondani, 1846.
Ancilorhynchus, *Ancylorrhynchus*. Incorrect subsequent spellings of *Ancylorhynchus*.
Xiphocerus, *Xyphocera*, *Xyphocerus*. Incorrect subsequent spellings of *Xiphocera*.

Diagnosis: Using characters employed by Londt (1999) in the construction of a key to the genera of Afrotropical Stenopogoninae and a few other characteristics the following brief diagnosis for *Ancylorhynchus* may be arrived at. Anatergites asetose; costal vein (C) extending around entire wing margin such that anal lobe (a1+2) and alula have bordering veins; palpi two-segmented; head clearly wider than high in anterior view (i.e. the face is relatively wide); proboscis strongly downward-curved and resembling the beak of a parrot. Claws, pulvilli and empodia well developed.

Note: The generic name is derived from the Greek words *ankylos*, meaning bent, hooked or crooked, and *rhynchos*, meaning nose, snout, or muzzle (Brown 1956).

Ancylorhynchus cruciger (Loew, 1858)

Figs 2, 3, 31, 32, 61–66, 148

Xiphocerus cruciger: Loew 1858: 348; 1860: 154.
Ancylorrhynchus crux Bezzi, 1908: 377; Hull 1960: 217; Oldroyd 1974: 33 (figs 16 head (lat.), 22 head (dor.)). **Syn. n.**
Ancylorrhyncus cruciger: Kertesz 1909: 100 (catalogue); Hull 1960: 217 (fig. 1785 ♂ terminalia); Oldroyd 1974: 31.
Ancylorrhynchus apicalis Curran, 1934: 7; Hull 1960: 217; Oldroyd 1974: 33.
Ancylorrhynchus splendens Bromley, 1936: 137; Hull 1960: 217; Oldroyd 1974: 33.
Ancylorhynchus apicalis: Oldroyd 1980: 360 (catalogue).
Ancylorhynchus cruciger: Oldroyd 1980: 360 (catalogue).
Ancylorhynchus crux: Oldroyd 1980: 360 (catalogue).
Ancylorhynchus splendens: Oldroyd 1980: 360 (catalogue).

Redescription:

Female.

Holotype *cruciger* (Condition: Excellent; although an old specimen, closely mounted to the pin head, only the tip of the right wing shows any sign of damage):

Head: Dark red-brown to black, silver and gold pruinose, yellow-orange and red-brown setose. Antenna (Fig. 3): Entirely orange, scape yellow and orange setose, pedicel with few pale yellow setae dorsally, postpedicel, tipped with obliquely placed pit-enclosed spine-like sensory element (terminal stylus 'segment' absent). Segmental ratios: 1:0.2:4.0. Face blackish, strongly gold pruinose except for lateral parts of epistomal margin, mystax shiny yellow occupying ventral ½ of face. Frons and vertex blackish,

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silver pruinose, yellow setose; ocellar tubercle fine pale yellow setose (no macrosetae). Occiput blackish, uniformly silver and gold pruinose strongly gold pruinose adjacent to eye margins), orange setose. Palpus orange, orange and dark red-brown setose (few dark setae terminally), terminal palpomere swollen. Proboscis orange and red-brown, red-brown setose.

Thorax: Black with orange areas dorsally, fine silver-grey pruinose, mainly pale yellow setose. Prothorax extensively orange (blackish laterally), fine silver pruinose, orange and dark red-brown (laterally) setose. Mesonotum orange, except for blackish medial stripe and dark patches centrally, anterior of transverse suture, fine silver-grey pruinose, fine short pale yellow setose. Mesonotal macrosetae (orange when present): *dc* weakly developed posterior to transverse suture (some may have been rubbed off), 3 *npl*, 2 *spal*, 3 *pal*. Scutellum orange except for dark red-brown anteromedial part, fine silver pruinose, disc sparsely yellow setose, hind margin with *c*. 6 orange weakly developed macrosetae accompanied by minor setae. Pleura extensively black (dorsal part of *kepst* orange-brown), entirely silver-grey pruinose, setae weak dark brown except for yellow setose *ktg*. *Anatg* and *mes pnot* chiefly blackish (orange-brown areas laterally), contrasting with orange scutellum. Legs: *cx* orange to brownish black, silver pruinose, white to yellowish setose; *tro* orange (*tro*2 with row of short black setae ventrally, Fig. 2); *fem*, *tib* and *tar* uniformly orange, yellow setose except for few dark red-brown setae ventrally on *fem*1 and some tarsomeres, claws dark red-brown with orange proximal parts. Wings (Fig. 31): 10.4×4.3 mm. Membrane extensively microtrichose (some proximal cells partly

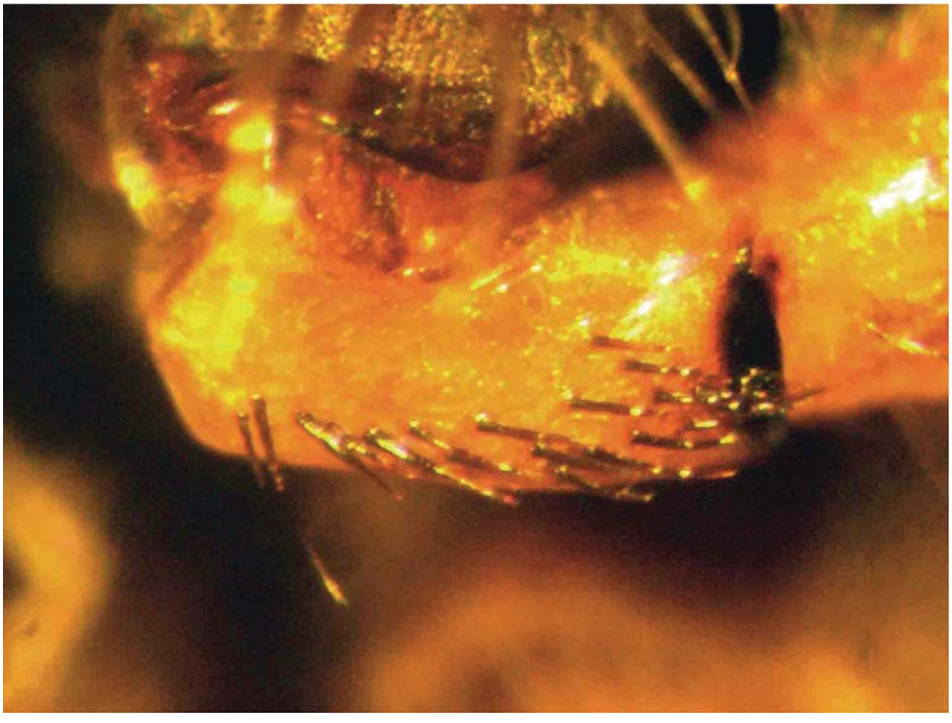

Fig. 2. *Ancylorhynchus cruciger* (Loew, 1858), mid leg trochanter showing ventral setae (♀ Serowe).

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bare), distal and posterior parts brown (from about *r–m* and posterior of Cup), other parts yellowish. Veins orange and dark brown (correlating with brown and yellow areas of membrane). Haltere dark red-brown.

Abdomen: Predominantly blackish with small orange to orange-brown patches dorsally, fine silver-grey pruinose, pale yellow and white setose. T1 uniformly blackish, T2–4 blackish with orange posterior margins and large silver pruinose areas posterolaterally; T5–7 dark red-brown to black, uniformly silver-grey pruinose; T8–9 orange-brown. Sternites uniformly blackish, silver-grey pruinose, white setose. Terminalia (Nelspruit ♀, Figs 64–66). Acanthophorites each with 6 well developed macrosetae. Spermathecae with tightly coiled tubes.

There being a fair degree of variation in the morphology of this species (see below) it is believed that the following redescription of the *crux* holotype provides useful additional information.

Holotype *crux* (Condition: Fair; both antennae broken off beyond pedicels; right palp with terminal palpomere missing; left mesothoracic leg broken off beyond trochanter. Some green verdigris associated with the pin is evident):

Head: Black, fine silver and gold pruinose, yellow and black setose. Antenna: Scape and pedicel orange, yellow setose (strongly ventrally), postpedicel missing. Segmental ratios: 1:0.3:–. Face black, extensively strong gold pruinose (except lateral parts of epistomal margin and small area below antennal sockets), mystax shiny yellow occupying entire facial profile. Frons and vertex black, fine silver-grey pruinose except for small lateral areas and anterior part of ocellar tubercle, pale yellow setose; ocellar tubercle fine pale yellow setose. Occiput black, strongly silver and silver-gold pruinose, orange setose except for few black setae mostly ventrally situated. Palpus with basal palpomere red-brown, apical palpomere orange-brown, black setose, swollen, apex with terminal sensory element. Proboscis dark red-brown, black setose.

Thorax: Black with orange areas dorsally, fine silver pruinose, pale yellow and black setose. Prothorax dorsally orange, laterally black, fine silver-grey pruinose, black and yellow setose. Mesonotum orange with black cross (broad medial band extending from anterior to posterior margins and transverse band at midlength that almost reaches lateral margins), fine silver-grey pruinose, fine black and yellow setose. Mesonotal macrosetae (yellow when present – some missing and represented only by their sockets): *dc* not evident, 2–3 *npl*, 2–3 *spal*, 3 *pal*. Scutellum black anteriorly, orange apically, fine silver pruinose, disc sparsely dark red-brown setose, hind margin with *c*. 4 yellow macrosetae accompanied by minor setae. Pleura entirely dark red-brown to black, entirely silver-grey pruinose, setae confined mainly to *anepst* (black), *kepst* (black) and *ktg* (yellow). *Anatg* and *mes pnot* black. Legs: *cx* black, silver pruinose (*cx*3 strongly so), white setose; *tro* red-brown (*tro*2 with row of short black setae ventrally); *fem*, *tib* and *tar* uniformly orange, yellow setose (except for black setae ventrally on *fem*1), claws dark red-brown with orange proximal parts. Wings: 10.8×4.3 mm. Veins orange and brown. Membrane extensively microtrichose (some proximal cells partly bare) giving wings a brownish colour, distal cells darker brown (from about level of *r–m* crossvein), proximal cells yellowish, posterior cells somewhat transparent. Haltere orange-brown.

Abdomen: Black with yellow patches dorsally, strongly gold (yellow parts) and silver (black parts) pruinose, pale yellow and white setose. T1 black, T2–7 black with extensive

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yellow areas posteriorly, T8 orange. Sternites entirely black, silver pruinose, white setose. Terminalia: Epigynium orange, acanthophorites well developed.

Male (based on holotype *splendens*. Condition: Good; hind margins of wings tatty.).

Agrees closely with female holotype (*crux*) except for the following: *Head*: Antennae entirely orange, postpedicel without terminal stylus 'segment', but with terminal pit-enclosed seta-like sensory element. Segmental ratios: 1:0.3:4.5. *Thorax*: Mesonotal macrosetae: 3 *npl*, 2–3 *spal*, 3–4 *pal*. Wings: 9.3×3.8 mm. Abdomen: T1 black, T2 black with posterior ⅔ yellow, T3–8 extensively yellow except for small black anterolateral parts. *Genitalia* (Figs 61–63): *Epand* bifid, forming pair of relatively short and stout lobes. Lobes closely abut proximally, each having curved appearance in dorsal view, distal parts strongly inwardly curved, opposing tips almost touching medially. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly beyond level reached by *epand*; dorsal finger-like process completely absent; inner lobe well developed, distal end sclerotised, medially directed (overlapping opposing lobe). *Gonst* laterally compressed, dorsally directed, tip curved anteriorly (largely hidden from view in undissected genitalia). *Hypd* well developed, tapering fairly rapidly to broad truncate distal end; distal end with pair of diverging, rounded protuberances each with group of converging setae (readily seen in dry material). *Aed* (largely hidden in undissected genitalia) with tiny bifid distal tip. *Note*: Komatipoort ♂ has *goncx* with a posteroventral indentation which appears to be an aberration.

Variation: A fairly variable species with a wide distribution. Some of the more obvious variations are as follows. Mystax is usually limited to ventral half of face but may extend into dorsal half; mystax is usually shiny bright yellow but may also be pale yellow or even white (e.g. some specimens from Namibia and Swaziland) or even brownish (e.g. some specimens from Somalia). While the blackish mesonotal cross-shaped marking is fairly uniformly shaped some specimens may have more extensive markings while others may almost lack a cross (a Mozambique female). While the majority of specimens have yellowish wings with a brownish distal end (e.g. those from the eastern parts of Southern Africa, Fig. 32) there is considerable variation involving a darkening of the proximal and posterior parts of the wing, leaving the yellowish colour limited to the anterocentral parts of the wing (e.g. specimens from Northern Cape of South Africa and Somalia). Femora usually uniform orange, but may have red-brown parts dorsally (e.g. a Swaziland specimen). Abdomen commonly extensively yellowish and strongly gold pruinose, but may also be extensively black and weakly pruinose (intermediate states are encountered).

Holotype *cruciger* (examined): ♀ SOUTH AFRICA: '53', '244', '*Xiphocerus* / *crucifer* [sic]' [white typed] (NHRS). *Note*: Loew (1858) gives provenance as 'Caffraria (Wahlb.)'. The specimen being collected by Wahlberg on an expedition through the eastern parts of Southern Africa.

Holotype *crux* (examined): ♀ DR CONGO: 'Type' [orange with black edge], 'Musée / Du Congo Belge / Congo Belge', '*Ancylorrhynchus* / *crux* / ♀ n. sp.' [much folded label], 'R. Det. / M / 243', 'Holo / *A. crux* / MRAC' (MRAC).

Holotype *apicalis*: ♀ ZIMBABWE: 'Matetsi [mission, 18°05'S:26°07'E] / S. Rhodesia / Apr. 1933' [black on white], 'Acc. 3475' [red on white], '*Ancylorrhynchus* / *apicalis* / Curran ♀ / Holotype.' [black on red] (AMNH). *Note*: I have not personally handled this holotype, however Tam Nguyen (AMNH) kindly sent me excellent digital photographs that clearly support the synonymy of *apicalis* with *crux*.

Holotype *splendens* (examined): ♂ SOUTH AFRICA: 'Barberton [25°47'S:31°03'E] / De Kaap. B. 30 / 1-5-20 / H.K. Munro', 'Holotype / *Ancylorrhynchus* / *splendens* Br' [red], '*Ancylorrhynchus* / *splendens*

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Brom. / ♂ / Holotype No. 148' [red ink] (NMSA). Allotype ♀ 'Bulawayo [20°09'S:28°35'E] / S Rhodesia / 19.i.1927 / R.H. Stevenson' [red], '*Ancylorrhynchus* / *splendens* ♀ Brom / ♀ / Allotype No. 149' [red ink] (NMSA).

Other material examined: BOTSWANA: 1♀ 'Nord-Botswana / Okavango-Delta / Kulturlandschaft / Sepupa [18°44'S:22°11'E], 3.iii.1994 / le.g. H. Schumann' (ZMHB); 1♀ 'Botswana SE 2226BD / Farmers Brigade 5km / SE of Serowe Hillside / N slope P Forchhammer / Malaise trap 6 / i.88' (NMSA); 1♂ 'Botswana: Serowe #1 / Farmer's Brigade / 22°25'S 26°44'E 1000m / Date: xi.1989 / Coll: P. Forchhammer / Malaise Trap' (NMSA); 1♀ 'Beretse Pan [23°52'S:23°24'E] / Bechuanaland / 6.3.1963 / T. Oatley' (NMSA). BURUNDI: 1♀ 'Urundi: Rumonge [03°57'S:29°27'E] / alt. 790m. 19–20.vi.1948 / F. François', 'Sable et broussailles / près rive de Lac / Tanganyika' (ISNB) [recorded by Oldroyd (1970)]. DR CONGO: 1♀ 'Congo belge: P.N.U. / Mabwe [07°05'S:22°59'E] (r. E. lac Upemba) / (585m.) 1–11-i-1949 / Mis. G.F.de Witte. 2179a' (MRAC). KENYA: 1♀ 'East Africa / Protectorate: Foot of Kikyugu / Escarpment, / near Naivasha [00°43'S:36°26'E] / 7.300 feet / 3.iii.1911. / S.A. Neave. / 1912. 155' (BMNH); 1♀ 'Brit. E. Africa / Tsavo River [02°59'S:38°31'E] / 25.iii.1911 / S. A. Neave' (BMNH). MALAWI: 1♀ 'Nyasaland / Protectorate / Betw. Fort Maguire [ruins, 13°39'S:34°53'E] / and Fort Johnston, / S-E shore of L. Nyasa / 15.iii.1911. / S. A. Neave / 1912–155' (BMNH); 1♀ 'Nyasaland / Lingadzi, [13°58'S:33°48'E] 71 / Nr. Domira Bay, / 30.i.1915 1700 ft. / Dr. W.A. Lamborn.' (BMNH); 1♀ 'Nyasaland / Lingadzi, 71 / Nr. Domira Bay, / 7. iii.1915 1700 ft. / Dr. W.A. Lamborn.' (BMNH); 1? 'Nyasaland / Lingadzi, 71 / Nr. Domira Bay, / 2.iii.1915 1700 ft. / Dr. W.A. Lamborn.' (BMNH); 1♂ 'Nyasaland. / S.W. shore L. Nyasa. / Btwn. Ft. Johnston [= Mangochi, 14°28'S:35°16'E] / & Monkey Bay. 1650 ft. / 25 Feb.–Mch. 4 1910. / S.A. Neave', 'Sammlung / F. Hermann', '*Ancylorrh*. / *cruciger* / var *crux* / Bzzi', '~~*cruciger*~~ – *crux* / Bezzi', '*Ancylorrhynchus* / *cruciger* – *crux* / Bezz. / det. E. O. Engel', *Ancylorrhynchus* / *crux* Bezzi ♂' (ZSMC); 2♀ 'Nyasaland / Fort Johnston / Casey' (DMSA); 1♂ 1♀ 'Nyasaland. / S.W shore L Nyasa. / Btwn. Fort Johnston / & Monkey Bay. 1650 ft. / 25 Feb. – Mch 4 1910 / S.A. Neave' (BMNH); 1♂ 'Nyasaland / Lake Nyasa. / Monkey Bay, [14°05'S:34°55'E] / 1.xi.1915 / Dr. W.A. Lamborn.' (BMNH); 1♂ 'M9085 / Nkapola Hill [14°20'S:35°10'E] / Malawi / ii.1978 C.D. [Cornell Dudley]' (NMSA); 1♂ 'M9087 / Nkapola Hill / Malawi / ii.1978 C.D.' (NMSA); 1♂ 'M9088 / Nkapola Hill / Malawi / ii.1978 C.D.' (NMSA); 1♂ 1♀ 'G1xG [or GxG1 - in cop.], S.W. of / L. Chilwa [15°12'S:35°50'E] / Nyasaland / 15.i.1914 / S.A. Neave' (BMNH); 1♀ 'B>B1 / S.W. of / L. Chilwa / Nyasaland / 14.i.1914 / S. A. Neave' (BMNH); 1♀ 'A>A1 / S.W. of / L. Chilwa / Nyasaland / 15.i.1914 / S. A. Neave' (BMNH); 1♀ 'S.W. of / L. Chilwa / Nyasaland / 15.i.1914 / S. A. Neave' (BMNH); 1♂ 'B>B1 / Mlanje [16°02'S:35°30'E] / Nyasaland / 12.ii.1914 / S.A. Neave', 'Tachinidae / det. 1938 / J. Smart' (BMNH); 1♂ '24.iii.13 / S.A.N.', 'Mlanje / Nyasaland, / 1913. / S. A. Neave' (BMNH); 1♀ 'Mlanje / Nyasaland, / 18.12.1913. / S. A. Neave' (BMNH); 1♀ 'Mlanje / Nyasaland, / 21.iii.1913. / S. A. Neave' (BMNH); 1♂ 'Nyasaland / Mt. Mlanje / 24.ii.1913. / S. A. Neave' (BMNH); 1♂ 'Mt. Mlanje, / Nyasaland / 7.i.1914. / S. A. Neave' (BMNH); 1♀ 'Mlanje / Nyasaland / 14.iv.1913 / S. A. Neave' (BMNH); 1♀ 'Mlanje / Nyasaland / 13.ii.1914 / S. A. Neave' (BMNH); 1♀ 'Mlanje / Nyasaland / 19.iv.1914 / S. A. Neave' (BMNH); 1♂ [no locality but is Mlanje] 'I1<I / 12.iii.13 / S.A. N', 'I>I1 / 24.iii.13 / S.A.N.', '*Jassus maculiner*- / *vis*. Stal. / det. In B.M. / W.E. China.' (BMNH); 1♂ 'Portugese / E. Africa [? Mozambique]: / Mlanje Mt. / 6.i.52. / J. Vincent Coll. / B.M. 1933–194.' (BMNH); 1♀ 'Nyasaland / Chiromo [16°33'S:35°08'E] / 12.v.1910 / Dr. J.E.S. Old' (BMNH); 1♀ 'Nyasaland / Ruo R. [16°33'S:35°09'E] / 3.iii.1913 / S.A. Neave' (BMNH); 1♂ '19.iii.13 / S.A.N.', 'Sammlung / F. Hermann', '*Ancylorrh*. / *cruciger* / Lw.', 'Nyassa [pink]', '*cruciger* Lw', '*Ancylorrhynchus* / *cruciger* Lw. / det. E. O. Engel ♂' (ZSMC). MOZAMBIQUE: 1♂ 'Inhambane [23°51'S:35°29'E] / P.E.Afr / R.F. Lawrence' ~ 'Jan. / 1924' (SAMC); 1♀ 'Zambezi / Caia. [25°19'S:32°58'E] / 29.v.1912 / H. Swale' (BMNH); 1♀ 'Moçambique / Macaneta [25°52'S:32°14'E] / 23.3.1980 / Coll. H.R. Feijen' (NMSA); 3♀ 'Moçambique / Inhaca [26°01'S:32°58'E] / 20.4.1980 / Coll. H.R. Feijen' (NMSA); 1♀ 'Moçambique / Goba [26°12'S:32°08'E] / 12.5.1980 / Coll. H.R. Feijen' (NMSA). NAMIBIA: 1♂ 'Namibia: Epupa / Falls [17°00'S:13°15'E], Kunene / 20.–22.ii.1994 / le.g. F. Koch' (ZMHB); 1♀ 'Namibia: Kunene / 9km W Ruacana / 17°26'S/14°09'E / 24.–26.ii.1994 / le.g. H. Schumann' (ZMHB); 1♀ 'Namibia / Popa / Falls [18°07'S:21°33'E] / 28.ii.–6.iii.1993 / le.g. F. Koch' (ZMHB); 1♀ 'Namibia: Kavango / Camp Popa / 18°07'S/21°34'E / 28.ii.–5.iii.1994 / le.g. H. Schumann' (ZMHB); 1♀ 'Kaross [19°30'S:14°20'E] / S.W.A.' ~ 'Mus. Exped. / Feb. 1925' (SAMC); 1♀ 'Namibia / 20km n of Usakos / Ameib [21°48'S:15°38'E] / 9 May 1978 / V.B. Whitehead' (SAMC). SOMALIA: 2♂ 1♀ 'Coll. A. Mochi / 17–31.v.35 / Iscia Baidoa [03°04'N:43°48'E] / Somalia' (MCSN); 4♂ 3♀ 'Iscia Baidoa / Somalia / v.35' (MCSN); 1♂ 'Iscia / Baidoa / V.35 Somalia' (MCSN); 1♀ 'Brit. Somaliland / 1950 / Agric. & Vet. Services / Ex Cotton plants' (BMNH). SOUTH AFRICA: 1♂ 'South Africa, Tvl. / Mogol Nature Reserve / Ellisras Dist. 23.58S / 27.45E. 27–29.ii.1984 / C.D. Eardley' (SANC); 1♂ 'So. Africa: Transvaal / Kruger National Park / Skukuza 2431DC / 1–3.iii.1982 R. Miller / & P. Stabbins Malaise trap' (NMSA); 1♂ 'Moorddrift [24°17'S:28°57'E] / Oct 1909 / C.J. Swierstra' (NMSA); 1♀ 'GAH Bedford / Pretoria [25°44'S:28°11'E] / 8.ii.1917' (BMNH); 1♀ 'GAH Bedford / Pretoria / 22.ii.1917' (BMNH); 1♀ 'Nylstroom [24°42'S:28°24'E] / 16–31/12/21 / G.P.F. v. Dam' (NMSA); 1♂ 'South Africa, Tvl. / Kruger Nat. Park / Skukuza, 24.59S / 31.55E. 20.i.1984 / M.W. Mansell' (SANC); 1♀ 'Kruger N. Park, Onder Sabie [Rest-camp, 25°07'S:31°55'E]. / Tvl. 22/5/1969 / L.C.

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Starke' (SANC); 1♀ 'Platriver [25°10'S:28°05'E] / Wtb [Waterberg] Distr. / 1–11 [1.xi] 1903 / R.v.Jutrencha' (NMSA); 1♂ 'Komatipoort [25°26'S:31°57'E], / Tvl. 3.6.69 / M.W. Strydom' (SANC); 1♀ 'Nelspruit [25°28'S:30°58'E] / 2.1915 / A. Roberts' (NMSA); 1♀ 'Sth Africa Cape Prov / ca 5km W Hotazel / 2722BB 23.iii.1982 / J. Londt & L. Schoeman / Acacias/Grass/Shrubs' (NMSA); 1? 'Lake Sibaya [27°20'S:32°42'E] / Zululand / 13.4.1968 / T. Schofield' (NMSA); 1♂ 'Magude [Magudu 27°32'S:31°39'E] 10. 1918 / C.J. Swierstra' (NMSA); 1♂ 'South Africa: N Cape / Witsand Nature Reserve / 28°33.615'S 022°29.105'E / 1160m J Londt & T Dikow / 31.i.–1.ii.2004 Acacia / savanna & white dune area' (NMSA); 1♂ 'South Africa: Natal / Richards Bay Mineral / 2838S 3215E iii.83 / P Atkinson 33m / at light' (NMSA); 1♀ 'Mfongosi [28°42'S:30°48'E] / Zulu L. / WE Jones' ~ '1914' (SAMC); 1♀ 'Mfongosi / Zulu L. / WE Jones' ~ 'Jan. / 1917' (SAMC); 1♂ 'Mfongosi / Zulu L. / WE Jones' (BMNH); 1♂ 'Natal. / Weenen [28°51'S:30°05'E] / iii.1924 / H.P. Thomasset' (BMNH); 1♀ 'Natal / Estcourt [29°00'S:29°53'E]' ~ 'Haviland 18' (NMSA); 1♂ 'Estcourt / 12/96' (NMSA); 1♂ 'Durban [29°51'S:31°01'E] / 12/4/32' (NMSA); 1? 'Marley / Stella B [Stella Bush, Durban, 29°51'S:31°01'E] / 3-1915' (SAMC); 1♀ 'Congella [29°52'S:31°00'E] / Marley / 3-15' (NMSA); 1♀ 'Metlapitsi [?] / Jan. 1911 / H.G. Breijer' (NMSA); 1♀ 'Kafferal. [Kafferland] / Drège S', '501', 'Zool. Mus. / Berlin' (ZMHB). SWAZILAND: 1♂ 'Swaziland #45 / 13km N. of Ngogolo / 26°19'S 31°38'E 300m / Date: 22–24.iv.1991 / J Londt & L Schoeman / Panata Ranch / Bushveld' (NMSA). TANZANIA: 1♂ 'Tanzania, Mkomazi / Game Reserve, Ibaya / Camp, 3.58S 37.48E. / 11 Mar – 5 Apr 1996', 'S. Van Noort / Malaise trap. / *Acacia*/*Commiphora*/ / *Combretum* bushland' (SAMC); 1♀ 'Zanzibar / Jambiani [06°19'S:39°33'E] / 23.iii.1993 / K. Guichard' (BMNH); 1♂ 'Tanganyika T. / Kilossa [06°50'S: 36°59'E] / 3.iii.1921 / A. Loveridge' (BMNH); 1♂ 'Tanganyika Ty. / Morogoro [5 places with this name – district 06°50'S:37°45'E] 6/5/22 / coll: A.H. Ritchie' (BMNH); ZAMBIA: 1♂ 'N. Rhodesia: / 39 mi SW. of / Ft. Jameson [= Chipata, 13°28'S:32°46'E] / iii.1.58, 1150m', 'E.S. Ross & / R.E. Leech / collectors' (CASC). ZIMBABWE: 1♀ 'T.R.S. / 23.i.59 / N.J.M', 'Trelawny [17°32'S:30°27'E] / S. Rhodesia' (NMSA); 1♀ 'A. Cuthbertson / 1929-328', 'Salisbury [Harare, 17°50'S:31°03'E] / S. Rhodesia / Dept. Agric. / ii.1912' (BMNH); 1♀ 'Hillside [17°50'S:31°05'E], S. Rhod. / 2.2.1923 / Swinburne & Stevenson' (NMSA); 1♂ 'Hillside, S. Rhod. / 4.4.1923 / Swinburne & Stevenson' (NMSA); 1♂ 'Umtali [18°58'S:32°40'E] District / S Rhodesia / 25.i.1931 / P.A. Sheppard' (NMSA); 1♂ '14.2.47 / Wankie [19°10'S:26°30'E] / S.R. / D. Lovemoore' (AMGS); 1♂ 'N. Vumba [Mts, 19°53'S:31°22'E] / S. Rhodesia / 21.2.1966 / D. Cookson' (NMSA); 1♀ 'Vumba / Umtali Dist / Feb. 1932 / PAS [PA Sheppard]' (NMSA); 1♂ 'Bulawayo [20°09'S: 28°35'E] / 28.iii.1923 / R. Stevenson' (NMSA); 1♀ 'Bulawayo / 17.iii.1923 / R. Stevenson' (NMSA); 1♂ 'Hope Fountain [mission, 20°16'S:28°39'E] / S. Rhodesia / 2.i.1923 / Neville Jones' (BMNH).

Distribution, phenology and biology: Widely distributed in Southern, Central and East Africa (Table 1, Fig. 148) with a few records north of the equator. Adults have been collected from October–June (Table 2). The biology is poorly known, but the limited label data available suggest that this is a woodland, savanna, scrubland species that can also survive in semi-arid habitats. Two prey records (both for BMNH males) are known to me, i.e. Diptera (Tachinidae) and Hemiptera (Cicadellidae).

Similar species: A member of the *nomadus* species-group with close similarities to both *hylaeiformis* and *sokokensis*. It is necessary to compare male genital structure to adequately differentiate these species.

Ancylorhynchus dilobion sp. n.

Figs 4, 33, 67–69

Etymology: From Greek *di-* (two, *dis*) and *lobion* (a small rounded protuberance). Males of the species possess a pair of small rounded lobes on the distal margin of the hypandrium.

Description:

Male (based on holotype. Condition: Excellent; thorax slightly greasy).

Head: Dark red-brown to blackish, silver pruinose, mainly dark red-brown setose. Antenna (Fig. 4): Scape and pedicel dark red-brown, dark red-brown setose, postpedicel orange-brown proximally becoming dark red-brown distally, terminal stylus 'segment' present, tipped with obliquely situated pit-enclosed spine-like sensory element.

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Segmental ratios: 1:0.3:3.3:0.3. Face blackish, uniformly silver pruinose (weakly so on lateral parts of epistomal margin), mystax blackish occupying ventral ¾ of face (weakly dorsally). Frons and vertex blackish, fine silver-grey pruinose, dark red-brown to black setose; ocellar tubercle fine blackish setose (no macrosetae). Occiput blackish, uniformly fine silver-grey pruinose, dorsal setae mainly brown-orange setose, all other setae dark red-brown to blackish. Palpus dark red-brown, blackish setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis dark red-brown (proximally a little paler), blackish setose.

Thorax: Blackish with orange areas dorsally, fine dull silver-grey pruinose, dark red-brown and brown-orange setose. Prothorax: Anterior antepronotum orange, posterior antepronotum dark red-brown with some orange areas dorsally, fine silver-grey pruinose, dark red-brown setose. Mesonotum blackish except for orange postpronotal and postalar lobes (and immediate surrounding areas), fine silver-grey pruinose, fine short dark red-brown setose. Mesonotal macrosetae (orange when present): *dc* tiny dark red-brown setae confined to area posterior to transverse suture, 2 *npl*, 1 *spal*, 2 *pal*. Scutellum entirely orange, fine silver pruinose, disc sparsely dark red-brown setose, hind margin with 5 brown-orange macrosetae accompanied by minor setae. Pleura entirely blackish, entirely silver-grey pruinose, setae dark red-brown confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* blackish, contrasting with orange scutellum. Legs: *cx* blackish, silver pruinose, *cx*1&2 black setose *cx*3 white setose; *tro* blackish (*tro*2 without obvious ventral setae); *fem*1&2 blackish except for orange distal ends, *fem*3 mostly orange with central parts dark red-brown dorsally and ventrally, *tib* and *tar* entirely orange, major setae orange or dark red-brown minor setae white or pale yellowish, claws dark red-brown with orange proximal parts. Wings (Fig. 33): 6.6×2.6 mm. Veins brown. Membrane pale brown, extensively microtrichose (small parts of some proximal cells partly bare). Haltere orange with brown stalk.

Abdomen: Predominantly blackish, most segments with narrow orange posterior margins, silver-grey pruinose, white and dark red-brown setose. T1 blackish, dull pruinose, longish white setose, T2 dark red-brown with narrow orange-brown posterior margin, strongly silver pruinose posterolaterally, mainly white setose (some small dark red-brown setae present laterally); T3–6 dark red-brown with narrow brown-orange posterior margins, strongly silver pruinose posterolaterally, short dark red-brown setose; T7 red-brown, fine silver-grey pruinose, dark red-brown setose; terminalia orange-brown. Sternites similar to tergites, but all setae short dark red-brown.

Genitalia (paratype, Figs 67–69): *Epand* bifid, forming pair of relatively short, straight slender lobes that project beyond all other genital structures. Lobes closely abut proximally, lie parallel with one another, distal parts slightly inwardly curved. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe with ventral flange-like structure clearly evident; dorsal finger-like process reduced to a setose, broadly rounded bump; inner lobe well developed, distal end sclerotised, medially directed. *Gonst* laterally compressed, dorsally directed, tip curved anteriorly. *Hypd* well developed, somewhat wider than long, tapering fairly rapidly to broad somewhat truncate distal end; distal end with pair of fairly widely separated, small distal protuberances. *Aed* sub-triangular in shape with tiny bifid distal tip.

Female. Similar to male, orange parts of mesonotum more extensive, *fem*3 entirely orange.

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Variation: A remarkably consistent species, the extent of dark red-brown coloration of *fem*3 is, however, somewhat variable.

Holotype: ♂ SOUTH AFRICA: 'Paleisheuwel [32°28'S:18°43'E] / C.P.' ~ 'Mus. Exp., Nov. 1948' (SAMC).

Paratypes: SOUTH AFRICA: 2♂ 1♀ 1? same data as holotype (SAMC); 1♂ 'Bulhoek [31°47'S:25°06'E] / Klaver-Clanw.' ~ 'Mus., Expd., / Oct. 1950' (SAMC).

Distribution, phenology and biology: Known only from South Africa (Table 1). Adults have been collected in October and November (Table 2). The biology is unknown, but the two known localities are located in the Fynbos biome of the Western Cape Province of South Africa.

Similar species: A member of the *reynaudii* species-group with close similarities to *gessi*, *variabilis* and *whiteheadi*.

Ancylorhynchus doryphorus sp. n.

Figs 5, 34, 70–72

Etymology: From Greek *doryphoros* (spear-bearing). Refers to the relatively straight, elongate gonostyli possessed by this species.

Description:

Male (based on holotype. Condition: Good; left antenna broken off beyond pedicel; generally slightly dirty).

Head: Dark red-brown, silver pruinose, white to pale yellow and dark red-brown setose. Antenna (Fig. 5): Dark red-brown. Scape ventrally strongly pale yellow setose, dorsally weakly pale yellow and dark red-brown setose. Pedicel poorly setose pale yellowish and red-brown. Postpedicel tipped with obliquely situated pit-enclosed spine-like sensory element (terminal stylus 'segment' absent). Segmental ratios: 1:0.3:6.3. Face dark red-brown, uniformly fine silver-grey pruinose except for lateral parts of epistomal margin, mystax shiny white occupying ventral ⅓ of face. Frons and vertex dark red-brown, fine silver pruinose, white setose; ocellar tubercle fine pale yellow setose (no macrosetae). Occiput dark red-brown, uniformly silver pruinose, white setose. Palpus red-brown, red-brown setose, terminal palpomere with terminal sensory pit. Proboscis red-brown, pale yellow setose.

Thorax: Dark red-brown to black with orange areas dorsally, fine silver pruinose, white to pale yellow setose. Prothorax orange anteriorly dark red-brown porteriorly, silver pruinose, white to pale yellow setose. Mesonotum predominantly blackish (median band from anterior margin, but falling short of posterior margin, plus pair of longitudinal lateral bands straddling transverse suture) except for orange areas involving postpronotal lobes (and adjacent areas), lateral margins and areas including postalar lobes and intervening region, fine silver-grey pruinose, fine moderately long whitish setose. Mesonotal macrosetae (pale yellow when present): *dc* pale yellowish confined to area posterior of transverse suture, *c*. 3 *npl*, 1 *spal*, 2 *pal*. Scutellum orange posteriorly, dark red-brown anteriorly, fine silver pruinose, disc sparsely pale yellowish setose, hind margin with *c*. 8 pale yellow weakly developed macrosetae accompanied by minor setae. Pleura mostly dark red-brown to black except for orange *ktg*, entirely silver pruinose, setae white to pale yellow confined mainly to *anepst*, *kepst* and *ktg*. *Anatg* orange, *mes pnot* blackish, not contrasting with scutellum. Legs: *cx* dark red-brown to blackish, strongly silver

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pruinose, white setose; *tro* dark red-brown. Apruinose (*tro*2 with row of short black setae ventrally); *fem*, *tib* and *tar* orange (terminal tarsomeres dark red-brown), extensively pale yellowish setose (*fem*1&2, distal ends of tibiae and tarsi with some black setae), claws dark red-brown with paler proximal parts. Wings (Fig. 34): 9.3×3.6 mm. Veins orange. Membrane extensively microtrichose (some proximal cells partly bare), cells mostly transparent and without obvious darkly stained areas. Haltere orange.

Abdomen: Predominantly dark red-brown with orange-brown areas, fine silver-grey pruinose, pale yellow-white setose. T1 dark red-brown, strongly silver pruinose; T2–4 dark red-brown with brown-orange posterior margins, moderately silver pruinose; T5 and beyond dissected with terminalia. Sternites similar to tergites but lacking orange coloration.

Genitalia (Figs 70–72): *Epand* bifid, forming pair of parallel, moderately slender lobes. Lobes closely abut proximally, each being relatively straight with tapering distal tips. *Proct* simple, dorsally situated *cerc* closely associated for much of their length. *Goncx* well developed, outer lobe projecting posteriorly to small distal lobe; dorsal finger-like process well-developed, broadly rounded and bearing some moderately strong setae; inner lobe moderately developed, distal end more or less straight, strongly sclerotised and only weakly medially directed. *Gonst* hardly, if at all compressed, straight and dorsally directed. *Hypd* fairly weakly developed, broad proximally, about twice as broad as long in ventral view, tapering rapidly to truncate posterior margin. *Aed* sub-triangular with tiny bifid distal tip.

Female. Unknown.

Holotype: ♂ TANZANIA: 'Tanganyika / Mahali Peninsula [Mountains, 06°12'S:29°50'E] / Aug.–Sept. 1959. / 2nd. Oxford U. Exped. / B.M.1960279.' (BMNH).

Distribution, phenology and biology: Known only from the type locality in East Africa (Tanzania) (Table 1) and collected in either August or September (Table 2). The biology is unknown.

Similar species: A member of the *nomadus* species-group with close similarities to *phelpsi*.

Ancylorhynchus elbaiensis Efflatoun, 1937

Figs 35, 73, 74

Ancylorrhynchus elbaiensis: Efflatoun 1937: 274 (figs 212, 213 head, 214, 215 male terminalia, pl. 5 fig. 48 whole specimen); Hull 1960: 217.
Ancylorhynchus elbaiensis: Oldroyd 1980: 360 (catalogue); Lehr 1988: 233 (catalogue).

Efflatoun (1937) published an excellent description, stating 'The only two specimens known of this species are males; they both originate from Gebel Elba (South Eastern Desert) where they had been captured by Mohammed Tewfik Effendi between 15.iii and 30.iv.1928'. He mentions a 'type' and a 'cotype' – I have seen photographs of both specimens and believe that one lacking a left wing must be considered the holotype judging from the description of its abdomen (e.g. T5 with anterior half black). The other specimen is therefore a paratype. Efflatoun goes on to say 'not unlike *crux'* and that it 'differs from it by the relative lengths of the third antennal segment, the colour of the wings and by the colour and markings of the abdomen'. *A. crux*, now a synonym of *cruciger*, is a widespread, fairly variable species and until direct comparisons are

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possible I believe that it is the male terminalia (reasonably well illustrated by Efflatoun) that provide the most convincing evidence for the distinctiveness of *elbaiensis*.

Despite efforts to borrow the type specimens for study, this proved impossible. Fortunately, I made contact with Dr Haitham Badrawy Mosa, a lecturer of entomology at the Ain Shams University in Cairo, who kindly sent me a series of digital photographs of both type specimens now housed in the collection of the ESEC. These specimens appear to be in reasonable condition and indicate that Efflatoun's fine colour plate (his fig. 48, the wing of which is reproduced here as Fig. 35) and his other illustrations (figs 212, 213, head, anterior and lateral views; figs 214, 215, male genitalia, dorsal and ventral views) are accurate depictions. Although it might be possible to redescribe the species using Badrawy's photographs this is considered unnecessary as Efflatoun provided a well-prepared description.

Genitalia: Efflatoun (1937) published two informative illustrations of the male terminalia, i.e. his figs 214, 215 (reproduced here as Figs 73, 74). These clearly show a typical, although fairly short *epand*, not projecting far beyond *proct*. The *hypd* is particularly well developed, tapering rapidly to a large, triangular, mediodistal, setose lobe that projects beyond all other genital structures. This lobe has a 'narrow apex divided into two minute pointed processes'. These characteristics clearly indicate that *elbaiensis* represents a species that is distinctive amongst the Aftotropical *Ancylorhynchus* fauna.

Holotype (not examined): ♂ EGYPT / SUDAN: 'Gebel Elba [22°11'N:36°22'E] / South Eastern Desert / 15.3 to end April 1928', 'Coll. Efflatoun / Egypte', 'Type' [red], '*Ancylorrhynchus* / *elbaiensis* Effl. / Det. Efflatoun' (ESEC).

Paratype (not examined): ♂ with similar labels as holotype.

Distribution, phenology and biology: Known only from the type locality in Egypt/Sudan (Table 1). Gebel Elba (= Mount Elba), is a 1435 m high mountain that is found in the Hala'ib Triangle, an area under the administration of Egypt. However, the Sudanese government disputes the boundary between the two countries and the mountain is located in the disputed area. The mountain is known to be a biodiversity hotspot, and although Elba is in a region that gets only *c*. 50 mm of rain annually, the mountain itself receives *c*. 400 mm due to orographic rainfall. Specimens were collected in March–April (Table 2). The biology is unknown.

Remarks: While Egypt is considered part of the Palaearctic Region, which means that *elbaiensis* should fall outside the scope of this review, the Sudan falls within the Afrotropical region, and so I believe it is appropriate to include this species in this review even though I have not been able to adequately study the types. Having studied a lot of material from the afrotropics I can state with some confidence that I have not seen any material that agrees well with the types of *elbaiensis*. This may indicate that this is truly a Palaearctic species and that its closest relatives are not to be found in the Afrotropics.

Similar species: A fairly distinctive member of the *nomadus* species-group.

Ancylorhynchus feijeni sp. n.

Figs 6, 36, 75–77, 150

Etymology: Named for Dr Hans Feijen who made important collections of Diptera in Mozambique and who collected the holotype specimen.

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Description:

Male (based on holotype. Condition: Excellent; right antenna broken off beyond pedicel).

Head: Mainly orange, fine silver-gold pruinose, pale yellow, orange and red-brown setose. Antenna (Fig. 6): Scape and pedicel orange, scape orange setose, pedicel with few yellowish setae dorsally, postpedicel orange proximally becoming orange-brown distally, tipped with obliquely situated pit-enclosed spine-like sensory element (terminal stylus 'segment' absent). Segmental ratios: 1:0.3:5.8. Face orange, strongly silver-gold pruinose, mystax shiny orange occupying ventral ½ of face. Frons and vertex orange, fine silver-gold pruinose, pale yellow setose; ocellar tubercle ventrally red-brown, fine pale yellow setose (no macrosetae). Occiput mainly orange (dark red-brown around cervical region) fine silver-gold pruinose, orange setose. Palpus orange, orange and red-brown setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis orange proximally dark red-brown distally, red-brown setose.

Thorax: Dark red-brown to blackish with orange areas dorsally and laterally, fine silver-grey pruinose, white and pale yellow setose. Prothorax blackish laterally orange dorsally, fine silver-grey pruinose, pale yellow and orange setose. Mesonotum orange except for blackish markings (medial stripe from anterior margin to just short of posterior margin; pair of transverse marks just anterior of transverse suture that fail to reach lateral margins or medial stripe; pair of longitudinal marks posterior of transverse suture that commence at posterior margin but do not reach transverse suture), fine silver-grey pruinose, fine pale yellow and reddish setose. Mesonotal macrosetae (orange when present): *dc* weak reddish posterior to transverse suture, 2 *npl*, 0 *spal*, 1–2 *pal*. Scutellum entirely orange, fine silver pruinose, disc sparsely red-brown setose, hind margin apparently without apical setae. Pleura mostly blackish except for posterior half of *anepst* and most of *anepm* and *ktg* entirely silver-grey pruinose, orange and dark red-brown setose (confined to *anepst*, *kepst* and *ktg*). *Anatg* orange *mes pnot* blackish and contrasting with orange scutellum. Legs: *cx* orange and red-brown, silver pruinose, white to pale yellow setose; *tro* orange (*tro*2 with short black setae ventrally); *fem*, *tib* and *tar* orange except for red-brown terminal tarsomeres, mainly yellowish setose (few dark red-brown setae on *tar*), claws dark red-brown with orange proximal parts. Wings (Fig. 36, paratype): 8.9×3.8 mm. Veins mostly dark red-brown. Membrane extensively microtrichose (some proximal cells partly bare), mostly brown but with orange patches. Haltere brown-orange.

Abdomen: Predominantly blackish with orange to orange-brown patches, fine silver pruinose, pale yellow setose. T1 blackish with feint brownish marks laterally; T2–4 blackish with large orange posterolateral patches (T2 strongly silver pruinose posterolaterally); T5–8 dark red-brown. Sternites similar to tergites but orange parts haphazardly distributed.

Genitalia (Figs 75–77): *Epand* bifid, forming pair of relatively long, straight, slender lobes that project posteriorly beyond all other genital structures. Lobes closely abut proximally, lie parallel to each other. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly to fairly broadly rounded distal end; dorsal process not finger-like but as broadly rounded, setose bump; inner lobe well developed, distal end sclerotised, somewhat medially directed and with prominent distal, outwardly directed, rounded process. *Gonst* hardly compressed, dor-

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sally directed, tip curved anteriorly. *Hypd* well developed, suboval proximally, with posteriorly projecting medial protuberance of characteristic shape; distal protuberance with pair of slightly raised, setose bumps (these setae strong, proximally directed). *Aed* largely hidden in undissected genitalia.

Female. Similar to male, slightly larger (wing 9.1×3.6 mm), abdomen more extensively blackish except for posterior margin of T6 and entire T7–9 which are orange.

Variation: A species exhibiting remarkably little variation. The holotype has a slightly more brown-stained wing membrane when compared to the paratypes.

Holotype: ♂ MOZAMBIQUE: 'Moçambique / Matola [25°58'S:32°27'E] / 10.4.1982 / Coll. H.R. Feijen' (NMSA).

Paratypes: SOUTH AFRICA: 1♂ 'Molsgaat, nr / Chunies Poort [14°13'S:29°32'E] / Oct. 1935 / G. van Son' (NMSA); 1♀ 'Waterberg / Dist. [24°00'S:28°00'E] 1898–99 / v. Jutrzencka' (NMSA); 1♀ 'Moorddrift [24°17'S:28°57'E] / Oct 1909 / C.J. Swierstra' (NMSA); 1♂ 'Pretoria distr. / Soutpan [25.409°S:28.096°E] / EKH / 4/4 1944 / Univ. Pretoria' (NMSA); 1♀ 'Roodeplaat [25°41'S:28°18'E], Tvl / 12.2.1969 / M.W. Strydom' (SANC); 1♂ 'Transvaal: / Pretoria. [25°44'S:28°11'E] / 28.iii.1914. / Miss J. Brinker. / 1914–277.' (BMNH).

Notes: Although a few of the above specimens were identified as *cruciger* by Harold Oldroyd, the species only superficially resembles *cruciger*. The condition of two of the paratypes is generally poor.

Distribution, phenology and biology: Recorded from Southern Africa (Mozambique and South Africa) (Table 1, Fig. 150). Adults have been collected in October as well as from February – April (Table 2). The biology is unknown, but label data suggest that this is a savanna species.

Similar species: A member of the *nomadus* species-group with close similarities to *magnificus*.

Ancylorhynchus fulvicollis (Bigot, 1879)

Figs 7, 37, 78–80, 151

Xyphocerus fulvicollis: Bigot 1879: 429.
Ancylorrhynchus fulvicollis: Kertész 1909: 101 (catalogue); Hull 1960: 217; Oldroyd 1974: 34.
Ancylorrhynchus zonalis Bromley, 1936: 137; Hull 1960: 217; Oldroyd 1974: 32. **Syn. n.**
Ancylorhynchus fulvicollis: Oldroyd 1980: 360 (catalogue).
Ancylorhynchus zonalis: Oldroyd 1980: 360 (catalogue).

Redescription:

Male.

Holotype *fulvicollis* (Condition: Poor; both antennae missing; mesonotum cracked (but largely intact); both prothoracic legs broken off beyond tibiae; right mesothoracic leg missing; right metathoracic leg broken off beyond coxa; right wing missing; right halter broken off at midlength.):

Head: Black, fine silver-grey pruinose, pale yellow and brown-orange setose. Antenna (Fig. 37): Missing. Face black, uniformly fine silver-grey pruinose, mystax mixed brown-orange and pale yellow (dorsocentrally), occupying ventral ½ of face. Frons and vertex black, fine silver-grey pruinose, pale yellow setose; ocellar tubercle fine pale yellow setose (no macrosetae). Occiput black, uniformly fine silver-grey pruinose, setae mostly brown-orange, but a few pale yellow dorsally. Palpus red-brown, red-brown setose, terminal palpomere swollen, apex projecting with terminal sensory pit. Proboscis red-brown, brown-orange setose.

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Thorax: Black with orange areas dorsally, fine silver-grey pruinose (especially lateral margins of mesonotum), white and pale yellow setose. Prothorax entirely black, fine silver-grey pruinose, brown-orange setose. Mesonotum black except for brown-orange postpronotal lobes and surrounding area and postalar lobes and surrounding area, fine silver-grey pruinose, fine white and pale yellow setose. Mesonotal macrosetae (orange when present): *dc* weakly developed postsuture, 3 *npl*, 2 *spal*, 2 *pal*. Scutellum dark red-brown (a hint of orange-brown along hind margin), fine silver pruinose, disc sparsely pale yellow setose, hind margin with *c*. 4 pale yellow to orange macrosetae accompanied by minor setae. Pleura entirely black, entirely silver-grey pruinose, setae white to pale yellow largely confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* black. Legs: *cx* black, silver pruinose, white setose; *tro* red-brown; *fem*, *tib* and *tar* uniformly brown-orange, white to pale yellow setose, claws dark red-brown with orange proximal parts. Wings (Fig. 37): 8.1×*c*. 2.7 (twisted) mm. Veins brown. Membrane extensively microtrichose (some proximal cells partly bare). Wing fairly uniformly yellow-brown, posterior cells less so and somewhat transparent. Haltere red-brown.

Abdomen: Predominantly blackish with orange-brown areas dorsally, fine silver-grey pruinose, white and pale yellow setose. T1 black, T2–7 blackish, orange-brown posteriorly (most extensive on T3). Sternites appear similar to tergites (but largely obscured from sight).

Genitalia (Figs 78–80): *Epand* bifid, forming pair of relatively long, fairly slender, tapering lobes that jut out to a level exceeding all other genital structures. Lobes relatively wide apart except at proximal end where they abut medially, each lobe relatively straight and lying parallel to each other except at distal ends which converge to flattened, thin, flange-like apices. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly as a fairly slender, distally narrowly rounded lobe; dorsal finger-like process well-developed, relatively long; inner lobe well developed, distal end sclerotised, medially directed. *Gonst* hardly laterally compressed, dorsally directed, tip curved anteriorly. *Hypd* well developed, somewhat wider than long, tapering rapidly to broad truncate, slightly curved distal end. *Aed* triangular in ventral view (somewhat hidden in undissected genitalia) with tiny bifid distal tip.

Holotype *zonalis* (Condition: Excellent; a little green verdigris is associated with entry and exit holes of pin.):

Head: Dark red-brown to black, silver pruinose, pale yellow, orange and red-brown setose. Antenna: Scape and pedicel orange, orange setose, postpedicel orange proximally becoming orange-brown distally, terminal stylus ‘segment’ present, red-brown, tipped with pit-enclosed spine-like sensory element. Segmental ratios: 1:0.4:3.8:0.2. Face dark red-brown, strongly silver pruinose except for lateral parts of epistomal margin and small mediodorsal area adjacent to antennal sockets, mystax shiny white (few yellow and red-brown setae laterally) occupying ventral ½ of face. Frons and vertex blackish, uniformly fine silver pruinose, pale yellow setose; ocellar tubercle fine pale brownish setose. Occiput dark red-brown, uniformly silver pruinose, dorsal setae pale yellow to orange ventral setae red-brown. Palpus red-brown, red-brown setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis red-brown, red-brown setose.

Thorax: Dark red-brown to black with orange areas dorsally, fine silver-grey pruinose, white, pale yellow and red-brown setose. Prothorax entirely black, fine silver pruinose,

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red-brown and pale yellow setose. Mesonotum orange except for broad blackish dorsomedial band that extends from anterior to posterior margins and is broadest just anterior of transverse suture where it almost reaches lateral margins of mesonotum, fine silver pruinose, fine moderately long white and pale yellow setose. Mesonotal macrosetae (orange when present): few orange *dc* posterior to transverse suture, 2 *npl*, 1 *spal*, 2 *pal*. Scutellum predominantly orange with large dark red-brown anteromedial area, fine silver pruinose, disc asetose, hind margin with 5 orange macrosetae accompanied by 2 minor setae. Pleura entirely dark red-brown to black, entirely silver-grey pruinose, setae white confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* dark red-brown, contrasting with orange posterior region of scutellum. Legs: *cx* dark red-brown, strongly silver pruinose, white setose; *tro* predominantly orange (small red-brown area); *fem*, *tib* and *tar* orange except for proximal half of *fem*1 which is pale red-brown, orange and yellow setose, claws dark red-brown with orange proximal parts. Wings: 7.8×3.0 mm. Veins mostly orange anteriorly brown posteriorly. Membrane extensively microtrichose (some proximal cells partly bare), pale brown, proximal cells semi-transparent. Haltere pale orange with brownish base.

Abdomen: Predominantly dark red-brown to blackish with yellow patches, fine silver-grey and strong silver pruinose, white, pale yellow and dark red-brown setose. T1 blackish, weakly pruinose, white setose (long laterally); T2 dark red-brown with large yellow patches posterolaterally, strongly silver pruinose (a transverse band at midlength), white setose; T3–4 dark red-brown with small yellow posterolateral patches, weakly pruinose, dark red-brown setose; T5–terminalia dissected for genital study. Sternites similar to tergites but yellow parts along posterior margins.

Genitalia: *Epand* bifid, forming pair of relatively long, fairly slender, tapering lobes that jut out to a level exceeding all other genital structures. Lobes fairly wide apart except at proximal end where they abut medially, lobes relatively straight and lying parallel to one another except at distal ends which converge to flattened, flange-like apices. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly as a fairly slender, distally narrowly rounded lobe; dorsal finger-like process well-developed, relatively long; inner lobe well developed, distal end sclerotised, medially directed. *Gonst* hardly laterally compressed, dorsally directed, tip curved anteriorly. *Hypd* well developed, somewhat wider than long, tapering fairly rapidly to broad, slightly curved, medially shallowly indented distal end. *Aed* triangular in ventral view (somewhat hidden in undissected genitalia) with tiny bifid distal tip.

Female. Similar to male although the mystax is usually pale yellow to orange and never dark red-brown to black.

Allotype *zonalis*: Similar to male but yellow and orange areas more extensive. T4–5 fairly strongly silver pruinose, T6–8 apruinose.

Variation: A fairly uniform species. Mystacal coloration varies from pale yellow (e.g. *zonalis* holotype) to black. Males usually have darker mystacal setae than females. Leg coloration may also vary somewhat. While the legs are usually uniformly orange, some individuals may have brown legs or femora that are darker than the tibiae.

Holotype *fulvicollis* (examined): ♂ SOUTH AFRICA: 'Holo- / type' [circular, red edged], *Xiphocerus* / *fulvicollis* / J. Bigot / 381 in / coll. / Bigot.', 'Coll. Bigot / abt.1845-93. / Pres-1914 by / J.E. Collin.', '381 *X. Fulvicollis* / op. L-. [?] Hermann 1913 / Natal. Port. [Port Natal = Durban, 29°51'S:31°01'E] J. Bigot.' [large drawer label], 'Type Dip: 307 / *Xyphocerus* / *fulvicollis* / Bigot / Hope Dept. Oxford' (OXUM).

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Holotype *zonalis* (examined): ♂ SOUTH AFRICA: 'Moorddrift [24°17'S:28°57'E] / Oct. 1909 / C.J. Swierstra', 'Holotype / *Ancylorrhynchus* / *zonalis* Br' [red], *Ancylorrhynchus* / *zonalis* Broml. / Holotype 152.' [red ink] (NMSA).

Allotype *zonalis* (examined): ♀ similar data as holotype, but labelled 'Allotype 153' (NMSA).

Paratype *zonalis* (examined): ♂ SOUTH AFRICA: 'Woodbush [23°44'S:30°02'E] / xii.1924 / G.v.Dam', 'Paratype / *Ancylorrhynchus* / *zonalis* Br' [red], 'd.d.S.W. / Bromley. / 485. 1937', '*Ancylorrhynchus* / *zonalis* / Det. Bromley / S.W. Bromley 1937', '5', 'Type Dip: 171 / *Ancylorrhynchus* / *zonalis* Bromley / Hope Dept. Oxford' (OXUM).

Note: When listing the types of *zonalis* Bromley (1936) lists a 'Paratype, male, Magude, Oct. 1918 (C. J. Swierstra)', which I have not encountered and its whereabouts are not known.

Other material examined: SOUTH AFRICA: 1♂ 'South Africa: Limpopo / Nylsvley Nature Reserve / 24°38.595'S 028°41.789'E / 11.xi.2003 J.G.H. Londt / 1063m Acacia savannah / Waterhole area & trail path' (NMSA); 1♀ 'Nelspruit [25°28'S:30°58'E] / 12.1917 / H.G. Breijer' (NMSA); 1♀ 'Botshabelo [Botsabelo, 25°42'S:29°24'E], / Nr. Middelburg, / Transvaal, / 4000 ft / H.A. Junod' (BMNH); 2♂ 'South Africa: Natal / Ndumu Game Reserve / 2632DC 4–9.x.1982 / Coll. J.G.H. Londt / Camp & riverine bush' (NMSA); 1♀ 'Johannesburg [26°12'S:28°05'E] / Transvaal / le.g. Zumpt', '5.12.49' (BMNH); 1♂ 'South Africa: Natal / 15km SE Ingwavuma / 21.ii.1979 2732AA / J.G.H. Londt Bushy / area with big trees / ex Malaise trap' (NMSA); 1♀ 'S Africa: Natal #5 / Mkuzi Game Reserve / 27°38'S 32°14'E 160m / Date: 12.i.1994 / Natal Musm Expedition / Nsumu Pan area' (NMSA); 1♂ 'South Africa: Natal / Mkuzi Game Reserve / ca 140m 8–15. x. 1990 / 27°38'20"S:32°09'390"E / Coll. J.G.H. Londt / MV light & Malaise' (NMSA); 1♂ 'S Africa: Natal #6 / Kube Yini Game Res. / 27°48'S 32°14'E 360m / Date: 10–14.i.1994 / Natal Musm Expedition' (NMSA); 3♀ 'Umfolozi [28°09'S:32°02'E] / Natal / 27.10.1930' (SANC); 4♀ 'Umfolozi / Natal / 22.10.1930' (SANC); 1♀ 'South Africa / KZN Spioenkop / Nature Reserve / road verge / 28.42S / 29.32E / 21.x.2000 / M. Stiller' (SANC); 1♂ 'S Africa: Natal #58 / Kelvin Grove / 28°50'S 29°20'E / Date: 20.xi.1993 / Coll: K.R. Cradock' (NMSA); 1♀ 'Natal / Willow Grange [Willowgrange, 29°03'S:29°57'E] / R.C. Wroughton' (BMNH); 1♀ 'Natal / Willow Grange / Mooi River. / R.C. Wroughton / 1914–76' (BMNH); 1♀ 'New Hanover [29°21'S:30°32'E] / Natal xii.14.13 / C.B. Hardenberg' (NMSA); 1♀ 'Estcourt [29°00'S:29°53'E] / 11/96' (BMNH); 1♀ 'South Africa: Natal / Cumberland farm / 29°30'56"S: 30°30'55"E / Coll: S.A. Chinn / Date: 13.iii.1990' (NMSA); 2♂ 'South Africa: Natal / Pietermaritzburg [29°37'S:30°23'E] / Townbush Valley / RM Miller + malaise / December 1976' (NMSA); 1♂ 'South Africa: Natal / Pietermaritzburg / Townbush Valley / RM Miller + malaise / November 1976' (NMSA); 1♂ 'So. Africa: Univ. Natal / Ukulinga Res. Frm, 10km / SE Pietermaritzburg / 7–13.3.1986 grassland / RM Miller impoundment / Malaise trap' (NMSA); 1♂ 'So. Africa: Univ. Natal / Ukulinga Res. Frm, 10km / SE Pietermaritzburg / 8–14.4.1986 grassland / RM Miller impoundment / Malaise trap' (NMSA); 1♂ 'Model/Mimick', 'South Africa: Natal / Umlaas Road [29°44'S:30°31'E] / Thornveld – Malaise / Date: iv.1981 / Coll. P. Reavell' (NMSA); 1♀ 'Baynesfield [29°46'S:30°21'E] / Natal / 8.12.79 / ACB [Butler]' (NMSA); 1♂ 'Gillitts [29°47'S:30°48'E] / Pinetown district / Natal, S. Africa / B. & P. Stuckenberg' (NMSA); 1♂ 'Gillitts 21.xi.63 / Pinetown [29°49'S:30°51'E] district / Natal, S. Africa / B. & P. Stuckenberg' (NMSA); 1♂ 'Pinetown / 6.i.09. / G. F. Leigh', '1 / 688', 'Ex coll. / Transv Mus.', 'Sammlung / F. Hermann', '*Ancylorrh.* / *fulvicollis* / Bigot', *fulvicollis* Bigot', '*Ancylorrhynchus* / *cruciger* Big. / det. E. O. Engel ♀' (ZSMC); 1♀ 'Pinetown / 17.12.08. / G. F. Leigh', '1 / 685', 'Ex coll. / Transv Mus.', 'Sammlung / F. Hermann', '*Ancylorrh.* / *fulvicollis* / Bigot', '*fulvicollis* Bigot', '*A.* / *fulvicollis* Big. / det. E. O. Engel', '*Ancylorrhynchus* ♀ / *fulvicollis* Big.' (ZSMC); 1♂ 'Pt Natal [Port Natal = Durban, 29°51'S:31°01'E] / 55.96.', 'This is *not* the type / of *Laphria fortipes* Walk. / Said by Speiser (note in Kertész) / to be an *Ancylorrhynchus* / H.O. 16.i.68.' (BMNH); 1♂ 'S. Africa. / Durban . Port Natal / ex coll. / W.W. Saunders / 68–4' (BMNH); 3♂ 'Aliwal North [30°42'S:26°42'E] / Cape Province / Dec. 1922', 'S. Africa / R.E. Turner / Brit. Mus. / 1923–45' (BMNH); 3♂ 'E. Cape Prov. / Katberg. [hill, 30°52'S:24°11'E] / 1–10.ii.1933.', 'S. Africa / R.E. Turner / Brit. Mus. / 1933–139' (BMNH); 1♂ 'Südafrika: Eastern Cape: / Port St. Johns [31°38'S:29°32'E]: Trail: / Eagle's Nest – Airstrip / le.g. Barkemeyer 10.2.2004' (CODI); 1♂ 'Prt. St. John [Port St Johns, 31°38'S:29°32'E] / Nov. 1917 / H.H. Swinny' (NMSA); 1♀ 'South Africa: Natal / Mkuze Reserve / 3215E 2740S 22.xii.93 / PE Reavell 120m / Malaise Trap / Acacia veld' (NMSA); 1♀ 'East London [33°02'S:27°55'E] / 21.12.24 / H.K. Munro' (NMSA); 1♀ 'Cape Province / Gxulu River [33°07'S:27°44'E] / 15.xii.1970 / J.G.H. Londt' (NMSA); 1♂ 1♀ 'Malaise trap', 'Cape Province / Hilton [33°15'S:26°21'E] / Grahamstown / 22-31.xii.1979 / F.W. & S.K. Gess' (AMGS); 1♀ 'Malaise trap', 'Cape Province / Hilton / Grahamstown / 21.i. – 3.ii.1980 / F.W. & S.K. Gess' (AMGS); 1♂ 'Malaise trap', 'Cape Province / Hilton / Grahamstown / 17-31.i.1971 / F.W. Gess' (AMGS); 1♀ '77/78/133', 'Sandpit / floor', 'Cape Province / Hilton / Grahamstown / 2.i.1979 / D.W. Gess' (AMGS); 1♂ 'S. Africa: E. Cape / Grahamstown / 7 Park Road / 33°18'S 26°32'E / 14.iv.1982 / P.G. Hawkes' (AMGS); 1♂ 'S. Africa Cape Prov. / Grahamstown / 33.18'S 26.32'E / 11/3/1983 / J.E. Ken-Boisen' (AMGS); 1♂ 'Cape Province / Strowan [33°18'S:26°28'E] / Grahamstown / 5.ii.1967 / D. Brothers' (AMGS); 3♂ 'South Africa, Cape Prov. / 7km SW Grahamstown [33°18'S:26°32'E] / Faraway, 10–16.i.1984 / Brothers, Malaise trap' (NMSA); 1♂ 'S. Africa

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Cape Prov. / Grahamstown / 33.18'S 26.32'E / 11/3/1983 / J.E. Ken-Boisen' (AMGS); 2♂ 'Cape Province / Belmont Valley / Grahamstown [33°18'S:26°32'E] / 31.i.1972 / F.W. Gess' (AMGS); 3♂ 4♀ 'South Africa: E. Cape / Grahamstown (plot 5280) / Three Chimneys farm / 33°18.542'S 26°29.846'E / 2–13.iii.2008 / A. H. Kirk-Spriggs / Malaise trap' (AMGS); 1♀ 'Grahams / town / June 87 / V. Bradish' (AMGS); 1♂ 'Cape Province / Grahamstown / March 1971 / J. G. H. Londt' (NMSA); 2♂ 'South Africa / Grahamstown / Dassie Krantz / 1.i.72 / D.J. Greathead' (BMNH); 1♂ 'Südafrika: Eastern Cape: / Grahamstown: Mountain / Drive, above Dassiekrans / le.g. Barkemeyer 3.2.2004' (CODI); 1♂ 'South Africa: Cape Province / Grahamstown / Botanical Gardens / (33°19'S 26°31'E) / 11.i.1981 P.M.C. Croeser' (NMSA); 1♀ 'South Africa, Cape / Grahamstown / 3319'S 2631'E / 5.3.1982 / K. Sheppey' (AMGS); 1♀ 'Grahamstown / RSA / 3319S 2632E / 12/9/1993 / Z Davidson' (AMGS); 1♀ 'S. Africa: E. Cape / Nr Grahamstown / Fairbairn Farm / 33.20'S 26.33'E / 21/Jan/1986 / A.B. Ware' (AMGS); 1♀ 'S. Africa: E. Cape / Nr Grahamstown / Fairbairn Farm / 33.20'S 26.33'E / 16/Feb/1986 / A.B. Ware' (AMGS); 1♀ 'South Africa, E. Cape / Grahamstown / 33.20S 26.31E / 2/3/1985 / No. 26 F McLaren' (AMGS); 1♀ 'Cape Province / Swartwaterspoort / Grahamstown / 22.xi.1982 / D/W. Gess' (AMGS); 1♂ 'On flowering *Foeniculum* / *vulgare* Mill', 'Cape Province / Grahamstown / 17–25.i.1970 / J.G.H. Londt' (AMGS); 1♀ 'Cape Province / Grahamstown / 9.xii.1964 / D.J. Brothers' (AMGS); 1♀ 'Südafrika: Western Cape: / ca. 60km N George: Mei- / ringspoort [33°24'S:22°33'E] / le.g. Barkemeyer 10.1.2002' (CODI); 1♀ 'Otterford Forestry / Reserve / Hankey [33°50'S:24°53'E] area / 1–10.12.67 3325CC / B&P Stuckenberg' (NMSA); 1♂ 'Algoa bay [= Port Elizabeth, 33°58'S:25°35'E] / Capland / Dr. Brauns / 29 12 95 [sideways]', '*Ancylorrh.* / *tricolor Lw.*', 'Sammlung / F. Hermann', '*A.* / *tricolor* Wied. / det. E. O. Engel', '*Ancylorrhynchus* / *tricolor* Loew ♂' (ZSMC); 1♂ 'South Africa / Knysna [34°02'S:23°02'E] / C.P. i.1979 / C.D. Eardley' (SANC).

Notes on synonymy: The few specimens previously identified as *A. zonalis* are clearly very similar to those here assigned to *fulvicollis*. While I provide the following re-description of the *zonalis* holotype I am confident that with the acquisition of more material from the northern parts of the presently accepted distribution of *fulvicollis* that my synonymy of *zonalis* will prove to be fully justified.

Ancylorhynchus fortipes. Bromley (1936) was first to use the name *fortipes* in association with *Ancylorhynchus* when he recorded material as representing what he called '*fortipes* Walker'. His labelled specimens from the Eastern Cape (East London & Port St John) and KwaZulu-Natal (New Hanover) are to be found in NMSA (my study shows these to represent *fulvicollis* and so the material is listed above). The only *fortipes* described by Walker was *Laphria fortipes* Walker, 1857 (p. 128) from 'Port Natal' (= Durban, KwaZulu-Natal). Walker's (1857) paper included the descriptions of four South African species, all from Port Natal, which were part of the W.W. Saunders collection, subsequently incorporated into the BMNH collections. Two are definitely represented by type specimens in the BMNH (*Asilus firmatus* – now a *Dysclytus*, and *Trupanea venerabilis* – now a *Promachus*/*Bactria*). One species, *Dasypogon aequalis*, is listed in the Afrotropical catalogue as an unplaced species of Dasypogoninae (presumably because the type was not available to be checked). The type material of Walker's forth species, *Laphria fortipes*, could not be traced by Erica McAlister (BMNH) in a recent and extensive search of the BMNH's holdings. There is, however, an old specimen from Port Natal (identified by Oldroyd as *Ancylorhynchus insignis*, but actually representing *fulvicollis* – and listed above) that carries the following note 'This is <u>not</u> the type of / <u>Laphria fortipes</u> Walk. / Said by Speiser (note in Kertész) / to be an <u>Ancylorrhynchus</u> / H.O. 16.1.68'. This note, written by Oldroyd, provides no evidence for the assertion, and so, in the absence of any other alternative, it must remain possible that this specimen is in fact Walker's holotype. If this is so, the name *fortipes* would indeed be associated with *Ancylorhynchus* as indicated by Bromley, and would mean that the name *fortipes* Walker, 1857 would take precedence over *fulvicollis* Bigot, 1879. However, the fact that Walker placed his *fortipes* in *Laphria*, rather than in say *Dasypogon*, and the fact that he failed to mention the distinctive proboscis, must prompt caution in making the

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assumption that this specimen is Walkers type of *Laphria fortipes*. For the present I have decided to support Oldroyd's belief that the BMNH specimen is not Walker's type. This means that, like the type of *aequalis*, Walker's *fortipes* type must be considered lost.

Distribution, phenology and biology: Widely distributed endemic South African species (Table 1, Fig. 151). Adults have been collected from September–June (no records for May) (Table 2). The biology is poorly known, but label data suggest that this species inhabits woodland, savanna and grassland. Two prey records are known to me, a male (NMSA) pinned with Hymenoptera (Vespidae) and a female (AMGS) pinned with Hemiptera (Scutelleridae). It is remarkable that the male pinned with its vespid prey bears a strong resemblance to the prey item. It is about the same size and its coloration strongly resembles the prey item. This appears to be a convincing case of mimicry (see discussion below). Allotype *zonalis* has a small hemipteran (Miridae) clutched between its legs; this may not, however, be a prey item.

Similar species: A member of the *reynaudii* species-group with close similarities to *reynaudii*.

Ancylorhynchus funebris Bromley, 1936

Figs 8, 38, 81–83

Ancylorrhynchus funebris: Bromley 1936: 135; Hull 1960: 217; Oldroyd 1974: 31.
Ancylorhynchus funebris: Oldroyd 1980: 360 (catalogue).

Redescription:

Male (based on holotype. Condition: Good; both antennae broken off beyond pedicels; right prothoracic leg broken off beyond coxa.).

Head: Dark red-brown, silver and gold pruinose, orange and red-brown setose. Antenna (Fig. 8): Scape and pedicel orange, orange and red-brown setose, postpedicel missing (see below for details regarding other specimens). Segmental ratios: 1:0.4:–:–. Face dark red-brown, extensively fine silver-gold pruinose (except lateral parts of epistomal margin and large area below antennal bases), mystax shiny orange and red-brown, occupying ventral ½ of face. Frons and vertex dark red-brown, fine silver-grey pruinose (except for ocellar tubercle), orange and red-brown setose; ocellar tubercle fine red-brown setose (no macrosetae). Occiput dark red-brown, uniformly silver pruinose, orange setose (few red-brown ventrally). Palpus brown-orange setose, terminal palpomere swollen, apex projecting with terminal sensory pit. Proboscis brown-orange, orange setose.

Thorax: Dark red-brown with orange areas dorsally and laterally, fine silver-grey pruinose, red-brown and orange setose. Prothorax dorsally orange, laterally red-brown, fine silver-grey pruinose, orange and red-brown setose. Mesonotum chiefly orange with large centrally situated dark red-brown to black area (all margins orange), fine silver-grey pruinose, fine moderately long yellow-orange and red-brown setose. Mesonotal macrosetae (orange when present): *dc* red-brown, weak, postsuture, 3 *npl*, 1 *spal*, 2 *pal*. Scutellum entirely orange, fine silver pruinose, disc sparsely red-brown setose, hind margin with 2 orange macrosetae accompanied by 2 minor setae. Pleura extensively dark red-brown (*anepm*, *ktg* and *anatg* brown-orange), entirely fine gold pruinose, setae red-brown (*anepst*) or brown-orange (*ktg*). Legs: *cx* and *tro* brown-orange (*tro*2 with row of short black setae ventrally); *fem*, *tib* and *tar* uniformly orange, mainly red-brown setose, claws dark red-brown with orange proximal parts. Wings (Fig. 38): 6.7×2.9 mm.

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Veins yellow-orange. Membrane entirely microtrichose giving wing a uniformly brown colour. Haltere orange-brown with brown-yellow knob.
Abdomen: Predominantly dark red-brown with orange areas, silver pruinose, brown-orange-yellow setose. T1 dark red-brown, slightly orange-brown laterally, T2–4 dark red-brown with small orange patches posterolaterally (these areas strongly silver pruinose), T5–8 progressively more orange with silver pruinose hind margins. Sternites fairly uniformly red-brown, silver pruinose, orange and red-brown setose.
Genitalia (Figs 81–83): *Epand* bifid, forming pair of moderately long lobes. Lobes abut proximally and may be weakly fused, each being fairly straight with slight undulations, distal tips slightly inwardly directed. *Proct* simple, dorsally situated *cerc* weakly demarcated and possibly fused proximally. *Goncx* well developed, fairly broad in lateral view, outer lobe projecting to rounded apex; dorsal finger-like process greatly reduced, appearing as slight setose bump; inner lobe well developed, distal end sclerotised, slightly medially directed (not overlapping opposing lobe). *Gonst* weakly laterally compressed, dorsally directed, tip curved anteriorly. *Hypd* moderately developed, relatively short, tapering slightly to broad flattened distal end; distal end in ventral view with pair of broadly rounded protuberances. *Aed* (somewhat hidden in undissected genitalia) fairly broad, with short distal projection with tiny bifid tip.

Female. Unknown.

Variation: Newly listed material is assigned to this species with some hesitation and primarily on the grounds of male genital similarity. The holotype has a well developed mesonotal marking (being a broad dark red-brown medial band that is wider at the level of the transverse suture) while the other three specimens have a narrow medial mesonotal band that is only slightly darker than the mesonotum and not obviously wider at the level of the transverse suture. Although the holotype is somewhat smaller (wing length 6.7 mm) than the Masiene material (♂ wing 9.1 mm, ♀ 9.2 mm), the BMNH ♂ from the type locality is only slightly larger (wing 7.3 mm). Until more material becomes available I accept the variation in coloration described above as intraspecific.

Holotype (examined): ♂ MOZAMBIQUE: 'Lourenço / Marques. [= Maputo, 25°58'S:32°34'E] / 19.i.[19]29 / HK Munro', 'Holotype / *Ancylorrhynchus* / *funebris* Br' [red], '*Ancylorrhynchus* / *funebris* Broml. / Holotype 156' [red ink] (NMSA).

Other material examined: MOZAMBIQUE: 1♂ 1♀ 'Masiene [16°24'S:39°54'E] / P.E.Afr / R.F. Lawrence' ~ 'Dec. / 1923' (SAMC); 1♂ 'Lourenço Marques / 1914 / H.A. Junod / April–July' (BMNH).

Distribution, phenology and biology: Known only from Mozambique (Table 1). Adults have been collected with some certainty in December–January, while one specimen is labelled April–July thus providing inadequate and suspect information (Table 2). The biology is unknown, but the two known localities are dominated by the Savanna biome.

Similar species: A member of the *nomadus* species-group with close similarities to *greatheadi* and *susurrus*.

Ancylorhynchus gessi sp. n.

Figs 9, 39, 84–86

Etymology: Named for Dr Fred Gess (AMGS), who, together with his wife Sarah, collected many interesting Afrotropical Asilidae, including the holotype and a paratype of this new species.

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Description:

Male (based on holotype. Condition: Excellent; slightly greasy.).

Head: Blackish, silver-grey pruinose, pale yellow to whitish setose. Antenna (Fig. 9): Scape and pedicel blackish, whitish setose, postpedicel orange-brown proximally becoming dark red-brown distally, terminal stylus 'segment' present, dark red-brown tipped with pit-enclosed spine-like sensory element. Segmental ratios: 1:0.4:4.5:0.3. Face black, uniformly silver-grey pruinose (slightly weaker laterally on epistomal margin), mystax shiny whitish occupying entire facial profile. Frons and vertex black, fine silver-grey pruinose, pale yellow whitish setose; ocellar tubercle fine pale yellow setose. Occiput black, uniformly silver pruinose, pale yellow to whitish setose. Palpus dark red-brown, whitish setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis dark red-brown, whitish setose.

Thorax: Black with orange areas dorsally, fine silver-grey pruinose, white and pale yellowish setose. Prothorax entirely blackish, fine silver-grey pruinose, pale yellow-white setose. Mesonotum black except for orange postpronotal lobes and posterolateral regions from just anterior of transverse suture to posterior margin (including postalar lobes), fine silver pruinose, fine moderately long white and pale yellow setose. Mesonotal macrosetae (translucent pale yellow when present): few *dc* confined to posterior region, 2 *npl*, 1 *spal*, 3 *pal*. Scutellum entirely dark red-brown to black, fine silver pruinose, disc sparsely pale yellow setose, hind margin with 4 pale yellow weakly developed macrosetae accompanied by minor setae. Pleura entirely blackish, entirely silver-grey pruinose, setae white to pale yellow confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* black. Legs: *cx* dark red-brown to black, silver pruinose, white setose; *tro* dark red-brown; *fem* orange with dark red-brown ventral parts, *tib* yellowish with dark red-brown ventral parts (*tib*3 almost entirely dark red-brown), *tar* uniformly dark red-brown; legs entirely pale yellowish white setose, claws dark red-brown with red-brown proximal parts. Wings (Fig. 39): 9.2×3.4 mm. Veins orange-brown to dark red-brown. Membrane extensively microtrichose (some proximal cells partly bare), distal cells brown (from about first fork of Rs), slightly orange stained basally and anteriorly and some centrally situated veins bordered by light brownish stain, cells mostly transparent. Haltere orange, slightly darker basally.

Abdomen: Predominantly blackish with orange to brown-orange patches, fine silver-grey pruinose, pale yellowish white setose. T1 predominantly orange with broad dark red-brown medial area; T2–3 blackish with large orange patches posterolaterally; T4–5 blackish with small brown-orange patches posterolaterally. Sternites similar to tergites but orange areas extensive and along posterior margins.

Genitalia (Figs 84–86): Large and bulbous. *Epand* bifid, bulbous, forming pair of relatively large, well-developed, distally down-curved, stout lobes. Lobes closely associated proximally, each having fairly straight appearance in dorsal view, distal parts not inwardly directed, but laterally compressed and ventrally directed. *Proct* simple, projecting beyond *epand* in dorsal view, dorsally situated *cerc* appearing fused posteromedially. *Goncx* relatively poorly developed, distal end somewhat truncate, lacking posteriorly directed terminal process and dorsal finger-like process; inner lobe relatively weakly developed, slender, straight. *Gonst* slightly laterally compressed, posteriorly directed, tip relatively straight. *Hypd* large, well developed, cup-shaped; proximal margin

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broad, slightly indented medially; distal end smoothly and broadly rounded with some small mediodistal corrugations. *Aed* hidden from view in undissected genitalia.

Female (topotypic female paratype): Similar to male. Head more yellowish setose and gold pruinose. Antennae orange except for dark red-brown stylus. Orange parts of mesonotum more extensive (black area confined to a somewhat cross-shaped central marking that fails to reach posterior margin). Pleura partly orange (posterior part of *anepst* and entire *ktg*). Legs almost entirely orange (except for dark red-brown *cx* and terminal tarsomeres). Wing: 10.5×4.0 mm (slightly larger than ♂).

Variation: A species displaying little individual variation of note.

Holotype: ♂ NAMIBIA: 'in cop', 'Namibia, N of Kalkveld / on road to Otjiwarongo / 20.50S 16.13E / 25.iii.1997 / F.W. & S.K. Gess' (AMGS).

Paratypes: 2♂ 1♀ NAMIBIA: 1♂ 'Kaoko Otavi [18°18'S:13°42'E] / S.W.A.' ~ 'Mus. Exped. / Mar. 1926' (SAMC); 1♂ 1♀ 'Kamanyab [waterhole, 19°48'S:14°50'E] / S.W.A.' ~ 'Mus. Exped. / Mar. 1925' (SAMC); 1♀ same data as holotype (AMGS).

Distribution, phenology and biology: Known only from Namibia (Table 1). Adults have been collected only in March (Table 2). The biology is unknown, but localities are dominated by the Savanna biome.

Similar species: A member of the *reynaudii* species-group with close similarities to *whiteheadi*.

Ancylorhynchus greatheadi sp. n.

Figs 10, 40, 87–89

Etymology: Named after Dr David J. Greathead, whose collecting activities have led to the discovery of a number of interesting Afrotropical Asilidae, including this species from Eritrea.

Description:

Male (based on holotype. Condition: Excellent.).

Head: Red-brown to dark red-brown, silver pruinose, white setose. Antenna (Fig. 10): Red-brown, scape and pedicel white setose, postpedicel tipped with obliquely positioned pit-enclosed spine-like sensory element (terminal stylus 'segment' absent). Segmental ratios: 1:0.3:5.2. Face dark red-brown, fine silver pruinose except lateral parts of epistomal margin, mystax shiny white occupying ventral ⅓ of face. Frons and vertex dark red-brown, fine silver pruinose, white setose; ocellar tubercle fine white setose (no macrosetae). Occiput dark red-brown, uniformly fine silver pruinose, white setose. Palpus red-brown, white setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis dark red-brown, pale yellow setose.

Thorax: Red-brown to dark red-brown with orange-brown areas dorsally, fine silver-grey pruinose, white setose. Prothorax anteriorly brown-orange, posteriorly red-brown, fine silver-grey pruinose, white setose. Mesonotum red-brown with lateral parts brown-orange, fine silver-grey pruinose, fine moderately long white setose. Mesonotal macrosetae (white when present): *dc* weak confined to region posterior of transverse suture, *c*. 2 *npl*, 1 *spal*, 1 *pal*. Scutellum entirely red-brown, fine silver pruinose, disc sparsely white setose, hind margin with *c*. 4 white weakly developed macrosetae accompanied by minor setae. Pleura entirely dark red-brown, entirely fine silver-grey pruinose, setae white, confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* red-brown, not contras-

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ting with scutellum. Legs: Entirely red-brown, white to pale yellow setose, *cx* silver pruinose, claws dark red-brown with orange proximal parts. Wings (Fig. 40, paratype): 5.6×2.2 mm. Veins brown-yellow. Membrane entirely microtrichose, transparent (lacking staining). Haltere yellow with red-brown base.

Abdomen: Predominantly red-brown with some yellow areas, fine silver-grey pruinose, white setose. T1 red-brown; T2 red-brown with large yellow posterolateral areas that coalesce medially; T3–4 red-brown with small yellow areas posterolaterally; T5–7 red-brown with narrow posterior margins; terminalia red-brown. Sternites similar to tergites but yellow areas cover entire posterior margins.

Genitalia (Figs 87–89 paratype): *Epand* bifid, forming pair of parallel, moderately slender lobes that just out beyond all other genital structures. Lobes closely abut proximally, each being relatively straight with slightly inwardly curved distal tips. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly to fairly broadly-rounded tip; dorsal finger-like process poorly-developed appearing as a slight bump bearing a few longish setae; inner lobe well developed, distal end pointed, sclerotised and medially directed. *Gonst* somewhat compressed, dorsally directed, tip curved anteriorly. *Hypd* well developed, a little broader than long, tapering fairly rapidly to slightly bilobed apex; distal third flattened with group of long setae arising from base of flattened region (Fig. 87, lateral view); *Aed* not visible in ventral view.

Female: There is a fair degree of sexual dimorphism. Females are generally more orange in colour (e.g. the head, including face, palps and antennae are orange; the mesonotum is orange with a central dark marking; the legs are entirely orange). Females are generally slightly larger than males (♂ wing length ranges from 5.6–7.5 mm (average 6.4 mm), ♀ wing length ranges from 6.4–7.9 mm (average 7.1 mm)).

Variation: There is very little variation. One male from Waddi Damas is somewhat paler than other males but this may be a consequence of being teneral.

Holotype: ♂ ERITREA: 'Eritrea: / Salamona [15°39'N:39°01'E] / 30.iv.1961 / D.J. Greathead' (BMNH).

Paratypes: 5♂ 5♀ ERITREA: 2♂ 'Eritrea: / Barentu [15°07'N:37°36'E] / Dist. / 18.ix.1960 / D.J. Greathead' (BMNH); 1♀ 'Eritrea: nr / Gogni [15°08'N:37°21'E] / 17.ix.1960 / D.J. Greathead' (BMNH); 2♂ 'Eritrea: / Waddi / Damas [15°30'N:39°12'E] / 14.iii.1956 / D.J. Greathead' (BMNH); 1♂ 1♀ similar data as holotype (BMNH); 2♀ 'Eritrea: / Salamona / 9–10.iv.1961 / D.J. Greathead' (BMNH); 1♀ 'Eritrea: / Salamona / 29.iv.1961 / D.J. Greathead' (BMNH).

Distribution, phenology and biology: Known only from the type series collected in East Africa (Eritrea) (Table 1). Adults have been collected in September as well as in March and April (Table 2). The biology is unknown, but vegetation maps suggest that the environments occupied are dominated by *Acacia* savanna and desert scrubland. Greathead (1967) provides further details on habitats, where the specimens were collected.

Similar species: A member of the *nomadus* species-group with close similarities to *funebris* and *susurrus*.

Ancylorhynchus humeralis (Wiedemann, 1821)

Dasypogon humeralis: Wiedemann 1821: 225; 1828: 396.
Ancylorrhynchus humeralis: Kertész 1909: 101 (catalogue); Hull 1960: 217; Oldroyd 1974: 32.
Ancylorhynchus humeralis: Oldroyd 1980: 360 (catalogue).

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There are two specimens, the male with an identification/provenance label and the female without such a label. Wiedemann's (1821) description states '♂. Prom. bon. sp.' (= Cape of Good Hope), there being no indication that he studied a female. I consider the male specimen as having holotype status. These specimens, which appear not to have been studied since the description of the species, prove to be representatives of the genus *Pegesimallus* Loew, 1858 (subfamily Dasypogoninae). This genus was reviewed by Londt (1980) and the type specimens key out perfectly to *P. tapulus* (Walker, 1849), the male genitalia matching those illustrated for the species. *P. tapulus*, with a distribution that includes the Western Cape Province of South Africa and the western parts of the Eastern Cape Province, was also described from 'C.B.S.' (= Cape of Good Hope). Wiedemann's (1821) *humeralis* clearly has precedence over Walker's (1849) *tapulus* and so the latter name falls as a synonym of *humeralis*. Two taxonomic actions therefore need to be taken: (1) *Dasypogon humeralis* Wiedemann, 1821 is transferred to *Pegesimallus* Loew, 1858, resulting in the **new combination** *Pegesimallus humeralis* (Wiedemann, 1821); and (2) *Pegesimallus tapulus* (Walker, 1849) is synonymised with *P. humeralis* becoming a **new junior synonym** of the latter.

Pegesimallus and *Ancylorhynchus* belong to totally different subfamilies and it is surprising that nobody has detected this over the many years that these taxa have been in existence. The keys to Afrotropical *Ancylorhynchus* species produced by Oldroyd (1970, 1974) were obviously based on published descriptions rather than any personal experience of the taxa.

Holotype (examined): ♂ SOUTH AFRICA: '♂', 'Mus. / Westerm.', '*D. humeralis* / Wied. / Cape Good Hope / Decb. [xii] 1817' (UZMD).

Other material examined: SOUTH AFRICA: '♀', 'Mus. / Westerm.' (UZMD).

Ancylorhynchus hylaeiformis Speiser, 1910

Figs 11, 41, 90–92, 149

Ancylorhynchus hylaeiformis: Speiser 1910: 88; Oldroyd 1974: 33.
Ancylorrhynchus hyaeiformis: Hull 1960: 217 (misspelling).
Ancylorrhynchus striatus Oldroyd, 1970: 274. **Syn. n.**
Ancylorhynchus hylaeiformis: Oldroyd 1980: 360 (catalogue).
Ancylorhynchus striatus: Oldroyd 1980: 360 (catalogue).

Redescription:

Male (based on holotype *hylaeiformis*. Condition: Excellent; right antenna broken off beyond pedicel; mesonotum cracked in region of pin.).

Head: Dark red-brown to blackish, strongly gold-silver pruinose, pale yellow, yellow, orange and dark red-brown setose. Antenna (Fig. 11): Uniformly orange, scape and pedicel pale yellow setose (weakly on pedicel), postpedicel tipped with obliquely situated pit-enclosed spine-like sensory element (terminal stylus 'segment' absent). Segmental ratios: 1:0.3:5.1. Face dark red-brown to blackish, strongly gold-silver pruinose except lateral margins of epistomal margin and small dorsal area adjacent to antennal sockets, mystax shiny yellow occupying at least ventral ¾ of face (narrow asetose area dorsally). Frons and vertex blackish, fine silver-grey pruinose except for transverse band anterior of ocellar tubercle that is largely apruinose, pale yellow setose; ocellar tubercle fine pale yellow setose. Occiput blackish, fine silver pruinose except for strongly pruinose parts adjacent to eye margins, dorsal setae orange, ventral setae dark red-brown. Palpus

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orange-brown, dark red-brown setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis red-brown, dark red-brown setose.

Thorax: Dark red-brown to blackish with orange areas dorsally, fine silver pruinose, pale yellow, orange and dark red-brown setose. Prothorax fine silver pruinose; anterior antepronotum orange, orange setose; posterior antepronotum dark red-brown, pale yellow (dorsally) and dark red-brown (laterally) setose. Mesonotum orange except for blackish cross-shaped marking where medial stripe reaches anterior and posterior margins while transverse strip fails to reach lateral margins, fine silver pruinose, fine pale yellow setose. Mesonotal macrosetae (mostly orange when present): *dc* weak, red-brown, confined to posterior region, *c*. 3–4 *npl*, 1 *spal*, 3–4 *pal*. Scutellum orange with dark red-brown anterior margin, fine silver pruinose, disc sparsely pale yellow and red-brown setose, hind margin with *c*. 6 yellow and red-brown weakly developed macrosetae accompanied by minor setae. Pleura entirely dark red-brown to black, entirely silver-grey pruinose, setae white to pale yellow confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* black, contrasting with predominantly orange scutellum. Legs: *cx* blackish, strongly silver pruinose, white setose; *tro* red-brown; *fem*, *tib* and *tar* uniformly orange, pale yellow-white setose (some dark red-brown on terminal tarsomeres), claws dark red-brown with orange proximal parts. Wings (Fig. 41): 8.8×3.6 mm. Veins brownish. Membrane extensively microtrichose (some proximal cells partly bare), transparent except for pale brown staining along distal veins (from about *r–m*) and along Rs. Haltere pale cream.

Abdomen: Predominantly blackish, strongly gold-silver pruinose, pale yellow setose. T1–4 blackish, fine silver pruinose except for strongly gold-silver pruinose hind margins; T5–7 blackish, fairly uniformly strongly gold-silver pruinose; terminalia orange, apruinose. Sternites similar to tergites (largely hidden from view).

Genitalia (Figs 90–92 paratype): *Epand* bifid, forming pair of relatively short, proximally stout lobes. Lobes closely abut proximally, each having curved appearance in dorsal view, distal parts tapering and strongly inwardly curved, opposing tips almost touching medially. *Proct* simple, dorsally situated *cerc* appearing fused proximally (specimen weakly sclerotised and detail not evident). *Goncx* well developed, outer lobe tapering posteriorly and projecting well beyond level reached by *epand*; dorsal finger-like process completely absent; inner lobe well developed, distal end strongly sclerotised, strongly medially directed (overlapping opposing lobe). *Gonst* laterally compressed, dorsally directed, tip curved anteriorly (largely hidden from view in undissected genitalia). *Hypd* well developed, tapering fairly rapidly to broad, somewhat truncate distal end; distal end with pair of slightly diverging, broadly-rounded protuberances each with group of setae. *Aed* small (largely hidden in undissected genitalia).

Female (based on holotype *striatus*. Condition: Fair; both antennae broken off beyond pedicel; right metathoracic tarsus missing terminal four segments; abdomen reattached with glue partly obscures scutellum. Useful details displayed by the paratype are provided in square brackets).

Head: Dark red-brown to black and orange, silver-gold pruinose, pale yellow, orange and dark red-brown setose. Antenna: Scape and pedicel orange, pale yellow setose, [postpedicel orange proximally becoming brown-orange distally, tipped with obliquely situated pit-enclosed spine-like sensory element, terminal stylus ‘segment’ absent.

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Segmental ratios: 1:0.3:4.5. Face black, strongly silver-gold pruinose except on lateral parts of epistomal margin and dorsomedial spot adjacent to antennal sockets, mystax shiny pale yellow occupying ventral ⅔ of face. Frons and vertex black, fine silver-gold pruinose, pale yellow setose; ocellar tubercle fine pale yellow setose. Occiput black, uniformly silver-gold pruinose, orange setose except for few pale yellow setae dorsally. Palpus orange, dark red-brown setose, terminal palpomere swollen, apex projecting with terminal sensory pit. Proboscis red-brown, pale yellow setose.

Thorax: Black with orange areas dorsally, silver-gold pruinose, pale yellow and orange setose. Prothorax orange anteriorly with orange setae, dark red-brown posteriorly with dark red-brown setae, fine silver-gold pruinose. Mesonotum orange except for large blackish (masked by pruinescence) central area extending from anterior to posterior margin (widest at level of transverse suture, but not extending to orange margin, silver-gold pruinose, fine shortish pale yellow setose. Mesonotal macrosetae (orange when present): *dc* not evident, 4 *npl*, 1–2 *spal*, 3 *pal*. Scutellum orange with dark red-brown anterior and lateral margins, silver-gold pruinose, disc sparsely pale yellow setose, [hind margin with *c*. 6 pale yellow macrosetae accompanied by minor setae]. Pleura entirely dark red-brown to black, entirely silver-gold pruinose, setae white to pale yellow confined mainly to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* black, contrasting with mainly orange scutellum. Legs: *cx* dark red-brown, silver pruinose, white and pale yellow setose; *tro* red-brown (*tro*2 with row of short black setae ventrally); *fem* orange with dark red-brown longitudinal stripe anterodorsally, *tib* and *tar* uniformly orange, entirely yellow setose, claws dark red-brown with orange proximal parts. Wings: 9.6×3.6 [11.2×4.3] mm. Veins orange and brown. Membrane extensively microtrichose (some proximal cells partly bare), distal cells brown especially adjacent to veins (from just beyond level of *r–m*), proximal cells pale yellow, semi-transparent. Haltere yellow with brown-yellow base.

Abdomen: Predominantly dark red-brown to blackish with brown-orange parts, silver-gold pruinose, pale yellow setose. T1 dark red-brown, fine silver-gold pruinose; T2–6 dark red-brown with narrow orange-brown posterior margins, strongly silver-gold pruinose; T7–8 and terminalia orange, largely apruinose. Sternites similar to tergites in coloration, evenly fine silver-gold pruinose, white setose.

Variation: The species shows some variation in abdominal coloration. Most specimens have fairly uniformly dark red-brown to black abdomens except for the BMNH male from Kilindini where the dominant colour is orange.

Holotype *hylaeiformis* (examined): ♂ TANZANIA: 'Meru [Mt Meru, 03°13'S:36°40'E] / Nieder.', 'Sjöstedt. 1905', 'okt.', 'Type! / *Ancÿlorhÿnchus* / *hÿlaeiformis* m. / P. Speiser det.' (NHRS).

Paratypes *hylaeiformis* (examined): 1♂ 1♀ TANZANIA: ♂ 'Meru / Nieder.', 'Sjöstedt. 1905', '2 dec.', '*Ancÿlorhÿnchus* / *hÿlaeiformis* m. / P. Speiser det.' (NHRS); ♀ 'Meru / Nieder', 'Ngare na / nyuki', 'Sjöstedt', 'jan.', '*Ancylorrhynchus* / *hylaeiformis* / P. Speiser det.', 'Typus [orange]', 'Zool. Mus. / Berlin' (ZMHB).

Notes: In describing *hylaeiformis* Speiser (1910: 89) states '3♂ und 1♀ aus der Niederung am *Meru*, vom Oktober und 9. December und mit der desonderen Bezeichnung vom Flusse Ngare na nyuki, vom Januar.' He does not say these are types, but this must be inferred from a label on one ♂. This ♂ is considered the holotype, other specimens must therefore be accepted as paratypes. Of this material I have seen 2♂ and 1♀ and the whereabouts of the third ♂ paratype (presumably collected on 9 December) are not known to me.

Holotype *striatus* (examined): ♀ BURUNDI: 'Nyamibu [3.890°S:29.399°E] / 9.vi.49', 'Urundi: Nyamibu / Lac Tanganyika / 29-vi-1949 / F.J. François', 'Type' [purple], '*Ancylorrhynchus* / *striatus* Oldroyd / H. Oldroyd det., 1965 / Holotype' (ISNB).

Paratype *striatus* (examined): ♀ BURUNDI: same data as holotype but labelled as paratype [orange] (ISNB).

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Other material examined: KENYA: 1♂ 'Kenya / Sokoke / Forest [03°29'S:39°50'E] / 16.v.1964 / D.J. Greathead' (BMNH); 1♂ 'Kilindini [harbour, 04°04'S:39°39'E] K.C. [Kenya Colony] / 31.v.23. Loveridge' (BMNH).

Distribution, phenology and biology: Fairly widely distributed in East Africa (Burundi, Kenya, Tanzania) south of the equator (Table 1, Fig. 149). Adults have been collected in December–January and May–June (Table 2) which might suggest a bivoltine species. The biology is unknown, but localities suggest that the species inhabits grassland and savanna, although one record may suggest an association with subtropical or temperate forest vegetation.

Similar species: A member of the *nomadus* species-group with close similarities to *cruciger* and *sokokensis*.

Ancylorhynchus insignis Bromley, 1936

Figs 12, 42, 93–95

Ancylorrhynchus insignis: Bromley 1936: 137; Hull 1960: 217; Oldroyd 1974: 34.
Ancylorhynchus insignis: Oldroyd 1980: 360 (catalogue).

Redescription:

Male (based on holotype. Condition: Good; right antenna broken off beyond pedicel; right wing with small hole centrally.).

Head: Dark red-brown, silver and reddish pruinose, white, orange and brown-orange setose. Antenna (Fig. 12): Scape and pedicel orange, orange setose, postpedicel orange proximally becoming slightly orange-brown distally, terminal stylus 'segment' present, red-brown, tipped with pit-enclosed spine-like sensory element. Segmental ratios: 1:0.4:3.2:0.2. Face dark red-brown, uniformly strongly silver pruinose (weakly on lateral parts of epistomal margin), mystax shiny white occupying ventral *c*. ½ of face. Frons and vertex dark red-brown, fine reddish pruinose, brown-orange setose; ocellar tubercle fine brown-orange setose (no macrosetae). Occiput dark red-brown, uniformly silver-gold pruinose, orange setose. Palpus orange, orange-brown setose, terminal palpomere swollen, apex projecting with terminal sensory pit. Proboscis dark brown, brown-orange setose.

Thorax: Dark red-brown and orange, fine silver pruinose, white, orange and brown-orange setose. Prothorax mostly orange, dark red-brown laterally (and tiny spot medially), fine silver pruinose, white and brown-orange setose. Mesonotum orange except for broad dark red-brown medial band (which is broader at midlength and extends onto scutellum), fine silver pruinose, fine moderately long white and brown-orange setose. Mesonotal macrosetae (orange when present): *dc* present posterior to transverse suture, 3 *npl*, 1 *spal*, 2 *pal*. Scutellum orange with dark red-brown anterior area (adjacent to mesonotal band), fine silver pruinose, disc sparsely orange-brown setose, hind margin with 4 orange macrosetae accompanied by minor setae. Pleura largely dark red-brown (*ktg* and surrounding area orange), entirely silver pruinose, setae white (confined to *anepst*, *kepst* and *ktg*). *Anatg* and *mes pnot* dark red-brown, contrasting with mainly orange scutellum. Legs: *cx* dark red-brown, silver pruinose, white setose; *tro* largely orange (*tro*2 with row of short black setae ventrally); *fem*, *tib* and *tar* uniformly orange (tip of *tar*5 brownish), pale yellow and white setose, claws dark red-brown with orange proximal parts. Wings (Fig. 42): 6.9×2.4 mm. Veins yellow-brown. Membrane

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extensively microtrichose (some proximal cells partly bare), fairly uniformly yellow. Haltere pale yellow with brownish extremities.

Abdomen: Predominantly dark red-brown with some orange patches, silver pruinose, white and red-brown setose. T1 dark red-brown with orange lateral parts, weakly pruinose, white setose. T2 dark red-brown with large orange posterolateral corners, orange parts strongly silver pruinose, red-brown setose. T3–4 dark red-brown with small orange posterolateral corners, weakly silver pruinose (T3 only). T5–8 progressively more orange (terminalia orange). Sternites dark red-brown, hind margins somewhat orange and silver pruinose.

Genitalia (Figs 93–95): *Epand* bifid, forming pair of relatively long, slender lobes that project distally beyond all other genital structures. Lobes closely abut proximally, each being fairly straight, lying parallel to each other, distal parts slightly inwardly curved, a row of subapical setae present externally. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe terminating in weakly developed lobe; dorsal finger-like process well-developed, relatively short and stout; inner lobe well developed, projecting posteriorly beyond level reached by outer lobe, distal end sclerotised, medially directed. *Gonst* slightly laterally compressed, dorsally directed, tip curved anteriorly. *Hypd* moderately developed, somewhat oval on shape; distal margin with pair of closely associated small, rounded, posteriorly directed protuberances. *Aed* sheath almost parallel sided in ventral view, with narrower terminal section ending in bifid tip.

Female. Similar to male but larger (allotype wing 8.9×3.4 mm) and more extensively orange.

Variation: A species demonstrating little variation. A male from 'Tierberg' has a somewhat broader mesonotal medial band when compared with other specimens, but this is considered acceptable intraspecific variation.

Holotype (examined): ♂ SOUTH AFRICA: 'Capland / Willowmore [33°17'S:23°29'E] / 1 ii 1907 / Dr. Brauns', 'Holotype / *Ancylorrhynchus* / *insignis* Br' [red], '*Ancylorrhyn / chus* n. sp. / det. Lichtwardt', '*Ancylorrhynchus* / *insignis* / Bromley / Det. / S.W. Bromley 1934', '*Ancylorrhynchus* / *insignis* Broml. / Holotype 146.' [red ink] (NMSA).

Allotype (examined): ♀ SOUTH AFRICA: 'Willowmore / Capland / Dr. Brauns. / 7 09' [sideways], 'Allotype / *Ancylorrhynchus* / *insignis* Br' [red], '*Ancylorrhynchus* / *insignis* / Brom. / Allotype No 147' [red ink] (NMSA).

Other material examined: SOUTH AFRICA: 1♂ 'On flowers of / Acacia karroo', 'Cape Province / Prince Albert Dist. / Tierberg (Res. Stat.) / 33°7'42"S, 22°16'24"E / 26.xi. – 5.xii.1987 / F.W., S.K. & R.W. Gess' (AMGS); 1♂ '77/78/221', 'Sandstone / bank', 'Cape Province / Hilton [33°15'S:26°21'E] / Grahamstown / 7.ii.1978 / F.W. Gess' (AMGS); 1♀ 'Willowmore [33°17'S:23°29'E] / Capland. / Dr. Brauns / 20.12.09 (NMSA); 1♂ 'S Africa: Cape #7 / 6km E of Alicedale / 33°19'S:26°07'E 600m / Date: 21.xi.1990 / Whittington & Londt / New Years Dam area' (NMSA); 1♀ 'Cape Province / Alicedale [33°19'S:26°07'E] / 2.xii.1970 / F.W. Gess' (AMGS); 1♂ 'Boesmans Riv. [Boesmansriviermond = Bushman's River Mouth, 33°42'S:26°40'E] / nr. Grahamstown / E. Cape' ~ 'S. A. Museum / March 1954' (SAMC).

Distribution, phenology and biology: Fairly widely distributed in the southern parts of Southern Africa (South Africa) (Table 1, Fig. 150) being found in the Eastern Cape and Western Cape provinces. Adults have been collected from November–March (no records for January) (Table 2). The biology is unknown, but localities suggest that the species inhabits savanna and dry fynbos biomes.

Similar species: A fairly distinctive member of the *reynaudii* species-group, but with some similarities to *unifasciatus*.

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Ancylorhynchus magnificus Bromley, 1936

Figs 13, 43, 96–98, 148

Ancylorrhynchus magnificus: Bromley 1936: 136; Hull 1960: 217; Oldroyd 1974: 33.
Ancylorhynchus magnificus: Oldroyd 1980: 360 (catalogue).

Redescription:

Female (based on holotype. Condition: Excellent; right antenna broken off beyond pedicel; terminal 4 tarsomeres of right prothoracic leg missing).

Head: Orange, fine silver pruinose, orange and dark red-brown setose. Antenna (Fig. 13): Scape and pedicel orange, orange setose, postpedicel orange, tipped with obliquely placed pit-enclosed spine-like sensory element (terminal stylus 'segment' absent). Segmental ratios: 1:0.3:6.0. Face orange, fine silver pruinose except for inverted V-shaped area extending from antennal sockets to ventrolateral parts of epistomal margin, mystax shiny orange occupying ventral ½ of face. Frons and vertex orange, fine silver pruinose, orange-yellow setose; ocellar tubercle fine pale yellow setose (no macrosetae). Occiput mainly orange with black circumcervical ring, uniformly fine silver pruinose, orange setose (few dark red-brown setae ventrally). Palpus orange, segment 1 red-brown setose, segment 2 orange setose, swollen, apex projecting with terminal sensory pit. Proboscis brown-orange, dark red-brown setose.

Thorax: Dark red-brown with orange areas, fine silver pruinose, orange and dark red-brown setose. Prothorax predominantly orange, small dark red-brown areas laterally, fine silver pruinose, orange and fine dark red-brown setose. Mesonotum orange except for large central black area which extends narrowly medially to anterior margin, fine silver pruinose, orange and fine pale yellow setose. Mesonotal macrosetae (short orange when present): few weak *dc* confined to area posterior to transverse suture, *c*. 4 *npl*, 1–2 *spal*, 2 *pal*. Scutellum orange with dark red-brown disc, fine silver pruinose, disc sparsely red-brown setose, hind margin with 4 orange weakly developed macrosetae, accompanied by dark red-brown minor setae. Pleura mainly dark red-brown, entirely silver-grey pruinose, setae orange and fine red-brown confined to *anepst*, *kepst* and *ktg*. *Anatg* orange and red-brown, *mes pnot* dark red-brown, contrasting with largely orange scutellum. Legs: *cx* dark red-brown, silver pruinose, pale yellow setose; *tro* predominantly orange (*tro*2 with row of short black setae ventrally); *fem*, *tib* and *tar* uniformly orange, pale yellow and orange setose (*tar* with some black setae), claws dark red-brown with orange proximal parts. Wings (Fig. 43): 14.2×6.5 mm. Veins orange proximally, dark brown distally. Membrane extensively microtrichose (some proximal cells partly bare), distal cells brown (from about first fork of Rs), proximal cells yellow and partly transparent. Haltere red-brown.

Abdomen: Predominantly blackish with small orange to orange-brown areas, fine silver-grey pruinose except for terminal segments (6–10), white and dark red-brown setose. T1 entirely blackish, dark red-brown setose; T2–3 dark red-brown with narrow brown-yellow posterolateral margins, white setose (few dark red-brown setae anterolaterally); T4–7 dark red-brown, white setose; T8 and terminalia orange, fine dark red-brown setose. Sternites dark red-brown, S2–5 narrowly orange posteriorly, white setose.

Male.

Genitalia (St Lucia ♂, Figs 96–98): *Epand* bifid, forming pair of moderately long, fairly stout lobes that project posteriorly beyond levels achieved by other genital structures.

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Lobes closely abut proximally, lie parallel with each other, distal parts being relatively straight. *Proct* simple, dorsally situated *cerc* not appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly and terminating in rounded lobe; dorsal finger-like process absent, represented by slight, broadly rounded setose bump; inner lobe well developed, distal end strongly sclerotised, medially directed. *Gonst* hardly laterally compressed, dorsally directed, tip curved anteriorly. *Hypd* moderately developed, suboval in shape with pair, broad, fairly widely separated distal protuberances. *Aed* fairly stout with tiny bifid distal tip. *Note*: Olifants R. ♂ essentially similar but *hypd* with slightly more convoluted posterior margin.

Variation: Perhaps the most variable of *Ancylorhynchus* species. Females are on average larger than males: male wing length 10.0–12.5 mm (mean of 6, 11.6 mm), female wing length 10.0–14.2 mm (mean of 12, 12.3 mm). In coloration the species is also highly variable. For example, wing colour (in both sexes) varies from being mainly yellow with a dark red-brown tip to entirely blackish. The abdomen varies from being almost entirely orange to entirely blackish. The legs range from being orange through to dark red-brown. Male genital structure, however, appears to be reasonably consistent. It is of interest that of the 32 specimens listed below only 9 (29 %) are male, the vast majority (22, or 71 %) being female (1 specimen could not be sexed as the abdomen is missing).

Holotype: ♀ SOUTH AFRICA: 'Barberton [25°47'S:31°03'E] / (Stentor.) / 9.11.10 / L.S. Hulley', 'Holotype / *Ancylorrhynchus* / *magnificus* Br' [red], '*Ancylorrhynchus* / *magnificus* Broml. / Holotype 157.' [red on white] (NMSA).

Other material examined: KENYA: 1♀ 'Van Someren / Garissa [00°28'S:39°38'E] Bura / Tana Kenya 3 49 [iii.1949]' (BMNH). MALAWI: 1♀ 'Nyasaland / Zomba [15°23'S:35°20'E] / Nov. 1913 / H.S. Stannus' (BMNH). MOZAMBIQUE: 1♂ 'Port. E. Africa [Portuguese East Africa] / Kola Valley [17°02'S:35°11'E] / 24.v.1913 / S.A. Neave.' (BMNH). NAMIBIA: 1♀ 'S.W. Africa: 21 mi / W. Outjo [20°12'S:15°53'E] 1200m / 22.xii.1966 / E.S. Ross & / K. Lorenzen' (CASC); 1♀ '1-.xii.1970 / Windhoek / South West Africa / SE 2217CA / R. Oberprieler' (NMSA); 1♀ 'South West Africa / Windhoek 22.05S / 17.05E 30.12.1983 / R. Oberprieler' (SANC). SOUTH AFRICA: 1♀ 'Ben Lavin [23°08'S:29°57'E] / Louis Trichardt / 19/01/98' (NMSA); 1♀ 'Transvaal / Ellisras [23°40'S:27°43'E] / 22.xi.1978 / J.J.B. and C.J.G' (AMGS); 1♂ 'Transvaal / Olifants R. [24°03'S:32°40'E] / nr Babelulo / 29.x.90 / F. de Moor' (AMGS); 1♀ 'South Africa, Tvl. / Kopermyn, 14 km NE / Chuniespoort, 24.07S / 29.26E. 2.xii.1981 / G.L. Prinsloo' (SANC); 1♂ 'Transvaal / 30km S.E. of / Hoodspruit [Hoedspruit, 24°21'S:30°58'E] / 12.xi.1978 / J.J.B. and C.J.G' (AMGS); 1♀ 'South Africa, Tvl. / Soutpan Pretoria / Dist. 25.24S / 28.06E. 16.xi.1983 / I.M. Millar' (SANC); 1♂ 'Eastern Transvaal / Nelspruit / 25°29'S:30°55'E / 25/i/95 / Charles Tanton' (AMGS); 1? 'Rustenburg [25°40'S:27°15'E] / 1.11.45 / A.L. Capener' (NMSA); 1♀ 'Pienaars- / poort [25°44'S:28°25'E] / 1.11.48. / B. Smit.' (SANC); 1♂ 'RSA: KZN, Ndumo Game R. / main camp area at: / 26°54.652'S, 32°19.719'E / 27–30.xi.2009 / A.H. Kirk-Spriggs', 'Malaise traps / broad-leaved deciduous / woodland' (BMSA); 1♀ 'KwaZulu-Natal, RSA / False Bay Park [27°58'S:32°22'E], St / Lucia 17–21/2/1997 / Coll. A Weaving' (NMSA); 1♀ 'Natal False Bay / Lake St Lucia / 27°58'S, 32°23'E, 2–21.ii.1991 / Coll A. Weaving' (AMGS); 1♀ 'South Africa: Natal / False Bay Reserve / 3225E 2800S 15.iii.89 / PE Reavell 35m / Umziki Pan / Swim pool' (NMSA); 1♀ 'Coastal bush', 'Natal Fanies / Island, St Lucia / 28°06'S, 32°26'E / 21–25.ii.1987 / Coll A. Weaving' AMGS); 1♂ 'St Lucia [28°23'S:32°25'E] / Bell Marley / 4.4.31' (NMSA); 1♀ 'St Lucia Z / 28-12-30 / Marley' (NMSA); 1♂ 'Dukuduku Forest / 7m. NE. Matubatuba [= Mtubatuba, 28°25'S:32°11'E] / Natal, S. Afr. / 10.11.1969 / H.D. Brown' (SANC). ZIMBABWE: 2♀ 'Sanyati Valley [16°49'S:28°10'E] / S. Rhodesia / Sept.–Oct., 1925. / RHR Stevenson' (NMSA); 2♀ 'Sawmills [19°35'S:29°01'E] / S. Rhodesia / 14.xi.1924 / R.H.R. Stevenson' (NMSA); 1♀ 'Sawmills / S. Rhodesia / 16.v.1924 / Rhod. Museum' (BMNH); 1♀ 'Sawmills, S.R. / 25.10.1919. / Rhodesia / Museum' (BMNH). UNKNOWN: 1♂ '2150'' (NMSA); 1♂ '887' (NMSA).

Distribution, phenology and biology: Fairly widely distributed in Southern, Central and East Africa (Table 1) south of the equator (Fig. 148). Adults have been collected from September–May (Table 2). The biology is poorly known, but label data suggest that this is a woodland species. A single prey record in AMGS involves a female pinned with a small hemipteran (Membracidae).

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Similar species: A member of the *nomadus* species-group with close similarities to *feijeni*.

Ancylorhynchus nomadus (Wiedemann, 1828)

Figs 14, 44, 99–101

Dasypogon Nomada: Wiedemann 1828: 397; Walker 1854: 492.
Scylaticus Nomada: Wulp 1870: 209; Kertész 1909: 103 (catalogue).
Ancylorrhynchus nomada: Hull 1960: 217.
Ancylorhynchus nomadus: Oldroyd 1980: 360 (catalogue).

Wiedemann's holotype appears to be lost. Despite an extensive search it could not be traced. In his description Wiedemann (1828) states 'Im Lendener Museum', however the meaning of this is not known to me. The specimen is not in Leiden nor is it in London, although Walker (1854) lists a female in British Museum. Although Wiedemann (1828) states '♀. Vatterland?', Oldroyd (1980), in cataloguing the species, gives locality information as '[No locality]; Nigeria' indicating that he had seen material from Nigeria. There are two specimens from Nigeria in the BMNH (which probably provided the information used in the catalogue), and there is also a specimen in ZSMC identified as *nomadus* by Engel. I have decided that the species represented by these three specimens is therefore a reasonable candidate to bear Wiedemann's name, and so here redescribe the species on the basis of this material. Should the holotype not be found the single male listed below is the most appropriate neotype. It should also be noted that during this study I found two other West African species that also agree well with the description provided by Wiedemann. These species are described as new species under the names *similis* and *simpsoni*.

Redescription:

Male (based on Zungeru ♂. Condition: Good; left antenna broken off beyond pedicel; terminal 2 tarsomeres of right prothoracic leg missing; left prothoracic tarsus broken off and glued to supporting card).

Head: Dark red-brown to black, silver pruinose, white and dark red-brown setose. Antenna (Fig. 14): Scape dark red-brown white setose, pedicel orange-brown white setose, postpedicel orange-brown tipped with obliquely positioned pit-enclosed spine-like sensory element (terminal stylus 'segment' absent). Segmental ratios: 1:0.3:5.6. Face dark red-brown to black, strongly silver pruinose except laterally on epistomal margin and small medial spot adjacent to antennal sockets, mystax shiny white occupying ventral ⅓ of face. Frons and vertex dark red-brown to black, fine silver-grey pruinose (weak anterior of occelar tubercle), white setose; ocellar tubercle fine white setose (no macrosetae). Occiput black, uniformly silver pruinose, white setose. Palpus orange-brown, red-brown setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis brown-orange, white setose.

Thorax: Uniformly dark red-brown to black, silver pruinose, white and blackish setose. Prothorax entirely black, silver pruinose, white setose. Mesonotum dark red-brown to black, silver pruinose, fine moderately long white setose. Mesonotal macrosetae (blackish or white when present): few *dc* confined to posterior region, 3 black *npl*, 1 black *spal*, 2–3 white *pal*. Scutellum entirely blackish, fine silver pruinose, disc sparsely white setose, hind margin with *c*. 8 long white macrosetae accompanied by minor setae.

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Pleura entirely blackish, entirely silver pruinose, setae white confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* dark red-brown to black. Legs: *cx* dark red-brown, silver pruinose, white setose; *tro* dark red-brown (*tro*2 with row of short white setae ventrally); *fem*, *tib* and *tar* uniformly dark red-brown, entirely white setose, claws dark red-brown with brown-orange proximal parts. Wings (Fig. 44): 7.1×2.7 mm. Veins dark red-brown. Membrane extensively microtrichose (some proximal cells partly bare), extensively brown due to dark microtrichia and some staining, proximal parts semi-transparent. Haltere orange-brown with pale yellow knob.

Abdomen: Predominantly brown-orange with blackish areas, silver pruinose, entirely white setose. T1 uniform dark red-brown, strongly pruinose; T2 dark red-brown with orange-brown parts posterolaterally, strongly silver pruinose except for black spot mediolaterally; T3–5 brown-orange, somewhat red-brown dorsomedially, weakly pruinose; terminalia dark red-brown (excised). Sternites similar to tergites but orange areas more extensive.

Genitalia (Figs 99–101): *Epand* bifid, forming pair of relatively long, slender lobes. Lobes closely abut proximally, each being fairly straight and lying parallel to each other. *Proct* simple, dorsally situated *cerc* closely associated and may be partly fused together proximally. *Goncx* well developed, outer lobe projecting posteriorly beyond level reached by *epand*; dorsal finger-like process long, distally pointed, jutting out well beyond level reached by *epand*; inner lobe well developed, distal end sclerotised, medially directed. *Gonst* hardly compressed, dorsally directed, tip curved anteriorly. *Hypd* moderately developed, suboval in shape, posterior margin projecting posteriorly as a slightly medially indented ridge. *Aed* broadly triangular in ventral view, with tiny bifid distal tip.

Female. Similar to male.

Material examined: NIGERIA: 1♂ 'Zungeru [09°49'N:06°09'E] / N. Nigeria. / Dr. J.W. Scott Macfie. / 2 iii.1911', 'Sammlung / F. Hermann', '*Ancylorrh*. / *nomada* / Wd', '*nomada* Wied.', '*Ancylorrhynchus* / *nomada* Wied. / det. E. O. Engel ♂' (ZSMC); 1♀ 'Nigeria: Falala: [? Falali, 11°28'N:09°02'E] / 16.vii.1957: / P. Blasdale collection' (BMNH); 1♀ 'N. Nigeria. / nr. Ajassepo [Ajasse Ipo, 08°14'N:09°49'E] / 27.iv.1912 / Dr. J.W. Scott Macfie.' (BMNH).

Distribution, phenology and biology: Known only from three West African (Nigerian) records (Table 1). Adults have been collected in March, April and July (Table 2). The biology is unknown, but localities suggest that this is a savanna species.

Remarks: Van Der Wulp (1870: 209) had the following to say '*Dasypogon Nomada* en *Histrio* zijn beiden nog door typische exemplaren in het museum vertegenwoordigd en behooren, wegens de lange dunne sprieten en de overige kenteekens, tot het geslacht *Scylaticus* Löw.' Long, slender antennae are hardly grounds for transferring *nomada* to *Scylaticus*, however, Wulp (1870) was correct in removing the species from *Dasypogon* into a genus that is certainly similar to *Ancylorhynchus*. Kertész (1909) listed *Nomada* under *Scylaticus* Loew (citing Walker 1854 and Schiner 1866) and in response to the comment made by Wulp (1870). It is also of interest that Indian specimens in BMNH from Bahir (Banhar Province) look very like the dark species in West Africa (*nomadus*, *similis*, *simpsoni*) which suggests that Wiedemann's *nomadus* may not even be an Afrotropical species!

Similar species: A member of the *nomadus* species-group with close similarities to *simpsoni*.

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Ancylorhynchus nyukinus Speiser, 1910

Figs 15, 45, 102–104, 149

Ancylorhynchus nyukinus: Speiser 1910: 89; Oldroyd 1980: 360 (catalogue).
Ancylorrhynchus nynkinensis: Hull 1960: 217 (misspelling).

Redescription:

Female (based on holotype. Condition: Excellent; left antenna broken off beyond pedicel; terminal tarsomere missing from left prothoracic leg.).

Head: Orange-brown to dark red-brown, silver-gold pruinose, pale yellow setose. Antenna (Fig. 15): Scape and pedicel orange, pale yellow setose, postpedicel brown-orange proximally becoming dark red-brown distally, tipped with obliquely positioned pit-enclosed spine-like sensory element (terminal stylus 'segment' absent). Segmental ratios: 1:0.4:5.6. Face brown-orange, strongly gold pruinose except for lateral margins of epistomal margin, mystax shiny pale yellow occupying ventral ½ of face. Frons and vertex dark red-brown, fine silver-gold pruinose, pale yellow setose; ocellar tubercle posteriorly orange-brown, fine pale yellow setose. Occiput dark red-brown, uniformly strongly silver-gold pruinose, entirely pale yellow setose. Palpus orange, pale yellow setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis dark red-brown, pale yellow setose.

Thorax: Dark red-brown to blackish with orange areas dorsally, fine gold-silver pruinose, pale yellow setose. Prothorax predominantly orange-brown (dark red-brown laterally), fine silver-gold pruinose, pale yellow setose. Mesonotum black except for orange postpronotal lobes and surrounding area, lateral margins, postalar lobes and posteromedial area, fine silver-gold pruinose, fine moderately long pale yellow setose. Mesonotal macrosetae (pale yellow when present): *dc* pale yellow confined to posterior to transverse suture, *c*. 3 *npl*, 1 *spal*, 2 *pal*. Scutellum orange with narrow dark red-brown anterior margin, fine gold-silver pruinose, disc sparsely pale yellow setose, hind margin with *c*. 4 pale yellow weakly developed macrosetae accompanied by minor setae. Pleura entirely dark red-brown, silver-gold pruinose, setae pale yellow confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* dark red-brown, contrasting with mainly orange scutellum. Legs: *cx* orange to dark red-brown, silver-gold pruinose, pale yellow setose; *tro* orange (*tro*2 with yellow setae ventrally); *fem*, *tib* and *tar* orange except for terminal tarsomeres that are dark red-brown, entirely pale yellow setose, claws dark red-brown with orange proximal parts. Wings (Fig. 45): 8.9×3.4 mm. Veins orange to brown. Membrane extensively microtrichose (some proximal cells partly bare), distal cells brownish (from about level of *r–m* crossvein), proximal cells more transparent. Haltere orange with brown base.

Abdomen: Predominantly blackish with orange areas, fine silver-gold pruinose, pale yellow setose. T1 blackish with broad gold-silver pruinose posterior margin; T2 blackish with orange patches posterolaterally and along posterior margin, strongly silver-gold pruinose posterolaterally; T3–4 dark red-brown to black with orange posterior margins, weakly silver pruinose except for small areas posterolaterally; T5–6 blackish with broad orange posterior margins, uniformly silver pruinose; T7–8 and terminalia orange, apruinose. Sternites similar to tergites but orange areas more extensive.

Paratype: The ♀ paratype is essentially similar to the holotype except that the antennae are entirely orange as is the scutellum. It is slightly smaller (wing 7.7×3.0 mm).

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Male.

Similar to, but generally darker than female, the mesonotum being almost entirely black except for postpronotal and postalar lobes.

Genitalia (Figs 102–104, Voi, Kenya): *Epand* bifid, forming pair of relatively slender lobes that project beyond levels attained by other genital structures. Lobes closely abut proximally, being straight and lying parallel to one another. *Proct* simple, dorsally situated *cerc* not clearly demarcated (poorly sclerotised), appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly to narrowly rounded distal end; dorsal finger-like process well-developed projecting posteriorly to almost level of *epand*. *Gonst* hardly compressed, dorsally directed, distal end curved anteriorly. *Hypd* well-developed, proximal region suboval, distal region tapering posteriorly to upwardly directed hind margin of complicated form. *Aed* largely hidden within undissected genitalia.

Variation: A fairly consistent species with little variation of note. Kampi-Ya-Samaki ♂ has slightly differently shaped *hypand* considered to be acceptable variation.

Holotype (examined): ♀ TANZANIA: 'Meru [Mt Meru, 03°13'S:36°40'E] / Nieder.', 'Sjöstedt. 1905', '24 nov.', 'Type! / *Ancÿlorhÿnchus* / *nÿukinus* m. / P. Speiser det.' (NHRS).

Paratype (examined): ♀ TANZANIA: 'Meru / Nieder.', 'Ngare na / nyuki', 'Sjöstedt', 'jan.', '*Ancÿlorhÿnchus* / *nÿukinus* m. / P. Speiser det.' (NHRS).

Note: In describing *nyukinus* Speiser (1910: 90) states '2♀ aus der *Meru*-Niederung, das eine am 24. November, das andere im Januar am Flusse Ngare na nyuki gevangen.' While not stating that these are types this must be inferred from the label on one of the specimens. I therefore accept the specimen which has the word 'Type!' on its label as the holotype, and the other as a paratype.

Other material examined: KENYA: 3♂ 5♀ 'Kenya Kampi-Va- / Samaki (Lake Baringo) / 00°37'N:36°02'E 980m / 30.v.–2.vi.1980 / B. Lamoral Malaise' (NMSA); 1♂ 'Kenya: Kajiado Dist. / Nguruman area 700m / 01°50'S 36°56'E / Coll: I. Abu-Zinid / Date: 11.iii.1990' (NMSA); 1♀ 'Kenya: Kajiado Dist. / Nguruman area 700m / 01°50'S 36°56'E / Coll: I. Abu-Zinid / Date: 13.iii.1990' (NMSA); 1♀ 'Kenya: Tsavo Nat. / Park. Kitani Lodge [03°00'S:37°59'E] / 2600' 29.xii.69 / M.E. Irwin & / E.S. Ross' (CASC); 1♂ 'Brit. E. Afr. / Voi [03°3'S:38°34'E] / 8–10 iii 1912 / S.A. Neave', 'Sammlung / F. Hermann', 'Br. O. Afrika / *Ancylorrhyn-* / *chus* / *nyukinus* / Speiser [pink]', '*Ancylorrhynchus* / *nyukinus* Sp. / det. E. O. Engel ♂' (ZSMC); 1♂ 1♀ 'Voi / Brit E. Africa [British East Africa = Kenya]/ 21–23.iii.1911 / 1800 ft / S.E. Neave' (BMNH); 1♀ 'Voi / Brit. E. Africa / 21–23.iii.1911 / 1800 ft / S. A. Neave' (BMNH); 1♂ 'Kenya 15–18. vii.87 / Samburu [03°46'S:39°17'E] Buffalo / Springs H.R. Feijen' (NMSA); 1♀ 'Kenya / B.T. Parsons', 'Maungu [research station, 03°33'S:38°45'E] / 16 Ja 69 / BTP' (BMNH). SOMALIA: 1♂ 'Somaliland: Crioavo [illegible], Scarp / 1000 ft 12/1/54 / Desert Locust Survey' (BMNH). TANZANIA: 1♂ 'Tanzania. Hdqtrs. [headquarters] / Lake Manyara Nat. / Pk. ca. Mto wa Mbu [03°21'S:35°51'E] / xi.27.1969 flight / trap, dry tropical / forest. M.E. Irwin / and Edward S. Ross' (CASC).

Distribution, phenology and biology: Fairly widely distributed in East Africa (Kenya, Somalia, Tanzania) (Table 1) being collected both south and north of the equator (Fig. 149). The species has been collected in November–January, March and May–July (Table 2). The biology is largely unknown, but label data suggest that this is a species inhabiting woodland and savanna biomes.

Similar species: A member of the *nomadus* species-group with close similarities to *similis*.

Ancylorhynchus oldroydi Lindner, 1961

Figs 16, 46, 105–107

Ancylorhynchus oldroydi: Lindner 1961: 3 (Fig. 1 hypopygium); Oldroyd 1980: 360 (catalogue).

Redescription:

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Male (based on holotype, but supplemented with information taken from a perfect topotypic ♂ in UZMD [information in square brackets]. Condition: Fair; halteres broken, abdomen almost entirely missing (consumed by dermestids), remaining parts being T1 and parts of T2–4. Type is apparently slightly teneral resulting in colours not being fully developed.).

Head: Dark red-brown [black], silver pruinose, white and black setose. Antenna (Fig. 16): Scape dark red-brown [black] with black macrosetae and fine white setae, pedicel orange [orange-brown] with tiny black setae, postpedicel black, tipped with obliquely situated pit-enclosed spine-like sensory element, terminal stylus 'segment' absent. Segmental ratios: 1:0.2:4.6 (i.e. a tiny pedicel and a long postpedicel). Face dark red-brown [black], strongly silver pruinose except for lateral parts of epistomal margin and dorsomedial spot adjacent to antennal sockets, mystax shiny white (U-shaped in anterior view) occupying ventral ½ of face. Frons and vertex dark red-brown [black], fine silver pruinose except for transverse band across frons, white setose; ocellar tubercle fine white setose. Occiput dark red-brown [black], uniformly silver pruinose, black setose except for few white setae dorsally. Palpus orange-brown [dark red-brown], black setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis brown-orange [orange-brown], white [black] setose.

Thorax: Dark red-brown [black] with some brown-orange areas dorsally [uniformly black], fine silver pruinose (especially mesonotum), black and white. Prothorax entirely dark red-brown [black], fine silver pruinose, mainly black setose (few white). Mesonotum dark red-brown except for orange-brown postpronotal lobes [entirely black], silver pruinose, fine setae white macrosetae black. Mesonotal macrosetae: *dc* thin black confined to area posterior to transverse suture, *c*. 3–4 *npl*, 1–2 *spal*, 4–5 *pal*. Scutellum dark red-brown apical margin paler brown [entirely black], fine silver pruinose, disc sparsely black and white setose, hind margin with *c*. 8 black moderately developed macrosetae accompanied by black and white minor setae. Pleura dark red-brown [black], silver pruinose, setae black and white confined mainly to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* dark red-brown [black]. Legs: *cx* dark red-brown [black], silver pruinose, white setose; *tro* orange-brown [dark red-brown to black] (*tro*2 with row of short black setae ventrally); *fem*, *tib* and *tar* uniformly orange-brown [dark red-brown to black], black and white setose, claws dark red-brown with orange-brown proximal parts. Wings (Fig. 46): 7.6×3.1 [8.5×3.4] mm. Veins orange-brown. Membrane extensively microtrichose (some proximal cells partly bare), cells fairly uniformly pale brown [dark brown], proximal cells transparent. Halteres missing [yellowish with pale brown stalk].

Abdomen: Predominantly yellow-orange [orange] with some dark red-brown [black] parts, silver pruinose, whitish setose. T1 dark red-brown [black] white setose; T2 bright yellow-orange [orange] with dark red-brown [blackish] anterolateral parts and narrow posterolateral margin, strongly silver pruinose posterolaterally, T3–4[7] entirely yellow-orange [orange]; [T8 brown-orange; terminalia dark red-brown to black]. [Sternites fairly similar to tergites, black and white setose].

Genitalia (Figs 105–107, Bagamoyo): *Epand* bifid, forming pair of relatively short lobes. Lobes closely abut proximally, each having slight curved appearance in dorsal view, distal parts fairly slender, inwardly curved. *Proct* (weakly sclerotised) simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe tapering

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to longish slender distal region that projects posteriorly to beyond level reached by *epand*; dorsal finger-like process completely absent; inner lobe well developed, distal end sclerotised, strongly medially directed (overlapping opposing lobe). *Gonst* laterally compressed, dorsally directed, tip curved anteriorly (somewhat hidden from view in undissected genitalia). *Hypd* moderately developed, tapering rapidly to truncate distal end; distal end with pair of diverging, rounded protuberances each with group of setae. *Aed* (largely hidden in undissected genitalia) with lateral extremities distally and tiny bifid distal tip.

Variation: A fairly consistent species demonstrating a degree of sexual dimorphism. Females have somewhat orange antennae. The mesonotum is orange with a cross-shaped marking which varies in extent. The legs are orange. The wing is mainly yellowish with a dark red-brown tip. Abdominal coloration is variable, tergites being dark red-brown with orange hind margins or extensively orange.

Holotype (examined): ♂ TANZANIA: 'Dar es Salaam [06°50'S:39°12'E] / 18.xii.1958 - / 5.i.1959 / Lindner le.g.' [blue], '*Ancylorrhynchus* / not in / B.M.', '*Ancylorrhyn- / chus oldroydi* / Lindner det. Lind' [white, black frame], 'Typus / Lindner / 1961 [sideways]' [white, black frame, red ink] (SMNS).

Other material examined: TANZANIA: 2♂ 1♀ Bagamoyo [06°30'S:38°57'E] /iv.93 [1893]' (SMNS); 1♂ 'Tanzania / Dar Es Salaam [06°50'S:39°12'E] / 20.vi.1979 / M. Stoltze le.g.' (UZMD); 1♀ 'Tanganyika / Dar-es-Salaam / iv.1957 / N.L.H. Krauss / BM 1957–458' (BMNH). ZAMBIA: 1♂ 1♀ 'N. Rhodesia / Demba [? Dimba Stream, 16°01'S:27°52'E] / 29.2.11 / Silverlock Coll. / 1912–20.' (BMNH).

Distribution, phenology and biology: Known from Central (Zambia) and East Africa (Tanzania) (Table 1). The species has been collected in December, February, April and June (Table 2). The biology is unknown, but label data suggest that this is a species inhabiting woodland and savanna biomes.

Similar species: A member of the *nomadus* species-group with close similarities to *prunus*.

Ancylorhynchus phelpsi sp. n.

Figs 17, 47, 108–110

Etymology: Named for Dr R.F. Phelps whose collecting activities in Zimbabwe have provided interesting material including the type specimens of this species.

Description:

Male (based on holotype. Condition: Excellent; right antenna broken off beyond pedicel; mesonotum depressed and slightly cracked in region where pin was inserted; abdomen slightly greasy.).

Head: Orange and dark red-brown, silver pruinose, whitish setose. Antenna (Fig. 17): Dark red-brown, scape whitish setose pedicel appears asetose, postpedicel tipped with obliquely positioned pit-enclosed spine-like sensory element (terminal stylus 'segment' absent). Segmental ratios: 1:0.2:7.6. Face yellowish, strongly silver pruinose except lateral parts of epistomal margin, mystax shiny whitish occupying ventral ⅓ of face. Frons and vertex orange and dark red-brown, silver pruinose, whitish setose; ocellar tubercle anteriorly apruinose, fine whitish setose (no macrosetae). Occiput orange with small dorsal part dark red-brown, uniformly silver pruinose, whitish setose. Palpus dark red-brown, whitish setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis dark red-brown, whitish setose.

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Thorax: Dark red-brown and orange, silver pruinose, whitish setose. Prothorax dark red-brown and orange, strongly silver pruinose, whitish setose. Mesonotum brown-orange except for dark red-brown median stripe that fails to reach posterior margin and pair of dark red-brown marks at level of transverse suture, fine silver pruinose (including narrow strip down centre of dark median stripe), fine shortish whitish setose. Mesonotal macrosetae (whitish when present): *dc* tiny confined to area posterior of transverse suture, 2 *npl*, 1 *spal*, 2–3 *pal*. Scutellum red-brown with brown-orange area posteromedially, fine silver pruinose, disc sparsely whitish setose, hind margin with *c*. 4 whitish moderately developed macrosetae accompanied by minor setae. Pleura patchy dark red-brown and brown-orange, entirely silver-gold pruinose, setae whitish confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* brown-orange with dark red-brown spot medially. Legs: *cx* dark red-brown and brown-orange, silver pruinose, white setose; *tro* red-brown; *fem*, *tib* and *tar* brown-orange (dorsal parts of *tib* paler yellowish), whitish setose except for some blackish setae on *fem*, claws dark red-brown with orange proximal parts. Wings (Fig. 47, paratype): 7.1×2.9 mm. Veins pale brown. Membrane extensively microtrichose (some proximal cells partly bare), distal cells pale brown. Haltere pale yellow with slightly darker base.

Abdomen: Red-brown and orange-brown, anterior parts of segments a little darker, silvery pruinose, whitish setose. T1 dark red-brown, silver pruinose, white setose; T2–8 dark red-brown anteriorly orange-brown posteriorly, large silver pruinose areas posterolaterally, white setose. Terminalia orange-brown. Sternites similar to tergites.

Genitalia (Figs 108–110, paratype): *Epand* bifid, forming pair of relatively long, slender lobes that project posteriorly beyond all other genital structures. Lobes closely abut proximally, each having undulating appearance in dorsal view, distal parts converging. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly to rounded end; dorsal finger-like process well-developed, shortish, slightly clavate; inner lobe well developed, distal end sclerotised and somewhat medially directed. *Gonst* hardly compressed, slender, dorsally directed. *Hypd* moderately developed, proximal margin shallowly indented, anterior region tapering fairly rapidly to broad truncate, flattened distal end. *Aed* sub-triangular in ventral view with small bifid distal tip.

Female. Similar to the male, but more extensively orange in colour.

Variation: A fairly consistent species.

Holotype: ♂ ZIMBABWE: 'Africa, Rhodesia / Loc. Rekomitjie [16°08'S:29°24'E] / Ref. / Date. 25/x/76 / Habit. Riverine / Collector. R.J. Phelps' (NMSA).

Paratypes (all NMSA): 1♂ 2♀ ZIMBABWE: 1♂ same data as holotype; 1♀ 'Africa, Rhodesia / Loc. Rekomitjie / Ref. / Date. 23/x/76 / Habit. Riverine / Collector. R.J. Phelps'; 1♀ ZIMBABWE: 'Africa, Rhodesia / Loc. Rekomitjie / Ref. / Date. 22/x/76 / Habit. Riverine / Collector. R.J. Phelps'.

Distribution, phenology and biology: Known only from the type locality in Southern Africa (Zimbabwe) (Table 1). The species has been collected only in October (Table 2). The biology is largely unknown, although label data state 'riverine' suggesting riverine woodland or savanna.

Similar species: A member of the *nomadus* species-group with close similarities to *doryphorus*.

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Ancylorhynchus pretoriensis Bromley, 1936

Figs 18, 48

Ancylorrhynchus pretoriensis: Bromley 1936: 135; Hull 1960: 217; Oldroyd 1974: 31.
Ancylorhynchus pretoriensis: Oldroyd 1980: 360 (catalogue).

Redescription:

Female (based on holotype. Condition: Excellent.).

Head: Dark red-brown to black, silver pruinose, pale yellow and red-brown setose. Antenna (Fig. 18): Scape and pedicel brown-orange, pale yellow setose, postpedicel orange proximally becoming brown-orange distally, terminal stylus 'segment' present, tipped with pit-enclosed spine-like sensory element. Segmental ratios: 1:0.4:3.0:0.3. Face black, silver pruinose except for lateral parts of epistomal margin, mystax shiny pale yellow occupying ventral ½ of face. Frons and vertex black, fine silver and dull gold pruinose except for ocellar tubercle, pale yellow setose; ocellar tubercle fine pale yellow setose (no macrosetae). Occiput black, uniformly silver pruinose, pale yellow setose. Palpus dark red-brown, mixed red-brown and pale yellow setose, terminal palpomere swollen, apex projecting with terminal sensory pit. Proboscis dark red-brown, pale yellow setose.

Thorax: Dark red-brown to black with orange areas dorsally, silver and dull gold pruinose, pale yellow and yellow setose. Prothorax dark red-brown (laterally and medially) and orange, silver pruinose, pale yellow setose. Mesonotum orange except for broad blackish medial band from anterior margin to midway between transverse suture and posterior margin, silver pruinose, fine moderately long pale yellow setose. Mesonotal macrosetae (yellow when present): *dc* confined mainly to posterior half, *c*. 3–4 *npl*, 1–2 *spal*, 4–5 *pal*. Scutellum orange with central dark red-brown area, silver pruinose, disc sparsely pale yellow setose, hind margin with *c*. 8 yellow moderately developed macrosetae accompanied by minor setae. Pleura entirely dark red-brown to black, entirely silver and fine dull gold pruinose, setae yellow confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* largely black (small parts of *anatg* orange-brown). Legs: *cx* dark red-brown, silver pruinose, white setose; *tro* red-brown and orange; *fem*, *tib* and *tar* uniformly orange, entirely pale yellow setose, claws dark red-brown with orange proximal parts. Wings (Fig. 48): 8.1×3.2 mm. Veins orange-brown. Membrane extensively microtrichose (some proximal cells partly bare), pale brownish, transparent. Haltere orange-brown.

Abdomen: Blackish with orange to orange-brown patches, silver pruinose, white setose. T1 black, silver pruinose laterally; T2–3 dark red-brown to blackish, orange posterolaterally, narrow red-brown medial stripe, strongly silver pruinose posterolaterally; T4 similar to T2–3 but weakly pruinose posterolaterally; T5 dark red-brown posteriorly, uniformly moderately silver pruinose anteriorly; T6–terminalia orange-brown, T6 weakly pruinose anteriorly other parts apruinose. Sternites (largely hidden from view by overlapping tergites) appear similar to tergites.

Holotype (examined): ♀ SOUTH AFRICA: 'Pretoria [25°44'S:28°11'E] / Transvaal. / 2.12.1926 / H.K. Munro.', '*Ancylorrhynchus* / *pretoriensis* Br' [red], '*Ancylorrhynchus* / *pretoriensis* Br / Holotype 158' [red ink] (NMSA).

Notes: Bromley (1936) recorded details of his material as follows: 'Holotype, female, Pretoria, Feb. 12, 1926 (H. K. Munro). Paratopotype, female, Feb 12, 1915 (W. Impey) (No. 3220)'. The holotype is presently in NMSA, but there is no trace of the paratype. I believe that Bromley, following the American convention

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for writing dates (month before day), misinterpreted the date of collection which is more likely to be 2 December.

Distribution, phenology and biology: Known only from the type locality in Southern Africa (South Africa) (Table 1). The species has been collected only in December (Table 2). The biology is unknown. Pretoria is located in a area dominated by grassland and savanna biomes.

Similar species: A member of the *reynaudii* species-group. Despite efforts to associate males with the unique holotype this proved impossible and so a better understanding of this species must await the discovery of new material from the type locality.

Ancylorhynchus prunus Oldroyd, 1974

Figs 19, 49, 111–113

Ancylorrhynchus prunus: Oldroyd 1974: 32.
Ancylorhynchus prunus: Oldroyd 1980: 360 (catalogue).

Redescription:

Male (based on holotype. Condition: Good; right antenna broken off beyond pedicel; left metathoracic tarsus missing; generally greasy, thus obscuring pruinescence.).

Head: Dark red-brown to black, black and whitish setose. Antenna (Fig. 19): Scape dark red-brown to black, black and white setose (all macrosetae black); pedicel red-brown, tiny white setae only; postpedicel dark red-brown, tipped with obliquely situated pit-enclosed spine-like sensory element (terminal stylus 'segment' absent). Segmental ratios: 1:0.2:4.8. Face black, although greasy pruinescence visible except laterally on epistomal margin and small area mediodorsally below antennal sockets, mystax whitish, with inverse U-shape, occupying ventral ⅓ of face. Frons and vertex black, mainly whitish setose (few black setae laterally); ocellar tubercle fine whitish setose. Occiput black, black setose except for few white setae dorsally. Palpus black, black setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis dark red-brown, dark red-brown setose.

Thorax: Black with red-brown areas dorsally, black and white setose. Prothorax entirely black, mainly black setose (few whitish setae). Mesonotum red-brown with hardly discernible black central marking, fine moderately long white setose. Mesonotal macrosetae (black when present): *dc* weak black confined to area posterior to transverse suture, *c*. 3–4 *npl*, 1 *spal*, 3–4 *pal*. Scutellum entirely dark red-brown, disc sparsely black and white setose, hind margin with *c*. 6 black moderately developed macrosetae accompanied by minor white setae. Pleura entirely dark red-brown, setae white and dark red-brown confined mainly to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* dark red-brown. Legs: *cx* dark red-brown, white setose; *tro* dark red-brown (*tro*2 with row of short black setae ventrally); *fem*, *tib* and *tar* uniformly dark red-brown to black, entirely white to pale yellow setose, claws dark red-brown with slightly paler proximal parts. Wings (Fig. 49, allotype): 10.3×4.3 mm. Veins dark red-brown. Membrane entirely microtrichose, red-brown. Haltere orange with dark brown stalk.

Abdomen: Uniform dark red-brown to blackish, pale yellow to white setose.

Genitalia (Figs 111–113): *Epand* bifid, forming pair of relatively short and stout lobes that project just beyond other genital structures. Lobes closely abut proximally, each with slightly curved appearance in dorsal view, distal parts inwardly curved. *Proct*

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simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe tapering to fairly narrow, slightly upturned distal end; dorsal finger-like process completely absent; inner lobe well developed, visible in lateral view, distal end well sclerotised, fairly pointed, medially directed. *Gonst* somewhat laterally compressed, dorsally directed, tip curved anteriorly (partly hidden from view in undissected genitalia). *Hypd* moderately developed, tapering fairly rapidly to broad truncate, slightly bulbous distal end; distal end fairly weakly sclerotised, slightly inflated laterally. *Aed* fairly elongate (somewhat hidden in undissected genitalia) with narrowly rounded distal tip.

Variation: Female similar to male, greasy except for a few tiny areas that show silver pruinescence.

Holotype (examined): ♂ MOZAMBIQUE: 'Amatonga Forest [19°10'S:33°44'E] / Mozambique / D. Cookson / 15.2.64', '*Ancylorrhynchus* / *prunus* sp. n. / det. H. Oldroyd 1971 / Holotype' (NMSA).

Paratype (examined): ♀ similar data as holotype, but labelled as paratype (NMSA).

Distribution, phenology and biology: Known only from the type locality in Southern Africa (Mozambique) (Table 1). The species has been collected only in February (Table 2). The biology is unknown, although the locality suggests that this is a forest inhabiting species. While this may not necessarily be true as most species in the genus are not associated with forest undergrowth, but may be found in more open places adjacent to forests, the fact that the species is very darkly coloured (frequently a characteristic associated with forest insects) may support the suggestion that it does indeed actually inhabit forests.

Similar species: A member of the *nomadus* species-group with close similarities to *oldroydi*.

Ancylorhynchus reynaudii (Macquart, 1838)

Figs 20, 50, 114–116, 152

Xiphocera reynaudii Macquart, 1838: 48, tab. 3, fig. 9 (whole specimen dorsal view).
Xiphocerus quadrimaculatus Loew, 1858: 348; 1860: 155. **Syn. n.**
Ancylorrhynchus reynaudii: Kertesz 1909: 102 (catalogue); Hull 1960: 217.
Ancylorrhynchus quadrimaculatus: Kertesz 1909: 102 (catalogue); Curran 1934: 7; Bromley 1936: 135; Hull 1960: 217; Oldroyd 1974: 32.
Ancylorhynchus reynaudii: Oldroyd 1980: 360 (catalogue).
Ancylorhynchus quadrimaculatus: Oldroyd 1980: 360 (catalogue).

Type specimen: Macquart's (1838) description was based on a ♂ with data 'Du Cap. M. Reynaud. Muséum.', meaning that the specimen was collected by Reynaud in The Cape (= south-western parts of South Africa) and is housed at MNHN. However, Dr Christophe Daugeron (pers. comm.) reports that there is merely a label in the drawer that originally housed the specimen and so it must now be considered lost. Macquart's illustration certainly suggests a species of *Ancylorhynchus*. My studies have led me to believe that *Xiphocerus quadrimaculatus* Loew, 1858 is identical to *reynaudii* and so a redescription of the species may be based on the extant holotype male of *quadrimaculatus* (below). It is intriguing that Loew (1863) states, under *tricolor*, 'Synon. *Xiphocera Reynaudii* Macquart, Dip. Exot. I. II. 48. variet.' A comment difficult to interpret as *reynaudii* cannot possibly be a synonym of *tricolor* as *reynaudii* takes precedence. Perhaps he was referring to the fact that these species are superficially alike. One thing is certain, the two species are dispecific. See further reference to this matter under *tricolor*.

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Redescription:

Male (based on holotype *quadrimaculatus*. Condition: Excellent; slightly greasy.).

Head: Dark red-brown to black, silver pruinose, dark red-brown setose. Antenna (Fig. 20): Scape and pedicel orange, dark red-brown setose, postpedicel orange proximally becoming brown-orange distally, terminal stylus 'segment' present, dark red-brown, tipped with pit-enclosed spine-like sensory element. Segmental ratios: 1:0.4:4.3:0.3. Face black, silver pruinose except lateral parts of epistomal margin and dorsomedial area adjacent to antennal sockets, mystax dark red-brown occupying ventral ½ of face. Frons and vertex black, fine silver pruinose except for ocellar tubercle, dark red-brown setose; ocellar tubercle fine dark red-brown setose. Occiput black, uniformly silver pruinose, dark red-brown setose. Palpus dark red-brown, dark red-brown setose, terminal palpomere swollen, apex slightly projecting with terminal sensory pit. Proboscis dark red-brown, dark red-brown setose.

Thorax: Dark red-brown to black with orange areas dorsally, fine silver-grey pruinose, white and dark red-brown setose. Prothorax entirely blackish, fine silver-grey pruinose, dark red-brown setose. Mesonotum dark red-brown to black except for orange postpronotal and postalar lobes (and adjacent parts), fine silver pruinose, fine white and dark red-brown setose. Mesonotal macrosetae (dark red-brown when present): *dc* confined to area posterior to transverse suture, *c*. 2 *npl*, 1 *spal*, 2 *pal*. Scutellum dark red-brown with orange anterolateral parts, fine silver pruinose, disc sparsely pale yellow setose, hind margin with *c*. 4 macrosetae (missing) accompanied by few minor setae. Pleura entirely blackish, entirely fine silver pruinose, setae sparse, mainly whitish, confined mainly to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* blackish. Legs: *cx* dark red-brown to black, silver pruinose, white setose; *tro* red-brown; *fem*1&2 dark red-brown proximally, orange distally; *fem*3, *tib* and *tar* uniformly orange, entirely yellow setose, claws dark red-brown with orange proximal parts. Wings (Fig. 50): 6.7×2.8 mm. Veins brown-orange. Membrane extensively microtrichose (some proximal cells partly bare), pale brown, proximal cells partly transparent. Haltere brown-yellow with brown stalk.

Abdomen: Mostly dark red-brown to blackish with yellowish bands, partly fine silver pruinose, dark red-brown and white setose. T1 dark red-brown, whitish setose; T2 dark red-brown with yellowish posterior margin, silver pruinose submarginal band almost complete, white setose; T3–5 dark red-brown with yellow posterior margin, no obvious silver pruinose areas, dark red-brown setose; T6–end removed, macerated and illustrated. Sternites similar to tergites (largely hidden from view by overlapping tergites).

Genitalia (Figs 114–116): *Epand* bifid, forming pair of relatively long, slender lobes that project posteriorly to a level beyond other genital structures. Lobes closely abut proximally, straight, somewhat converging distally, distal parts slightly inwards curved. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe tapering distally to fairly acute tip, flange-like ventral structure evident (especially in lateral view); dorsal finger-like process well developed, projecting to approximately level achieved by tapered tip; inner lobe well developed, distal end strongly sclerotised, somewhat medially directed. *Gonst* hardly compressed, dorsally directed, tip curved anteriorly. *Hypd* moderately developed, tapering beyond half length rapidly to broadly rounded medial setose protuberance (setae typically strong, directed vertically). *Aed* as elongated triangle with tiny bifid tip.

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Variation: A fairly variable species. The mesonotum may be more extensively orange (especially in females). The legs vary with respect to the amount of dark red-brown coloration. Wing colour varies from yellowish through to pale brown (a female from Kagga Kamma has fairly dark brownish wings). Abdominal coloration varies from being almost entirely dark red-brown to blackish to very extensively orange posteriorly.

Holotype *quadrimaculatus* (examined): ♂ SOUTH AFRICA: 'Cap. B. Sp. [Cape of Good Hope] / Tollin' [blue], '*quadrimac*', '6666 [or 9999]', '[purple square – no writing]', 'Coll. / H. Loew', 'Holotypus' [red], 'Zool. Mus. / Berlin' (ZMHB).

Other material examined: SOUTH AFRICA: 1♀ 'Kamieskroon [30°12'S:17°56'E] / Namaqualand' ~ 'Museum Staff / Nov. 1936' (SAMC); 1♀ 'SAM / Paleisheuwel [32°28'S:18°43'E] / 16/xi.78 / VB Whitehead' (SAMC); 1♀ 'South Africa: W Cape / Kagga Kamma Nat. Res. / 32°45.15'S 19°34.21'E / 22–23.xi.2008 J&A Londt / 1075m Sandy area with / tall fynbos near houses' (NMSA); 1♀ 'Sth Africa: Cape Prov. / Prince Alfred Pass / summit 11.xii.1979 / 3323CC Stuckenberg & Londt Old lands' (NMSA); 1♀ 'Ceres [33°22'S:19°19'E] / S A Museum' ~ 'P. Smithers / Dec. 1940' (SAMC); 1♂ 'Cape Province / Ceres / Dec. 1924', 'S. Africa / R.E. Turner / Brit. Mus. / 1925–44' (BMNH); 1♀ 'Slypsteen / Towerwaterkloof [33°23'S:23°12'E] / Willowmore Dist.' ~ 'Mus. Staff / Oct. 1938' (SAMC); 1? 'Cape / Cape Town [33°24'S:19°17'E] / i.88' ~ 'Pres. / R. Lightfoot' (SAMC); 1♀ 'Cape / Cape Town' ~ '1888 / Pres. / Plirall [? illegible]' (SAMC); 1♀ 'J.J.S. le Roux / Rawsonville [33°41'S:19°19'E] / Suid-Afrika / 25.i.1944' (NMSA); 1♀ 'South Africa, C.P. / Du Toits Kloof Pass / 33.42S 19.13E / 8.xii. / 1988 M.W. Mansell' (SANC); 1♂ '3055', 'Stellenbosch [33°56'S:18°51'E] / Capland / Dr. Brauns. / 1.xii.1924' (NMSA); 1♀ 'Capland / Stellenbosch / Nov. 13 1926 / Dr. H. Brauns.' (NMSA); 1♂ 'Capland / Stellenbosch / Dec. 5 1926 / Dr. H. Brauns.' (NMSA); 1♂ 'Table Mountain [33°58'S:18°25'E] / Cape Town / 2.xii.1971 / A.L. Bevis' (DMSA); 1♂ 'Südafrika: Western Cape: / George [33°58'S:22°27'E]: Botanical Garden / 258m u. NN [über normal Null = above sea level] / le.g. Barkemeyer 8.1.2002' (CODI); 1♂ 'Cape Province / Oakhurst [34°00'S:23°44'E] / Tsitsikama Forest / 29.xii.1966 / C. Jacot-Guillarmod' (AMGS); 1♂ 'Groot Rivier / Knysna [34°02'S:23°02'E] Dist. / Jan. 1955 / Martin' (AMGS); 2♂ 'Jeffreys Bay [34°03'S:24°55'E] / C.P.' ~ 'S.A.M / i.60' (SAMC); 1♀ 'Sth Africa: Cape Prov / Kommetjie 13.xii.1988 / Hill overlooking town / 34°08'S 18°19'E / JGH Londt Macchia / Sandy ground & rocks' (NMSA); 3♂ 1♀ 'R. Sonder End [Riviersonderend 34°19'S:19°54'E] / Oudebosch 1500 ft' ~ 'K.H. Barnard / Nov.–Dec. 1928' (SAMC); 2♀ 'South Africa, Cape / 6 km NE Hermanus [34°26'S:19°12'E] / 24.xii.1983 / D.J. Brothers' (NMSA); 3♂ 1♀ 'Capland / Krebs S.', '499', 'Zool. Mus. / Berlin' (ZMHB). UNKNOWN: 1♀ 'Pres by / Cape Museum / per. G. Ricardo / 2.iii.1923' (BMNH).

Distribution, phenology and biology: Known only from South Africa (Table 1), where it has been collected along the west coast of the Western Cape and Northern Cape provinces and along the south coast of the Western Cape and Eastern Cape provinces (Fig. 152). The species has been collected from October through to March (no February records) (Table 2). The biology is largely unknown, although locality data and personal experience suggest that this is a species inhabiting Fynbos as well as Savanna biomes where it may be found resting on sandy surfaces.

Similar species: A member of the *reynaudii* species-group with similarities to *fulvicollis*, *tricolor* and *zophos*.

Ancylorhynchus similis sp. n.

Figs 21, 51, 117–119

Etymology: From Latin *similis* (similar); referring to the fact that this species resembles *nomadus*.

Description:

Male (based on holotype. Condition: Poor; both antennae broken off beyond pedicel; right pro- and mesothoracic legs missing, metathoracic leg broken off beyond tibia; left metathoracic leg broken off at midlength of femur; left wing missing; generally dirty.).

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Head: Dark red-brown, silver pruinose, pale yellow to white (= whitish) and dark red-brown setose. Antenna (Fig. 21, paratype): Scape and pedicel dark red-brown, pale whitish setose, postpedicels missing (proportions of scape and pedicel suggest a long strap-like postpedicel lacking stylus 'segment'). Segmental ratios: 1:0.4:?. Face dark red-brown, silver pruinose except for lateral parts of epistomal margin, mystax whitish occupying ventral ⅓ of face. Frons and vertex dark red-brown, fine silver-grey pruinose, whitish setose; ocellar tubercle fine whitish setose (no macrosetae). Occiput dark red-brown to black, uniformly silver pruinose, whitish setose. Palpus dark red-brown, dark red-brown setose, terminal palpomere slightly swollen, apex with terminal sensory pit. Proboscis dark red-brown, whitish setose.

Thorax: Uniformly dark red-brown to black, silver-grey pruinose, mainly whitish setose. Prothorax entirely dark red-brown to black, fine silver-grey pruinose, whitish setose. Mesonotum uniformly dark red-brown to black, fine silver-grey pruinose, fine moderately long whitish setose. Mesonotal macrosetae (whitish except for *npl*): *dc* confined to region posterior to transverse suture, 3 dark red-brown *npl*, 1 *spal*, 3–4 *pal*. Scutellum entirely dark red-brown, fine silver pruinose, disc sparsely whitish setose, hind margin with *c*. 6 whitish weakly developed macrosetae accompanied by minor setae. Pleura entirely dark red-brown to black, entirely silver-grey pruinose, setae whitish confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* dark red-brown to black. Legs: *cx* dark red-brown to black, silver pruinose, whitish setose; *tro* dark red-brown; *fem*, *tib* and *tar* uniformly dark red-brown, entirely whitish setose, claws dark red-brown with red-brown proximal parts. Wings (Fig. 51, paratype): 6.5×2.6 mm. Veins dark red-brown. Membrane extensively microtrichose (some proximal cells partly bare), extensively brown stained (basal parts transparent). Haltere orange with brown proximal half.

Abdomen: Predominantly orange (anterior segments dark red-brown), fine silver pruinose, whitish setose. T1 entirely dark red-brown to black, T2 orange with dark red-brown anterior ⅓; T3–4 entirely orange; T5–terminalia dissected and macerated. Sternites similar to tergites but S2 entirely dark red-brown.

Genitalia (Figs 117–119): *Epand* bifid, forming pair of parallel, moderately slender lobes that jut out beyond all other genital structures. Lobes closely abut proximally, each being relatively straight (slightly sinuous in dorsal view) with slightly inwardly curved distal tips. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly to fairly narrowly-rounded tip; dorsal finger-like process well-developed; inner lobe well developed, distal end as sclerotised, medially directed pointed structure. *Gonst* compressed, dorsally directed, tip curved anteriorly. *Hypd* moderately developed, twice as broad as long in ventral view with smoothly curved posterior margin. *Aed* sub-triangular with tiny bifid distal tip.

Female. Similar to ♂ except for following differences: Head more extensively blackish (including entire antenna); palpal setae white; all mesonotal macrosetae white; wing length 8.5 and 8.9 mm (slightly larger than ♂); T2 with strongly silver pruinose areas situated anterolaterally (posteromedial area blackish); T4–5 bright orange, posterior margins strongly silver pruinose.

Holotype: ♂ GHANA: 'Gold Coast / Accra. [05°33'N:00°13'W] / 22.vi.1941. / K.M. Guichard / B.M. 1945–39' (BMNH).

Paratypes: 2♀ CÔTE D'IVOIRE: 2♀ 'Côte d'Ivoire: Comoé / Nat. Park. Kakpin / Camp 16–18.iv.1989 / 08°40'N 03°12'W / JGH Londt. Malaise / and savanna woodland' (NMSA).

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Distribution, phenology and biology: Known only from West Africa (Côte d'Ivoire, Ghana) (Table 1). The species has been collected in April and June (Table 2). The biology is largely unknown, but I collected two females in 'savanna woodland'.

Similar species: A member of the *nomadus* species-group, with close similarities to *nyukinus*.

Ancylorhynchus simpsoni sp. n.

Figs 22, 52, 120–122

Etymology: Named after the collector of the holotype J.J. Simpson.

Description:

Male (based on holotype. Condition: Fair; double mounted on cellulose strip; both antennae broken off beyond pedicels; right prothoracic leg broken off beyond femur, left prothoracic leg broken off beyond first tarsomere; right wing with small part of anterior margin missing, left wing intact but glued to specimen with clear nail-varnish.).

Head: Dark red-brown to black, silver pruinose, white setose. Antenna (Fig. 22): Scape and pedicel dark red-brown to black, white setose, postpedicel missing (relative sizes of scape and pedicel suggest that there would be a long postpedicel lacking terminal stylus 'segment'). Segmental ratios: 1:0.3:?. Face dark red-brown to black, fairly uniformly silver pruinose, mystax white occupying ventral ⅓ of face. Frons and vertex dark red-brown to black, silver pruinose, white setose; ocellar tubercle fine pale yellow setose (no macrosetae). Occiput dark red-brown to black, uniformly strongly silver pruinose, white setose. Palpus dark red-brown, white setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis red-brown, white setose.

Thorax: Fairly uniform dark red-brown to black, fine silver-grey pruinose, white setose. Prothorax entirely black, fine silver pruinose, white setose. Mesonotum dark red-brown to black, fine silver-grey pruinose, fine moderately long white setose (some rubbed off in region of pin). Mesonotal macrosetae (whitish when present): *dc* white, confined to region posterior to transverse suture, 3 *npl*, 1 *spal*, 3 *pal*. Scutellum entirely dark red-brown to black, fine silver pruinose, disc sparsely white setose, hind margin with *c*. 10 white moderately developed macrosetae accompanied by minor setae. Pleura entirely blackish, entirely silver-grey pruinose, setae white confined mainly to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* dark red-brown to black, not contrasting with scutellum. Legs: *cx* dark red-brown to black, silver pruinose, white setose; *tro* dark red-brown (*tro*2 with row of short black setae ventrally); *fem*, *tib* and *tar* uniformly dark red-brown to black, entirely white setose, claws dark red-brown with orange proximal parts. Wings (Fig. 52): 9.9×4.1 mm. Veins dark red-brown. Membrane extensively microtrichose (some proximal cells partly bare), mostly red-brown stained (anal cell and alula transparent). Haltere orange, base dark red-brown.

Abdomen: Predominantly orange with blackish parts anteriorly, fine silver pruinose, white setose. T1 dark red-brown to blackish, strongly silver pruinose; T2 dark red-brown except for orange posterior margin, strongly silver pruinose except medially; T3 orange except for dark red-brown medial spot, weakly silver pruinose; T4 as T3 but medial spot small; T5 uniformly orange, weakly silver pruinose; T6–terminalia dissected and macerated. Sternites essentially similar to tergites.

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Genitalia (Figs 120–122): *Epand* bifid, forming pair of robust, somewhat parallel lobes that jut out beyond all other genital structures. Lobes closely abut proximally, each being slightly curved such that distal tips are inwardly directed. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly to fairly broadly-rounded tip and with characteristic indented posteroventral margin; dorsal finger-like process not evident. *Gonst* compressed, dorsally directed, tip curved anteriorly. *Hypd* relatively weakly developed, about twice as wide as long in ventral view, tapering distally to pair of flattened, setose lobes. *Aed* sub-triangular, fairly stout, pair of distal projections and tiny bifid tip.

Holotype: ♂ NIGERIA: 'Zungeru [09°49'N:06°09'E] / N. Nigeria / 1.xi.1910 / J.J. Simpson' (BMNH).

Note: Another male (ZSMC), also collected at Zungeru, has been assigned to *nomadus*. That specimen, collected by Dr. J.W. Scott Macfie in March, clearly represents a different species.

Distribution, phenology and biology: Known only from the type locality in northern Nigeria, West Africa (Table 1). The species has only been collected in November (Table 2). The biology is unknown, but the type locality is situated in the savanna biome.

Similar species: A member of the *nomadus* species-group with close similarities to *nomadus*.

Ancylorhynchus snowi sp. n.

Figs 23, 53, 123–125

Etymology: Named for William Snow who collected the unique specimen during extensive fieldwork in The Gambia (Londt 2010).

Description:

Male (based on holotype. Condition: Excellent; left antenna broken off beyond pedicel.).

Head: Orange to orange-brown, silver pruinose, whitish setose. Antenna (Fig. 23): Scape and pedicel orange, whitish setose, postpedicel orange, tipped with obliquely situated pit-enclosed spine-like sensory element (terminal stylus 'segment' absent). Segmental ratios: 1:0.3:7.1. Face brown-orange, colour largely masked by strong silver pruinescence, mystax shiny whitish occupying ventral ¼ of face. Frons and vertex orange to orange-brown, silver pruinose, whitish setose; ocellar tubercle largely apruinose, fine whitish setose. Occiput orange to brown-orange, uniformly silver pruinose, whitish setose. Palpus orange, whitish setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis orange-brown, whitish setose.

Thorax: Dark red-brown and orange, fine silver pruinose, whitish setose. Prothorax mostly orange, posterior antepronotum with red-brown lateral areas and small medial spot, fine silver pruinose, whitish setose. Mesonotum dark red-brown with broad orange lateral margins, fine silver pruinose, fine whitish setose. Mesonotal macrosetae (whitish when present): few *dc* confined to posterior region, 3–4 *npl*, 1 *spal*, 2 *pal*. Scutellum entirely red-brown, fine silver pruinose, disc sparsely whitish setose, hind margin with *c*. 4 (somewhat obscured) whitish weakly developed macrosetae accompanied by minor setae. Pleura extensively dark red-brown (anepimeron orange-brown), entirely silver pruinose, setae whitish, sparse, confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* orange-brown. Legs: *cx* orange-brown, silver pruinose, white setose; *tro* orange

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(*tro*2 with whitish setae ventrally); *fem*, *tib* and *tar* uniformly orange, entirely whitish setose, claws dark red-brown with orange proximal parts. Wings (Fig. 53): 6.0×2.4 mm. Veins orange centrally, brown marginally. Membrane extensively microtrichose (some proximal cells partly bare), distal veins bordered with pale brownish stain, proximal cells largely transparent. Haltere orange-brown with pale yellow knob.

Abdomen: Predominantly dark red-brown with yellow to orange patches, fine silver pruinose, whitish setose. T1 entirely dark red-brown; T2 dark red-brown with orange anterior region and large orange-yellow areas posterolaterally; T3–4 dark red-brown with small orange-yellow areas posterolaterally; T5–8 dark red-brown with orange posterior margins; terminalia orange. Sternites similar to tergites but somewhat obscured by overlapping tergites.

Genitalia (Figs 123–125): *Epand* bifid, forming pair of relatively long, slightly diverging (in dorsal view), slender lobes that project slightly beyond other genital structures. Lobes closely abut proximally, straight with slightly inwardly directed apices. *Proct* simple, dorsally situated *cerc* closely associated, not appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly to relatively acute distal end; dorsal finger-like process completely absent; inner lobe well developed, distal end sharply pointed, well sclerotised and medially directed. *Gonst* laterally compressed, dorsally directed, tip curved anteriorly. *Hypd* moderately developed, suboval, about half as long as broad, distal margin uneven and slightly medially indented. *Aed* sub-triangular in ventral view with tiny bifid distal tip.

Holotype: ♂ GAMBIA: 'Bansang [13°26'N:14°39'W], Gambia, 10.v.77 Malaise in scrub / beside river', 'W.F. Snow Collection / pres, W.F. Snow, 1996. / OUM 02-1996.' (OXUM).

Note: This specimen was listed as an unidentified species of *Ancylorhynchus* in an analysis of Gambian Asilidae (Londt 2010: 346). I have also seen a pair of female specimens from Niger that may belong to this species, although they do not closely resemble the holotype and are not considered paratypes. The position of these specimens, listed below, will only be adequately ascertained when males from Niger becomes available: 2♀ 'Niger / Niamey [14°00'N:01°43'E] 200m / 11.x.1976 / K. Guichard / BM1976–583' (BMNH).

Distribution, phenology and biology: Known only from West Africa (Gambia, ?Niger) (Table 1). The holotype was collected in May (Table 2), those from Niger being collected in October. The biology is unknown, although the type locality was 'scrub / beside river'.

Similar species: A fairly distinctive member of the *nomadus* species-group without close similarities to other species.

Ancylorhynchus sokokensis sp. n.

Figs 24, 54, 126–128

Etymology: Named after the type locality, Kenya's Sokoke Forest.

Description:

Male (based on holotype. Condition: Excellent (appears mounted from alcohol).).

Head: Dark red-brown to black, fine gold pruinose, pale yellow, orange and black setose. Antenna (Fig. 24, paratype): orange-brown, scape and pedicel orange setose (1 dark red-brown setae), postpedicel tipped with obliquely situated pit-enclosed spine-like sensory element (terminal stylus 'segment' absent). Segmental ratios: 1:0.3:5.6. Face black, fine gold pruinose (weakly on lateral parts of epistomal margin), mystax

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shiny orange occupying ventral ½ of face. Frons and vertex black, fine gold pruinose, pale yellow setose; ocellar tubercle fine pale yellow setose (no macrosetae). Occiput black, uniformly fine gold pruinose, dorsal setae orange ventral setae black. Palpus dark red-brown, black setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis dark red-brown, black setose.

Thorax: Black with orange areas dorsally, fine silver-grey pruinose, white, pale yellow and orange setose. Prothorax black except for orange antepronotum, fine silver-grey pruinose, pale yellow setose dorsally, black laterally. Mesonotum orange with black pattern (median band stretching from anterior to posterior margins, widening at level of transverse suture), fine silver-grey pruinose, fine moderately long white and pale yellow setose. Mesonotal macrosetae (usually orange when present): *dc* weak, confined to region posterior to transverse suture, 3–4 *npl*, 1 *spal*, 3 *pal*. Scutellum orange with narrow black anterior margin, fine silver pruinose, disc sparsely pale yellow setose, hind margin with *c*. 10 pale yellow, longish weakly developed macrosetae accompanied by minor setae. Pleura entirely black, entirely silver-grey pruinose, setae white and black confined mainly to *anepst*, *kepst* and *ktg* (setae white). *Anatg* and *mes pnot* dark red-brown to black, contrasting with mainly orange scutellum. Legs: *cx* black, silver pruinose, white setose; *tro* orange (*tro*2 with few short black setae ventrally); *fem*, *tib* and *tar* orange, *tar*5 a little darker, white to pale yellow setose (some black setae on *tar*), claws dark red-brown with orange proximal parts. Wings (Fig. 54): 7.4×3.1 mm. Veins mostly dark red-brown. Membrane extensively microtrichose (some proximal cells partly bare), pale yellow-brown stained (tip somewhat darker commencing at level of *r–m*), cells *cup* and *a1+2* transparent. Haltere yellow with orange base.

Abdomen: Predominantly dark red-brown to blackish with orange patches laterally, fine silver-grey pruinose, white and black setose. T1 dark red-brown to black, silver pruinose; T2 dark red-brown to blackish with large orange areas posterolaterally. Strongly silver pruinescence corresponds with orange areas; T3–4 dark red-brown to black with narrow posterolateral margins, silver pruinose (especially in regions with orange colour; T5–terminalia dissected and clear for drawing. Sternites similar to tergites but lacking orange areas.

Genitalia (Figs 126–128): *Epand* bifid, forming pair of parallel, fairly stout lobes that jut out beyond all other genital structures. Lobes closely abut proximally, each being relatively straight with inwardly curved distal ends. *Proct* simple, dorsally situated *cerc* closely associated proximally. *Goncx* well developed, outer lobe tapering posteriorly to narrowly-rounded tip; dorsal finger-like process absent; inner lobe well developed, distal end pointed, well sclerotised and medially directed. *Gonst* compressed, dorsally directed, tip curved anteriorly. *Hypd* moderately developed, twice as broad as long, tapering fairly rapidly to pair of fairly widely separated, flattened distal processes. *Aed* fairly stout with tiny bifid distal tip.

Female. Similar to male but head and prothorax more extensively orange setose. Thorax more extensively orange including parts of pleura (dorsal part of *ktps*, posterior half of *ktg* anatergite). Tip of wing more obviously dark stained. Abdomen far more extensively yellow to orange and fine gold pruinose.

Holotype: ♂ KENYA: 'Sokoke For [Forest, 03°29'S:39°50'E] K [Kenya]/ 8 May 76 IB [?]' (BMNH).

Paratype: 1♀ labels as for holotype (BMNH).

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Distribution, phenology and biology: Known only from East Africa (Kenya) (Table 1). The types were collected in May (Table 2). The biology is unknown. Although the type locality is a forest the specimens may have been collected in vegetation adjacent to the forest.

Similar species: A member of the *nomadus* species-group with close similarities to *cruciger* and *hylaeiformis*.

Ancylorhynchus susurrus (Karsch, 1879)

Figs 25, 55, 129–131

Xiphocerus susurrus: Karsch 1879: 380, fig. 4 (wing).
Ancylorrhynchus susurrus: Kertesz 1909: 102 (catalogue); Hull 1960: 217.
Ancylorhynchus susurrus: Oldroyd 1980: 360 (catalogue).

Redescription:

Male (based on holotype. Condition: Fair; mesonotum cracked, especially anteriorly, but reasonably intact (most macrosetae broken); both mesothoracic legs are broken off beyond trochanters.).

Head: Dark red-brown to black, gold-silver pruinose, pale yellowish white setose. Antenna (Fig. 25): Dark red-brown, scape and pedicel whitish setose, postpedicel tipped with obliquely positioned pit-enclosed spine-like sensory element (terminal stylus 'segment' absent). Segmental ratios: 1:0.3:4.9. Face blackish, strongly gold-silver pruinose, mystax whitish occupying ventral ½ of face. Frons and vertex blackish, fine silver pruinose except for apruinose band between eyes that includes anterior part of ocellar tubercle, whitish setose; ocellar tubercle fine whitish setose. Occiput blackish, masked by uniformly strong gold-silver pruinescence, uniformly whitish setose. Palpus dark red-brown, whitish setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis dark red-brown, whitish setose.

Thorax: Uniformly dark red-brown to blackish, silver to gold-silver pruinose, whitish setose. Prothorax entirely black, fine silver pruinose, whitish setose. Mesonotum bark red-brown, fine silver pruinose, fine moderately long whitish setose (many broken due to damage to mesonotum). Mesonotal macrosetae (whitish when present): *dc* thin whitish confined to posterior parts, *c*. 2–3 *npl*, 1 *spal*, 3 *pal*. Scutellum entirely dark red-brown, fine silver pruinose, disc sparsely whitish setose, hind margin with *c*. 12 whitish moderately developed macrosetae accompanied by minor setae. Pleura entirely dark red-brown, strongly gold-silver pruinose, setae whitish confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* black. Legs: *cx* dark red-brown, strongly silver pruinose, whitish setose; *tro* dark red-brown (*tro*2 with row of short black setae ventrally); *fem*, *tib* and *tar* uniformly dark red-brown, entirely whitish setose, claws dark red-brown with orange proximal parts. Wings (Fig. 55): 8.6×3.8 mm (wing folded along A_1 making width measurement difficult). Veins dark red-brown. Membrane extensively microtrichose, red-brown (posterior cells slightly paler). Haltere pale yellowish.

Abdomen: Entirely dark red-brown to blackish, silver and gold-silver pruinose, whitish setose. T1 weakly silver pruinose; T2 almost entirely strongly silver pruinose (except for dorsomedial stripe); T3–4 dorsally weakly silver pruinose, laterally strongly gold-silver pruinose; T5 and beyond probably similar to T4 (dissected for genital study). Sternites similar to tergites but uniformly strongly gold-silver pruinose.

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Genitalia (Figs 129–131): *Epand* bifid, forming pair of well-developed, stout lobes that project beyond all other genital structures. Lobes abut proximally, each lying parallel to each other, distal end slightly inwardly curved. *Proct* simple, weakly sclerotised, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, broad in lateral view, outer lobe projecting posteriorly to fairly broadly rounded distal end; dorsal finger-like process absent, lobe somewhat raised as a dorsal ridge where process commonly occurs; inner lobe well developed, distal end sclerotised, medially directed as acutely pointed structures. *Gonst* laterally compressed, dorsally directed, tip curved anteriorly (largely hidden from view in undissected genitalia). *Hypd* moderately developed, tapering fairly rapidly at midlength to broad, somewhat truncate distal end; distal end with pair of fairly closely associated, rounded setose protuberances. *Aed* broad with subapical lateral processes and tiny medial tip.

Variation: There are only two known specimens, both males. The Banana male is almost identical to the holotype, although slightly smaller (wing 8.2×3.5 mm).

Holotype (examined): ♂ ANGOLA: 'Chinchoxo Falls [12°45'S:14°30'E] 51 [somewhat illegible]', '7649', 'Type [orange]', 'Zool. Mus. / Berlin' (ZMHB). *Notes*: In describing the species Karsch (1879) states 'Es liegt nur ein Exemplar davon vor' from 'Loango-Expedition in Chinchoxo'. Fig. 4 is a poor rendition of the wing and the sex of the holotype was not stated.

Other material examined: DR CONGO: 1♂ 'Musée / du Congo Belge / Banana [08°01'S:12°24'E] 8 [August] - 1910 / Dr Etienne', '*Ancylorrhynchus* / *sussurrus* / ♂ Karsch / [illegible squiggle]', 'R. Det. / 5409 / FF', '*Ancylorrhynchus* / *susurrus* Karsch / Det. S.W. Bromley 19' (MRAC).

Distribution, phenology and biology: Known only from Central Africa (Angola, DR Congo) (Table 1). Specimens have been collected in May and August (Table 2). The biology is unknown, but both known localities are located in areas dominated by tropical grassland and savanna.

Similar species: A member of the *nomadus* species-group with close similarities to *funebris* and *greatheadi*.

Ancylorhynchus tricolor (Loew, 1863)

Figs 26, 56, 132–134, 152

Xiphocerus tricolor: Loew 1863: 11.
Xyphocerus maculatus Bigot, 1879: 428. **Syn. n.**
Ancylorrhynchus tricolor: Kertesz 1909: 102 (catalogue); Hull 1960: 217; Oldroyd 1974: 33.
Ancylorrhynchus maculatus: Kertesz 1909: 102 (catalogue); Hull 1960: 217; Oldroyd 1974: 31.
Ancylorrhynchus tricolor Reynaudii: Kertesz 1909: 102 (catalogue).
Ancylorrhynchus braunsi Bromley, 1936: 136; Hull 1960: 217; Oldroyd 1974: 33 (fig. 21 head). **Syn. n.**
Ancylorrhynchus tricolor reynaudii: Hull 1960: 217.
Ancylorrhynchus reynaudii: Oldroyd 1974: 33.
Ancylorhynchus tricolor: Oldroyd 1980: 360 (catalogue).
Ancylorhynchus maculatus: Oldroyd 1980: 360 (catalogue).
Ancylorhynchus braunsi: Oldroyd 1980: 360 (catalogue).

Despite an extensive search I have not been able to locate the type specimen(s) of *Xiphocerus tricolor* Loew, 1863. As reported under *reynaudii*, Loew (1863) apparently 'synonymised' *reynaudii* with *tricolor*, an action that does not make taxonomic sense as *reynaudii* takes precedence over *tricolor*. Kertész (1909), inexplicably, responded by placing *reynaudii* as a subspecies of *tricolor*, an arrangement maintained by Hull (1960). Oldroyd (1974) hesitatingly followed suite when he listed *reynaudii* in the synonymy of *tricolor*, but placed '(? *reynaudii* Macquart)' after the name *tricolor* in

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his key to South African species. Another observation of possible significance is that Oldroyd (1974) acknowledged having used Bromley's (1936) key in the construction of his own. However, Bromley inexplicably excluded both *reynaudii* and *tricolor* from his key! This fact suggests that these two species were not known to Bromley – perhaps because the types of both species were unavailable even at that time.

The following redescriptions of taxa now considered synonymous with *tricolor* serve to characterise the species.

Female (based on holotype *maculatus*. Condition: Fair; right antenna broken off beyond pedicel; right wing missing (an incorrect wing has been attached with glue, but is clearly different from intact right wing); left halter missing; abdomen has been glued in place after having been broken off at base.).

Head: Dark red-brown to black, silver-gold pruinose, yellow, orange and red-brown setose. Antenna: Scape and pedicel orange, orange setose, postpedicel orange proximally becoming brown-orange distally, terminal stylus 'segment' present, orange-brown, tipped with pit-enclosed spine-like sensory element. Segmental ratios: 1:0.4:4.5:0.4. Face dark red-brown to black, strongly silver-gold pruinose (weakly medially between mystax and antennal bases), mystax shiny yellow occupying ventral ⅔ (approx.) of face. Frons and vertex dark red-brown to black, fine silver-grey pruinose (except for ocellar tubercle and adjacent parts), pale yellow setose; ocellar tubercle fine pale yellow setose (no macrosetae). Occiput dark red-brown to black, uniformly silvery pruinose, dorsal setae yellow, ventral setae red-brown. Palpus red-brown, red-brown setose, terminal palpomere swollen, apex projecting with terminal sensory pit. Proboscis dark red-brown, red-brown setose.

Thorax: Dark red-brown to black with orange areas dorsally, fine silver pruinose (especially lateral margins of mesonotum and pleura), white and pale yellow setose. Prothorax entirely dark red-brown, fine silver pruinose, pale yellow setose. Mesonotum dark red-brown to black except for orange postpronotal lobes, posterior region (including postalar lobes and intervening area) and scutellum, fine silver-grey pruinose, fine moderately long white and pale yellow setose. Mesonotal macrosetae (orange when present): *dc* confined to posterior to transverse suture, 3–4 *npl*, 2 *spal*, 3 *pal*. Scutellum entirely orange, fine silver pruinose, disc sparsely pale yellow setose, hind margin with *c*. 4 pale yellow weakly developed macrosetae accompanied by minor setae. Pleura entirely dark red-brown to black, entirely silver-grey pruinose, setae white to pale yellow confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* black, contrasting with orange scutellum. Legs: *cx* black, silver pruinose, white setose; *tro* dark red-brown; *fem*, *tib* and *tar* uniformly orange, entirely yellow setose, claws dark red-brown with orange proximal parts. Wings (Fig. 56): 10.3×3.7 mm. Veins orange anteriorly brown posteriorly. Membrane extensively microtrichose (some proximal cells partly bare), distal cells pale brown (from about first fork of Rs), proximal cells somewhat transparent. Haltere orange-brown.

Abdomen: Dark red-brown to black with orange to orange-brown patches laterally, fine silver-grey pruinose, white and pale yellow setose. T1 blackish, white setose; T2–4 blackish with orange patches posterolaterally; T5–6 dark red-brown to black with orange-brown hind margins; T7–8 entirely orange. Sternites similar to tergites but orange areas along entire posterior margins.

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Male (based on holotype *braunsi*. Condition: Good; left antenna broken off beyond pedicel; hind margins of wings slightly broken.).

Head: Black, fine silver-grey pruinose, pale yellow, yellow and red-brown setose. Antenna (Fig. 26): Scape and pedicel orange, pale yellow setose, postpedicel orange proximally becoming orange-brown distally, terminal stylus 'segment' present, tipped with pit-enclosed spine-like sensory element. Segmental ratios: 1:0.4:3.9:0.2. Face black, uniformly fine silver-grey pruinose, mystax shiny yellow occupying ventral ⅔ of face. Frons and vertex black, fine silver-grey pruinose, pale yellow setose; ocellar tubercle fine pale yellow setose (no macrosetae). Occiput black, uniformly fine silver-grey pruinose, dorsal setae pale yellow ventral setae red-brown. Palpus red-brown, red-brown setose, terminal palpomere swollen, apex projecting with terminal sensory pit. Proboscis red-brown, pale yellow setose.

Thorax: Black with orange areas dorsally, fine silver-grey pruinose (especially lateral margins of mesonotum), white and pale yellow setose. Prothorax entirely black, fine silver-grey pruinose, pale yellow setose. Mesonotum black except for orange postpronotal lobes, posterior region (including postalar lobes and intervening area), fine silver-grey pruinose, fine moderately long white and pale yellow setose. Mesonotal macrosetae (pale yellow when present): *dc* pale yellow confined to posterior to transverse suture, *c*. 4 *npl*, 1 *spal*, 2 *pal*. Scutellum entirely orange, fine silver pruinose, disc sparsely pale yellow setose, hind margin with *c*. 4 pale yellow weakly developed macrosetae accompanied by minor setae. Pleura entirely black, entirely silver-grey pruinose, setae white to pale yellow confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* black, contrasting with orange scutellum. Legs: *cx* black, silver pruinose, white setose; *tro* red-brown; *fem*, *tib* and *tar* uniformly orange, entirely yellow setose, claws dark red-brown with orange proximal parts. Wings (Fig. 56): 8.6×3.1 mm. Veins orange anteriorly brown posteriorly. Membrane extensively microtrichose (some proximal cells partly bare), distal cells brown (from about first fork of Rs), proximal cells transparent. Haltere orange-brown.

Abdomen: Predominantly blackish with orange to orange-brown patches laterally, fine silver-grey pruinose, pale yellow setose. T1 blackish, T2–4 blackish with orange patches posterolaterally, T5–8 dark red-brown to black with orange-brown hind margins. Sternites similar to tergites but orange along posterior margins.

Genitalia (Figs 132–134): *Epand* bifid, forming pair of parallel, moderately slender lobes that jut out beyond all other genital structures, closely abut proximally, each being relatively straight with slightly inwardly curved distal tips. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly to narrowly-rounded tip; dorsal finger-like process well-developed, moderately long and stout; inner lobe well developed, distal end sclerotised, medially directed pointed structures. *Gonst* hardly compressed, dorsally directed, tip curved anteriorly. *Hypd* moderately developed, broadly heart-shaped, posterior margin indented medially, tapering fairly rapidly to broadly rounded medial protuberance; protuberance laterally somewhat membranous and slightly indented medially. *Aed* sub-triangular with tiny bifid distal tip.

Variation: A remarkably consistent species displaying little variation. The mystax varies in the intensity of its colour being yellow or bright orange (♂ from Kroonstad is exceptional in having a dark red-brown mystax). The legs are usually entirely orange, but a few individuals have the proximal parts of fore and mid legs red-brown.

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Holotype *maculates* (examined): ♀ SOUTH AFRICA: 'Holo- / type' [circular, red edged], *Xiphocerus* / *maculatus* / J. Bigot / 380 in / coll. / Bigot.', 'Coll. Bigot / abt.1845-93. / Pres-1914 by / J.E. Collin.', '380 *X. Maculatus* ♂ [upside-down ?] / = *tricolor* Lw. / L-. [?] Hermann 1913 / C.B.Sp. [= Cape of Good Hope] J. Bigot.' [large drawer label], 'Type Dip: 305 / *Xyphocerus* / *maculatus* / Bigot / Hope Dept. Oxford' (OXUM).

Holotype *braunsi* (examined): ♂ SOUTH AFRICA: 'De la Rey [= Delareyville, 26.683°S 25.443°E] / W. Transvaal / Dr. Brauns. / i.1919', 'Holotype / *Ancylorrhynchus* / *braunsi* Br.' [red], '*Ancylorrhynchus* / *braunsi* / Bromley / Det. S.W. Bromley 1934', '*Ancylorrhynchus* / *braunsi* Broml. / Holotype 154' [red ink] (NMSA).

Allotype *braunsi* (examined): ♀ 'Jan. 1919 / Dr. Brauns. / De la Rey / Transvaal', 'Allotype / *Ancylorrhynchus* / *braunsi* Br.' [red], '*Ancylorrhynchus* / *braunsi* Broml. / Allotype 155' [red ink] (NMSA).

Other material examined: LESOTHO: 1♂ 'Mamathes [29°08'S:27°51'E] / Basutoland / Jan. 1957 / D.J. Cuthbertson' (DMSA); 1♂ 'Mamathes / Basutoland / 18.xii.1943 / C. Jacot / Guillarmod' (DMSA); 1♀ 'Mamathes /Basutoland / 26.xii.1955 / A. Jacot- / Guillarmod' (AMGS); 1♀ 'Mamathes, Ba / sutol. / i.1940 / C. Jacot- / Guillarmod' (AMGS); 1♀ 'Mamathes /Basutoland / 20.xii.1947 / C. Jacot- / Guillarmod' (AMGS); 1♀ 'Basutoland / Teyateyaneng [29°09'S:27°44'E] / 18.xii.1964 / D.J. Brothers' (AMGS); 1♂ 1♀ 'Teyateyaneng /Basutoland / 21.xii.1964 / C. Jacot- / Guillarmod' (AMGS); 1♂ 1♀ 'Basutoland / 19.xii.1964 / D.J. Brothers / Teyateyaneng' (AMGS); 1♀ 'Valley floor / old lands / 5500 ft.', 'Roma Mission [29°27'S:27°44'E] / Maseru District / Basutoland / B. & P. Stuckenberg / 4–13 Jan. 1963' (NMSA). SOUTH AFRICA: 1♂ 'South Africa, N. Tvl. / Mogoto Nature Res. / Zebediela. 24.15S / 29.13E. 22–25.x.1979 / G.L. Prinsloo' (NMSA); 1♂ 'Lichtenburg [26°09'S:26°10'E] / Transvaal / Dr. Brauns' (NMSA); 1? 'Delarey [= Delareyville, 26.683°S 25.443°E] / W Transvaal / Dr. Brauns. / 15 i.1917' (NMSA); 1♀ 'Bothaville [27°22'S:26°37'E] / Orange Fr. St. / Dr. Brauns / 15 12 [18]98' [sideways], 'Sammlung / F. Hermann', '*Ancylorrh*. / *tricolor Lw.*', '*tricolor* Wied', *Ancylorrhynchus* / *tricolor* Wd. / ♀ / det. E. O. Engel' (ZSMC); 1♀ 'O. Free State / Kroonstad [27°40'S:27°14'E] / 29.xi.1965 / D.J. Brothers' (AMGS); 1♀ 'Sweeping', 'South Africa, OFS / Adullam Farm area / Clarens 28.34S / 28.28E. 15–18.i. / 1986. M.W. Mansell' (NMSA); 1♂ 'Kimb [Kimberley, 28°50'S:24°33'E] / 10/[18]96' (NMSA); 1♂ 1♀ 'Estcourt [29°00'S:29°53'E] / 12/96' (NMSA); 2♂ 'Estcourt, / Natal. / Sept. & Oct. 1896 / G.A.K. Marshall. / 1903–17' (BMNH); 1♂ 2♀ 1? 'Natal / Estcourt' ~ 'E. Haviland / 1894' (SAMC); 2♂ 'Estcourt / 1/97' (NMSA); 2♀ 'B'fontein [Bloemfontein, 29°06'S:26°11'E] / 1935 / H. v. Hoepen. / L. 219.' (BMSA); 1♂ 'South Africa / Natal: Hilton [29°30'S:30°18'E] / 10/11/80 / D.G. Rattray' (NMSA); 1♀ 'Pietermaritzburg [29°37'S:30°23'E] / City centre / 12.4.1970 / L. Kelsall' (NMSA); 1♀ 'Pietermaritzburg / Natal, S Africa / B. & P. Stuckenberg' (NMSA); 1♀ 'Sth Africa: Cape Prov / Karoo National Park / 15km N Beaufort West / 12.xi.1986 3222AB / Londt & Quickelberge / Dry Acacia woodland' (NMSA); 3♂ 'Sweeping / grassy / Fynbos', 'RSA: Eastern Cape / Baviaanskloof Nat. Res., / Berglaas trail hut at: / 33°38.075'S 24°29.306'E / 28.i.2009 / A. Kirk-Spriggs, S. Otto' (BMSA); 1? 'Capland / Krebs S.', '500', 'Zool. Mus. / Berlin' (ZMHB).

Distribution, phenology and biology: Known only from Southern Africa (Lesotho, South Africa) (Table 1), where it is fairly widely distributed (Fig. 152). Bromley (1939) recorded a poorly preserved female specimen from Stellenbosch which, as he suggested, is dispecific. Specimens have been collected from October–January as well as in April (Table 2). The biology is largely unknown, although most of the recorded localities fall within the Grassland, Nama-Karoo and Savanna biomes.

Similar species: A member of the *reynaudii* species-group with close similarities to *fulvicollis*, *tricolor* and *zophos*.

Ancylorhynchus unifasciatus (Loew, 1858)

Figs 27, 57, 135–137, 152

Xiphocerus unifasciatus Loew, 1858: 349; 1860: 156.
Ancylorrhynchus unifasciatus: Kertész 1909: 103 (catalogue); Hull 1960: 217; Oldroyd 1974: 32.
Ancylorrhynchus munroi Bromley, 1936: 135; Hull 1960: 217; Oldroyd 1974: 32. **Syn. n.**
Ancylorhynchus unifasciatus: Oldroyd 1980: 360 (catalogue).
Ancylorhynchus munroi: Oldroyd 1980: 360 (catalogue).

Redescription:

Male (based on holotype *unifasciatus*. Condition: Good; left antenna broken off beyond pedicel; right wing with small anterior part missing.).

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Head: Dark red-brown to black, silver pruinose, pale yellow and red-brown to dark red-brown setose. Antenna (Fig. 27): Entirely dark red-brown, scape and pedicel red-brown setose, postpedicel with terminal stylus 'segment' present, tipped with obliquely positional pit-enclosed spine-like sensory element. Segmental ratios: 1:0.3:3.0:0.1. Face blackish, silver pruinose except lateral margins of epistomal margin, mystax dark red-brown occupying ventral ⅓ of face. Frons and vertex blackish, fine silver pruinose, pale yellow and dark red-brown setose; ocellar tubercle fine pale yellow and dark setose. Occiput blackish, uniformly fine silver-grey pruinose, dark red-brown setose (few pale yellow setae dorsally). Palpus dark red-brown, red-brown setose, terminal palpomere swollen, apex projecting with terminal sensory pit. Proboscis dark red-brown, red-brown setose.

Thorax: Blackish with orange areas dorsally, fine silver-grey pruinose, white pale yellow and red-brown setose. Prothorax entirely blackish, fine silver-grey pruinose, dark red-brown setose. Mesonotum blackish except for orange postpronotal lobes and posterior region (including postalar lobes and surrounding area), fine silver-grey pruinose, fine moderately long pale yellow and dark red-brown setose. Mesonotal macrosetae (dark red-brown or orange when present): *dc* dark red-brown anterior of transverse suture, orange posteriorly, *c*. 2–3 dark red-brown *npl*, 2 red-brown *spal*, 4 orange *pal*. Scutellum entirely blackish, fine silver pruinose, disc sparsely pale yellow setose, hind margin with *c*. 6 red-brown, longish, weakly developed macrosetae accompanied by minor setae. Pleura entirely blackish, silver-grey pruinose, white setose (confined to *anepst*, *kepst* and *ktg*). *Anatg* and *mes pnot* blackish. Legs: *cx* blackish, silver pruinose, white setose; *tro* dark red-brown; *fem*, *tib* and *tar* uniformly dark red-brown, mostly pale yellow-white setose (some orange-brown tarsal setae), claws dark red-brown with orange proximal parts. Wings (Fig. 57): 4.7×1.8 mm. Veins brown. Membrane pale brownish, extensively microtrichose (only few small proximal areas bare), cells mostly semi-transparent. Haltere brown-yellow.

Abdomen: Extensively blackish with small orange areas dorsally, fine silver-grey pruinose, white, pale yellow and pale brown setose. T1 blackish; T2–4 blackish with tiny yellowish areas laterally on posterior margin and large silver pruinose areas posterolaterally (continuous medially); T3–4 blackish with yellowish posterolateral margins, weakly pruinose; T5–7 dark red-brown with narrow orange hind margins, moderately silver pruinose; T8–9 and terminalia red-brown. Sternites similar to tergites, posterior margins yellowish.

Genitalia (Figs 135–137): *Epand* bifid, forming pair of slightly diverging, relatively short and stout lobes. Lobes closely abut proximally, each is relatively straight with slightly inwardly directed distal ends; lobes characteristically downturned at about midlength when viewed laterally. *Proct* simple, dorsally situated *cerc* elongate, appearing fused proximally, projecting posteriorly to approximately similar level attained by *epand*. *Goncx* well developed, outer lobe projecting posteriorly to somewhat blunt distal end; dorsal finger-like process well developed, shortish, somewhat clavate; inner lobe well developed, distal end sclerotised, medially directed. *Gonst* slightly laterally compressed, dorsally directed, tip curved anteriorly (somewhat hidden from view in undissected genitalia). *Hypd* moderately developed, about twice as wide as long, tapering fairly rapidly to broadly rounded, medially indented, ridge-like distal end. *Aed* sheath fairly elongate with tiny bifid distal tip.

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Holotype *munroi* (Condition: Good; both antenna broken off beyond pedicels; right mesothoracic leg partly hidden within thorax where pin exits specimen.).

Head: Black, silver pruinose, whitish and dark red-brown setose. Antenna: Scape and pedicel dark red-brown, whitish setose, postpedicel missing. Segmental ratios: 1:0.4:-:-. Face black, silver pruinose except laterally on epistomal margin, mystax dark red-brown occupying ventral ⅓ of face. Frons and vertex black, fine silver pruinose, whitish setose; ocellar tubercle fine whitish setose. Occiput black, uniformly silver pruinose, dorsal setae whitish ventral setae dark red-brown. Palpus dark red-brown, dark red-brown setose, terminal palpomere swollen, apex projecting with terminal sensory pit. Proboscis dark red-brown, red-brown setose.

Thorax: Black with orange areas dorsally, silver pruinose, white and pale yellow setose. Prothorax entirely black, silver pruinose, whitish setose. Mesonotum orange except for broad black medial band extending from anterior to posterior margin, being broader at level of transverse suture but falling short of lateral margins, silver pruinose, fine moderately long white and pale yellow setose. Mesonotal macrosetae (pale yellow when present): *dc* pale yellow only posterior of transverse suture, *c*. 4 *npl*, 2 *spal*, 3–4 *pal*. Scutellum entirely dark red-brown, strongly silver pruinose, disc sparsely long whitish setose, hind margin with *c*. 6 pale whitish macrosetae accompanied by minor setae. Pleura entirely black, entirely strongly silver pruinose, setae whitish confined mainly to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* black, not contrasting with scutellum. Legs: *cx* black, strongly silver pruinose, white setose; *tro* dark red-brown; *fem* orange with dark red-brown proximal ⅔ (*fem*1) or dark red-brown dorsal band (*fem*2&3), *tib* and *tar* uniformly orange, legs entirely whitish setose, claws dark red-brown with orange proximal parts. Wings: 6.1×2.4 mm. Veins orange to pale brown. Membrane extensively microtrichose (some proximal cells partly bare), largely colourless and transparent. Haltere yellow with yellow-brown extremities.

Abdomen: Predominantly blackish with fairly narrow orange or orange-brown areas, silver pruinose, whitish setose. T1 uniformly blackish, strongly silver pruinose laterally; T2–3 blackish with narrow yellow-brown posterior margins and large areas of strong silver pruinescence laterally (completely absent medially); T4–8 similar to T3 but lacking large areas of strong silver pruinescence. Sternites blackish with orange posterior margins and long whitish setae. *Terminalia*: Agrees well with holotype of *unifasciatus*.

Variation: The above redescription of the *A. munroi* holotype illustrates the degree of intraspecific variation that may be expected. The species demonstrates little sexual dimorphism. While males usually have a dark red-brown to black mystax there are 2♂ from Soutpan with a white mystax. The mystax of females varies from pale yellow to orange. Males frequently have dark red-brown legs, but some have light brown to orange tibiae (and perhaps the distal ends of femora may be orange). Female legs are mostly fairly uniform orange, but a few may have the proximal parts of femora brownish.

Holotype *unifasciatus* (examined): ♂ SOUTH AFRICA: '113.', '245', '*Xiphocerus* / *univittatus*'. *Note*: This specimen is incorrectly labelled '*univittatus*' (NHRS).

Holotype *munroi* (examined): ♂ SOUTH AFRICA: 'Pretoria / W. boom. [Wonderboom, 25°36'S:29°20'E] Nov. 1915 / H.K. Munro', 'Holotype / *Ancylorrhynchus munroi* Br' [red], '*Ancylorrhynchus* / *munroi* Brom. / ♂ / Holotype No. 150' [red ink] (NMSA).

Allotype *munroi* (examined): ♀ SOUTH AFRICA: 'Pretoria [25°44'S:28°11'E] / 3.i.23 / H.K. Munro', 'Allotype / *Ancylorrhynchus* / *munroi* Br', '*Ancylorrhynchus munroi* Brom / Allotype No. 151' (NMSA).

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Paratype *munroi* (examined): ♀ SOUTH AFRICA: 'Pretoria / F [Faerie] Glen [25°46'24"S:28°18'03"E] 22.i.16 / H.K. Munro', 'Paratopotype / *Ancylorrhynchus* / *munroi* Br' [red], 'd.d.S.W. / Bromley. / 485. 1937', '*Ancylorrhynchus* / *munroi* / Bromley / Det. / S.W. Bromley 1937', 'Type Dip: 170 / *Ancylorrhynchus* / *munroi* / Bromley / Hope Dept. Oxford' (OXUM).

Note: The type locality is unknown.

Other material examined: SOUTH AFRICA: 2♂ 'Sth Africa: Transvaal / Soutpan 23–24.ii.1980 / Soutpansberge 2229CD / J. Londt & L. Schoeman / Bushveld vegetation' (NMSA); 1♀ 'So. Africa: Transvaal / N Kruger Natl. Park / Pafuri 22.21S 31.17E / 1–13 February 1980 / L. Braack. Malaise trap' (NMSA); 2♂ 'South Africa, Tvl. / Kruger Nat. Park / Pafuri, 22.26S / 31.12E. 23–29.i. / 1984 C.D. Eardley' (SANC); 1♂ 'South Africa, N.W. Tvl. / Mogol Nature Reserve / Ellisras Dist. 23.58S / 27.45E. 19–23.xi.1979 / M.W. Mansell' (SANC); 1♀ 'Sth Africa: Transvaal / Blyde river canyon / 2430DB 26–27.ii.1980 / J. Londt & L. Schoeman / Bushveld vegetation' (NMSA); 1♂ 'South Africa, Tvl. / Nylsvley Nature / Res. 24.39S 28.42E. / 10/11.xii.1979. / C.D. Eardley, C.G. / Moolman, W.A. Harrop', 'malaise trap' (SANC); 1♂ 'Pretoria [25°44'S:28°11'E] M., / 28.I.1948 / G. van Son' (NMSA); 2♂ 'South Africa / Barberton [25°47'S:31°03'E] / Tvl. xii.1978 / C.D. Eardley' (SANC); 1♂ 'Ingwavuma [27°08'S:31°59'E] / Zululand, Natal / South Africa / 10.xii.63', 'Collectors / B. & P. Stuckenberg' (NMSA); 6♂ 3♀ 'S. Africa: Natal #97 / Itala Game Reserve / Graig Adam Dam / 27°28'S 31°25'E / ii.1991 R.M. Miller / Malaise trap' (NMSA); 1♀ 'R.S.A.: KZ-Natal #73 / Itala Game Reserve / 27°32'S 31°22'E 570m / Date: 4.xi.1997 / Coll: J.G.H. & A. Londt / Kwasambane Grassland' (NMSA); 1♂ 1♀ 'South Africa KwaZulu-Natal / Vreyheid [Vryheid] Nature Reserve / N of Vreyheid [Vryheid, 27°46'S:30°48'E] 1300m / le.g. T. Dikow 2.xii.1999' (CODI); 2♂ 'South Africa Natal / Zululand / Ngoye Mission / 2831DC 15.xii.1983 / P. Reavell' (NMSA); 2♀ 'Sth Africa KZ-Natal / Cumberland Nature Res. / 29°30'16"S:30°30'12"E / 3.ii.2002 J.G.H. Londt / 570m Horseshow area / mixed wooded grassland' (NMSA); 2♂ 'S Africa KwaZulu-Natal / Cumberland Nature Res. / 29°30.457'S 30°30.383'E / J.G.H. Londt 21.xii.2007 / 564 [m] Acacia savanna' (NMSA); 1♂ 'Durban [29°51'S:31°01'E] / W. Haygarth / Apr 1913', 'Sammlung / F. Hermann', '*Ancylorrh.* / *unifasciatus* / Lw.', '*unifasciatus* / Lw.', '*Ancylorrhynchus* / *unifasciatus* / Lw. / ♂ / det. E. O. Engel' (ZSMC); 1♂ 'Durban / W. Haygarth / Apr. 1913' (SAMC).

Distribution, phenology and biology: Known only from South Africa (Table 1), where it is fairly widely distributed (Fig. 152). Specimens have been collected from November–April (no March records) (Table 2). The biology is largely unknown, although most of the recorded localities fall within the Savanna biome.

Similar species: A fairly distinctive member of the *reynaudii* species-group without close similarities to other species.

Ancylorhynchus variabilis nom. n.

Figs 1, 28, 58, 138–140, 151

Xyphocerus variegatus Bigot, 1879: 429.
Ancylorrhynchus variegatus: Kertész 1909: 103 (catalogue); Hull 1960: 217; Oldroyd 1974: 33.
Ancylorhynchus variegatus: Oldroyd 1980: 360 (catalogue).

It should be noted that the name *variegatus* has been used for two different species which currently reside in *Ancylorhynchus*. *Dasypogon variegatus* Wiedemann, 1817, a Palaearctic species now considered a junior synonym of type species *Ancylorhynchus glaucius* (Rossi, 1790) was described before the Afrotropical species *Xyphocerus variegatus* Bigot, 1879. Although both species were at one time considered valid within *Xyphocerus* (see Schiner 1867: 368) both were listed by Kertész (1909) under *Ancylorrhyncus*; Wiedemann's 1817 species as a synonym of *glaucius* and Bigot's 1879 species as a valid name in its own right. While all subsequent authors have accepted Bigot's name it is necessary to provide this taxon with a new name in order to stabilise the taxonomy (it being possible that a much needed review of Palaearctic *Ancylorhynchus* could see the resurrection of Wiedemann's earlier name). The similar, but different name, *variabilis*, is here established as a new name for Bigot's *variegatus*.

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Redescription:

Male (based on holotype. Condition: Good; both antennae completely missing; right metathoracic leg has been reattached to specimen with glue, but is complete).

Head: Dark red-brown to black, silver pruinose, white setose. Antenna (Fig. 28): Missing. Face black, strongly silver pruinose except laterally on epistomal margin, mystax shiny white occupying ventral ⅔ of face. Frons and vertex blackish, fine silver pruinose except for area anterior of ocellar tubercle, white setose; ocellar tubercle fine white setose. Occiput black, uniformly fine silver-grey pruinose, dorsal setae pale yellow ventral setae red-brown. Palpus dark red-brown, white setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis dark red-brown, white setose.

Thorax: Blackish with orange areas on posterolateral parts of mesonotum, fine silver pruinose (weak on orange parts), white setose. Prothorax entirely black and apruinose, white setose. Mesonotum dark red-brown to black anterior of transverse suture, posterior of suture black area tapers to point just short of hind margin, postalar lobes and surrounding area orange, fine silver pruinose (weak on orange sections), fine moderately long white setose. Mesonotal macrosetae (pale yellow when present): *dc* weak, confined to parts posterior to transverse suture, *c*. 3 *npl*, 1 *spal*, 2 *pal*. Scutellum dark red-brown except for small anteromedial orange area, fine silver pruinose, disc sparsely pale yellow setose, hind margin with 3 pale yellow weakly developed macrosetae accompanied by minor setae. Pleura entirely blackish, entirely silver-grey pruinose, setae setose (confined to *anepst*, *kepst* and *ktg*). *Anatg* black, silver pruinose laterally, *mes pnot* red-brown, weakly pruinose. Legs: *cx* dark red-brown, strongly silver pruinose, white setose; *tro* red-brown; *fem* dark red-brown with narrowly orange distal tips, *tib* orange except for dark red-brown distal ends, *tar* uniformly dark red-brown; legs entirely fine white setose, more major setae pale yellowish, claws dark red-brown with orange proximal parts. Wings (Fig. 58): 8.1×3.2 mm. Veins yellow anteriorly, brown posteriorly. Membrane extensively microtrichose (some proximal cells partly bare), distal cells brown (from about first fork of Rs), proximal cells yellowish and semi-transparent. Haltere yellow with pale brown stalk.

Abdomen: Predominantly dark red-brown to blackish with orange patches, silver pruinose, whitish. T1 entirely dark red-brown, fairly strongly silver pruinose; T2 dark red-brown with extensive orange areas posterolaterally (almost meet medially), weakly silver pruinose; T3 similar to T2 but orange areas not as extensive; T4 entirely dark red-brown, weakly silver pruinose; T5 similar to T3; T6 and terminalia removed for study of genitalia. Sternites similar to tergites but orange along posterior margins of all sternites.

Genitalia (Figs 138–140): *Epand* bifid, forming pair of relatively long, slender, straight lobes, extending posteriorly beyond level achieved by other genital structures. Lobes closely abut proximally, lie parallel with each and are hardly if at all inwardly curved distally. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly to narrowly rounded distal end; dorsal finger-like process completely absent; inner lobe well developed, distal end sclerotised, medially directed. *Gonst* laterally compressed, dorsally directed, tip curved anteriorly. *Hypd* moderately developed, wider than long, tapering fairly rapidly to pair of relatively

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poorly sclerotised, somewhat membranous, slightly diverging, setose protuberances (setae shiny and readily seen in dry material, and at least partly obscure underlying structures). *Aed* largely hidden in undissected genitalia.

Variation: The holotype lacks antennae; another specimen was measured and demonstrated the following segmental ratios 1:0.4:4.7:0.2 (the species having a small, but clearly differentiated stylus 'segment'). This species shows little variation. Males have dark red-brown to black antennae while females have extensively orange antennae. The legs of males are mostly dark red-brown but some individuals have the distal parts of femora and tibiae orange. Females usually have entirely orange legs (except for the terminal tarsomere which is always dark red-brown), but a few individuals have red-brown coloration proximally on the femora. The extent of orange coloration of the mesonotum varies somewhat.

Holotype (examined): ♂ SOUTH AFRICA: 'Holo- / type [circular, red edged]', *Xiphocerus* / *variegatus* / J. Bigot / 379 in / coll. / Bigot.', 'Coll. Bigot / abt.1845-93. / Pres-1914 by / J.E. Collin.', '379 *X. Variegatus* ♂ / = op. L-. [?] Hermann 1913 / C.B.Sp. [Cape of Good Hope] J. Bigot. [large drawer label]', 'Type Dip: 306 / *Xyphocerus* / *variegatus* / Bigot / Hope Dept. Oxford' (OXUM).

Other material examined: LESOTHO: 1♀ 'Mamathes [29°08'S:27°51'E] / Basutoland / 8-1-1950 / A Jacot- / Guillarmod' (NMSA); 1♂ 'Mamathes /Basutoland / 4.ii.1951 / C. Jacot- / Guillarmod' (AMGS); 1♂ 'Mamathes /Basutoland / 28.ii.1959 / C. Jacot- / Guillarmod' (AMGS); 1♀ 'Mamathes /Basutoland / 26.ii.1949 / C. Jacot- / Guillarmod' (AMGS). NAMIBIA: 1♂ 'SWA / Outjo / Ibc [?] / 1916DA / 12.iii.79 / VB Whitehead' (SAMC); 1♀ 'S.W. Africa: / Witvlei / 1.iii.1970 / E.S. Ross (CASC). SOUTH AFRICA: 1♀ 'S Africa: NW Province / Molopo Game Reserve / Phiri Camp area / 25°46'43"S:22°55'53"E / 990m 14.iii.2003 J Londt / *Acacia Erogrostis* savanna' (NMSA); 1♂ 3♀ 'S Africa: NW Province / Vorstershoop (outskirts) / 25°50'08"S:23°01'28"E / 990m 15.iii.2003 J Londt / *Erogrostis Schmidtia* verge' (NMSA); 1♀ 'S Africa: NW Province / Molopo Game Reserve / Motapi Camp area / 25°50'55"S:22°55'45"E / 1020m 14.iii.2003 J Londt / Dry *Acacia* savanna' (NMSA); 1♂ 'Sth Africa Cape Prov / 15km SE. Van Zylsrus / 2622CC 22.iii.1982 / J. Londt & L. Schoeman / Acacias/Grass/Shrubs' (NMSA); 5♂ 7♀ 'Sth Africa Cape Prov / ca 5km W Hotazel / 2722BB 23.iii.1982 / J. Londt & L. Schoeman / Acacias/Grass/Shrubs' (NMSA); 2♀ 'S Africa: N Cape #14 / 20km N of Hotazel / 27 07'S 22 59'E 1050m / Date: 14.iii.1991 / Whittington & Londt / Kuruman River banks' (NMSA); 1♂ 'Africa: Belmont. [? South Africa, 27°28'S:28°44'E] / L. Ogilvie. / 23.ii.1934 / B.M. 1934–157.' (BMNH); 1♂ 1♀ 'Sth Africa Cape Prov / 30km E. Groblershoop / 2822CD 19.iii.1982 / J. Londt & L. Schoeman / Roadside vegetation' (NMSA); 2♂ 'S Africa: N Cape #20 / 26km E of Upington / 28 23'S 21 29'E 950m / Date: 16.iii.1991 / Whittington & Londt / permanent dunes' (NMSA); 1♂ 'South Africa, Cape / 16mi. E of Cradock / Farm "Who can tell" / March 11, 1972, 1000m. / ME & BJ Irwin, 3225Bb' (NMSA).

Distribution, phenology and biology: Known only from Southern Africa (Lesotho, Namibia, South Africa) (Table 1), where it is fairly widely distributed (Fig. 151). Specimens have been collected from January–March (Table 2). The biology is largely unknown, locality data and personal experience suggest that the species inhabits both Grassland and Savanna biomes.

Similar species: A member of the *reynaudii* species-group with some similarities to *dilobion*.

Ancylorhynchus whiteheadi sp. n.

Figs 29, 59, 141–143

Etymology: Named after Dr Vincent Whitehead, who, while working at the South African Museum, collected a number of interesting Asilidae, including the holotype of this distinctive species.

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Description:

Male (based on holotype. Condition: Excellent; right mesothoracic leg is missing the tarsus.).

Head: Dark red-brown to blackish, silver pruinose, white pale yellow and dark red-brown setose. Antenna (Fig. 29, paratype): Entirely dark red-brown to black, pedicel slightly paler, pale yellow setose, terminal stylus 'segment' present, tipped with pit-enclosed spine-like sensory element. Segmental ratios: 1:0.4:4.0:0.1. Face blackish, strongly silver pruinose except laterally on epistomal margin, mystax shiny white occupying entire face (weakly dorsally). Frons and vertex black, fine silver-grey pruinose except for V-shaped area between eyes that includes much of ocellar tubercle, pale yellow-white setose; ocellar tubercle fine pale yellow setose (no macrosetae). Occiput black, uniformly fine silver pruinose, pale yellow setose. Palpus dark red-brown, palpomere 1 yellow setose, palpomere 2 dark red-brown and yellow setose, terminal palpomere swollen, apex with terminal sensory pit. Proboscis dark red-brown, pale yellow setose.

Thorax: Dark red-brown to blackish with orange areas dorsally, silver pruinose, white and pale yellow setose. Prothorax entirely blackish, silver pruinose, white and pale yellow setose. Mesonotum blackish except for orange lateral and posterior margins (including postpronotal and postalar lobes and intervening parts), fine silver pruinose, fine shortish pale yellow setose. Mesonotal macrosetae (yellow when present): *dc* tiny pale yellow confined to area posterior to transverse suture, 2 *npl*, 1 *spal*, 3 *pal*. Scutellum entirely dark red-brown, fine silver pruinose, disc sparsely pale yellow setose, hind margin with 4 pale yellow weakly developed macrosetae accompanied by minor setae. Pleura entirely black, entirely strongly silver pruinose, setae white to pale yellow confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* dark red-brown. Legs: *cx* black, strongly silver pruinose, white setose; *tro* shiny dark red-brown; *fem*1&2 orange with small proximally situated red-brown marks anteroventrally *fem*3 mainly dark red-brown with orange distal and proximal ends, *tib* and *tar* uniformly orange, macrosetae yellow fine setae white, claws dark red-brown with orange proximal parts. Wings (Fig. 59): 8.1×3.4 mm. Veins orange anteriorly brown posteriorly. Membrane extensively microtrichose (some proximal cells partly bare), distal cells brownish (from about first fork of Rs), proximal cells relatively transparent. Haltere yellow with brown distal and proximal ends.

Abdomen: Predominantly blackish with orange areas, fine silver pruinose areas, white setose. T1 blackish, weakly pruinose; T2 blackish anteriorly. Orange posteriorly (with tiny yellowish parts along posterior margin), silver pruinescence only evident anteriorly; T3–4 blackish with orange areas posterolaterally (small on T4), little evidence of pruinescence; T5 blackish anteriorly orange posteriorly, little evidence of pruinescence; T6-terminalia dissected. Sternites similar to tergites but orange parts more extensive.

Genitalia (Figs 141–143): *Epand* bifid, forming pair of relatively long, fairly slender, straight lobes that project beyond other genital structures. Lobes closely abut proximally, becoming fairly widely separated (in dorsal view). *Proct* simple, weakly sclerotised, dorsally situated *cerc* closely associated but probably not fused. *Goncx* large, well developed, outer lobe broad, covered with strong setae, projecting posteriorly to rounded distal end; dorsal finger-like process completely absent; inner lobe well developed, distal end sclerotised and medially directed (slightly overlapping opposing lobe). *Gonst* laterally compressed, dorsally directed, tip curved anteriorly (largely hidden from view

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in undissected genitalia). *Hypd* well developed, almost as long as broad, tapering fairly rapidly to broad bilobed, densely setose, flattened distal end; setose distal end with small group of strong setae medially. *Aed* hidden in undissected genitalia.

Female. Similar to male but somewhat larger (wing 11.4×4.5 mm); *fem*1&2 entirely orange, *fem*3 extensively orange with small slightly red-brown areas at midlength anterodorsally.

Holotype: ♂ SOUTH AFRICA: 'S. Afr. C.P. / Murraysberg [Murraysburg, 31°57'S:23°46'E] / Witteklip / 6.iii.[19]91 / VB Whitehead' (SAMC).

Paratype: 1♀ SOUTH AFRICA: 1♀ 'Murraysburg Dist. / C.P.' ~ 'Museum Staff / Mar. 1931' (SAMC).

Distribution, phenology and biology: Known only from South Africa (Table 1). Specimens have been collected only in March (Table 2). The biology is unknown. The type locality falls within the Nama-Karoo biome.

Similar species: A member of the *reynaudii* species-group with close similarities to *gessi*.

Ancylorhynchus zophos sp. n.

Figs 30, 60, 144–146

Etymology: From Greek *zophos* (West). A species limited to the western part of South Africa.

Description:

Male (based on holotype. Condition: Excellent; left antenna entirely missing; terminal tarsomere of left metathoracic leg missing.).

Head: Dark red-brown to blackish, silver-gold pruinose, shiny yellow setose. Antenna (Fig. 30): Scape and pedicel orange, yellow setose, postpedicel orange proximally becoming brown-orange distally, terminal stylus 'segment' present, tipped with pit-enclosed spine-like sensory element. Segmental ratios: 1:0.4:3.4:0.3. Face dark red-brown, strongly silver-gold pruinose except on lateral parts of epistomal margin and a small spot below antennal sockets, mystax shiny yellow occupying ventral ½ of face. Frons and vertex blackish, fine silver-gold pruinose, yellow setose; ocellar tubercle anteriorly apruinose, fine pale yellow setose (no macrosetae). Occiput blackish, uniformly gold-silver pruinose, yellow setose. Palpus red-brown, yellow setose, terminal palpomere swollen, apex projecting with terminal sensory pit. Proboscis orange-brown, yellow setose.

Thorax: Blackish with orange areas dorsally, silver pruinose, yellow setose. Prothorax entirely black, fine silver pruinose, yellow setose. Mesonotum blackish except for orange postpronotal and postalar lobes (and immediate surrounds), fine silver-grey pruinose, fine pale yellow setose. Mesonotal macrosetae (yellow when present): *dc* yellow confined to few pairs posterior to transverse suture, 2 *npl*, 1 *spal*, 3 *pal*. Scutellum entirely orange, fine silver pruinose, disc apparently asetose, hind margin with 4 yellow macrosetae. Pleura entirely blackish, silver pruinose, setae yellowish confined to *anepst*, *kepst* and *ktg*. *Anatg* and *mes pnot* black, contrasting with orange scutellum. Legs: *cx* black, silver pruinose, pale yellow setose; *tro* red-brown; *fem*, *tib* and *tar* uniformly orange, entirely yellow setose, claws dark red-brown with orange proximal parts. Wings (Fig. 60): 10.3×3.5 mm. Veins orange anteriorly pale brown posteriorly. Membrane extensively

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microtrichose (some proximal cells partly bare), distal cells pale brownish (from about first fork of Rs), proximal cells mostly transparent. Haltere yellow-brown.
Abdomen: Extensively dark red-brown to blackish with large orange patches, dull pruinose, pale yellow setose. T1 blackish, T2–4 blackish with large orange patches posterolaterally, T5–7 similar to T4 but dissected with genitalia. Sternites similar to tergites but orange areas predominate posteriorly.
Genitalia (Figs 144–146): *Epand* bifid, forming pair of relatively long, fairly slender, undulating lobes that project beyond other genital structures. Lobes closely abut proximally, lying almost parallel with one another, slightly undulating (in dorsal view), with distal tips slightly inwardly directed. *Proct* simple, dorsally situated *cerc* appearing fused proximally. *Goncx* well developed, outer lobe projecting posteriorly to narrowly rounded distal end; dorsal finger-like process well developed, fairly short and stout; inner lobe well developed, long, distal end well sclerotised and medially directed. *Gonst* laterally compressed, dorsally directed, distal end curved anteriorly. *Hypd* moderately developed, less than half as long as broad, elongate oval with undulating, medially indented posterior margin. *Aed* triangular in ventral view with tiny bifid distal tip.

Holotype: ♂ SOUTH AFRICA: 'Klip Vlei [30°59'S:17°51'E], Garies / Namaqualand' ~ 'Museum Staff / Nov. 1931' (SAMC).

Distribution, phenology and biology: Known only from South Africa (Table 1). The unique holotype was collected in November (Table 2). The biology is unknown. The type locality falls within the Succulent Karoo biome.

Similar species: A member of the *reynaudii* species-group with close similarities to *fulvicollis*, *reynaudii* and *tricolor*.

Ancylorhynchus sp.

I have studied a single female from the northern parts of Somalia that does not appear to belong to any of the species known from East Africa. Until male material from the same region is available this specimen cannot be adequately assigned. Label data are as follows: 1♀ 'Somaliland / Protectorate / Borama [Boorama, 09°56'N:43°11'E] / 6.vi. [19]57 / J. Roffey' (BMNH).

Key to Afrotropical *Ancylorhynchus* species

In order to successfully key specimens using this key it is necessary to have an intact male in good condition. All characters relate to male specimens and it may prove necessary to remove and macerate terminalia. Females may differ from males and can only be adequately identified though their association with males and by referring to detailed descriptions where available. Unfortunately, two of the 29 reviewed species could not be accommodated in this key. Firstly, *pretoriensis* Bromley, 1936, which belongs to the *reynaudii* species-group, known only from a unique female holotype and, secondly, *elbaiensis* which belongs to the *nomadus* species-group, is excluded as I have not been able to study the only known type specimens.

1 Antenna with well-developed stylus 'segment' (e.g. Fig. 20) (*reynaudii* species-group, confined to Southern Africa).....2
– Antennal postpedicel terminating in an obliquely situated pit enclosed spine-like element (e.g. Fig. 14) (*nomadus* species-group, all African subregions).....11

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2 Gonocoxite with well-developed dorso-distal finger-like projection (e.g. Fig. 78) 3
– Gonocoxite with poorly defined dorso-distal projection (e.g. Fig. 82), or completely lacking this structure (e.g. Fig. 62) 8
3 A small (wing <5 mm) blackish species (legs entirely blackish). Genitalia as in Figs 135–137.....**unifasciatus** (Loew, 1858)
– Larger (wing >5 mm) more colourful species (legs entirely or extensively yellow or orange) 4
4 Blackish mesonotal marking confined to a narrow medial strip extending to both anterior and posterior margins (although narrowing near posterior margin) and possibly being slightly broader at about midlength. Genitalia as in Figs 93–95..... .....**insignis** Bromley, 1936
– Blackish mesonotal marking not confined to a narrow medial strip extending to both anterior and posterior margins, but often more extensive and sometimes failing to reach posterior margin (the following four species are best separated using male genital features).....5
5 Mystax dark red-brown to black 6
– Mystax pale yellow to orange 7
6 Male genitalia as in Figs 78–80; tips of epandrial lobes flattened ....**fulvicollis** (Bigot, 1879)
– Male genitalia as in Figs 114–116; distal tip of hypandrium with small group of dorsally directed setae..... **reynaudii** (Macquart, 1838)
7 Male genitalia as in Figs 132–134 ..... **tricolor** (Loew, 1863)
– Male genitalia as in Figs 144–146 ..... **zophos** sp. n.
8 Gonocoxite with poorly defined dorso-distal projection. Male genitalia as in Figs 67–69 ..... **dilobion** sp. n.
– Gonocoxite completely lacking dorso-distal projection 9
9 Prothorax entirely shiny apruinose. Male with black postpronotal lobes (not differentiated from anterior parts of mesonotum). Genitalia as in Figs 138–140 ....**variabilis** nom. n.
– Prothorax entirely silvery pruinose. Male with orange postpronotal lobes (differentiated from blackish anterior parts of mesonotum).....10
10 Distal half of wing clearly darkly shaded and differentiated from proximal half. Tibiae and tarsi orange. Genitalia as in Figs 141–143 ..... **whiteheadi** sp. n.
– Distal half of wing not distinctly different in shading from proximal half. Tibiae and tarsi of male uniformly dark red-brown, orange in female except for terminal tarsomere which is dark red-brown. Genitalia as in Figs 84–86 ..... **gessi** sp. n.
11 Gonocoxite with well-developed dorso-distal finger-like projection.....12
– Gonocoxite with poorly defined dorso-distal projection or completely lacking this structure.....13
12 Wing membrane somewhat dark red-brown. Thoracic pleura of male entirely blackish, including katatergite 13
– Wing uniformly pale, lacking a distinctive. Thoracic pleura of male bicoloured (dark red-brown and orange), katatergite orange.....14

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13 Wing membrane with characteristic patches of yellow and dark red-brown. Male genitalia with elongate hypandrium featuring complex distal region. Genitalia as in Figs 102–104 (East Africa) ..... **nyukinus** Speiser, 1910
– Wing uniformly dark red-brown except for small transparent proximal region. Male genitalia with short hypandrium with simple distal margin. Genitalia as in Figs 117–119 (West Africa) ..... **similis** sp. n.

14 Mesonotum mainly orange with only a narrow blackish medial band. Genitalia as in Figs 108–110 (Southern Africa) ..... **phelpsi** sp. n.
– Mesonotum orange with bold blackish cross-shaped marking featuring a broad medial band and lateral bands at midlength. Genitalia as in Figs 70–72 (East Africa) ..... **doryphorus** sp. n.

15 Gonocoxite with poorly defined dorso-distal projection.....16
– Gonocoxite completely lacking dorso-distal projection 19

16 Head ground colour dark red-brown to black. 17
– Head ground colour orange.....20

17 Wings uniformly dark brown shaded.....18
– Wings pale and largely transparent. Genitalia as in Figs 87–89 (East Africa) .... **greatheadi** sp. n.

18 Legs and mesonotum entirely blackish. Mystax white. Genitalia as in Figs 129–131 (Central Africa) ..... **susurrus** (Karsch, 1879)
– Legs entirely orange, mesonotum orange with central blackish marking. Mystax orange. Genitalia as in Figs 81–83 (Southern Africa)..... **funebris** Bromley, 1936

19 Medium to large (wing length >10 mm) species usually with dark-tipped wings (variable, rarely with entirely blackish wings). Genitalia as in Figs 96–98 (Southern, Central & East Africa)..... **magnificus** Bromley, 1936
– Smallish to medium sized (wing length <10 mm) species distinctively patterned dark red-brown to black and yellowish wings. Genitalia as in Figs 75–77 (Southern Africa) ..... **feijeni** sp. n.

20 Mesothoracic trochanters with row of mainly white setae ventrally. West African species 21
– Mesothoracic trochanters with row of black setae ventrally (Fig. 2). East & Southern African species 23

21 Antennae, legs and mesonotum entirely blackish. Wings extensively dark red-brown to black with transparent parts proximally.....22
– Antennae extensively orange but brownish distally, legs entirely orange, mesonotum extensively orange with blackish marking medially. Wings uniformly pale yellowish. Genitalia as in Figs 123–125 ..... **snowi** sp. n.

22 Palpus red-brown setose. Face silver pruinose except for small apruinose spot below antennae sockets. Genitalia as in Figs 99–101 ..... **nomadus** (Wiedemann, 1828)
– Palpus white setose. Face uniformly silver pruinose. Genitalia as in Figs 120–122 ..... **simpsoni** sp. n.

23 Antennae and legs black, mesonotum dark red-brownish to black, mystax white 24

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– Antennae and legs orange, mesonotum orange with extensive blackish marking medially, mystax yellow or orange 25

24 Abdomen black. Genitalia as in Figs 111–113 (Southern Africa)..... ..... **prunus** Oldroyd, 1974

– Abdomen extensively yellowish. Genitalia as in Figs 105–107 (Central & East Africa) ..... **oldroydi** Lindner, 1961

25 Genitalia as in Figs 61–66 (Southern, Central & East Africa)..... ..... **cruciger** (Loew, 1858)

– Genitalia as in Figs 90–92 (East Africa)..... **hylaeiformis** Speiser, 1910

– Genitalia as in Figs 126–128 (East Africa)..... **sokokensis** sp. n.

DISCUSSION

Taxonomy

Some 12 scientists have contributed to our taxonomic knowledge of this interesting and attractive genus by describing Afrotropical species. The main contributors were Bromley (8 species), Loew (4), Bigot & Oldroyd (3 each), and Speiser (2), while single species were added by no fewer than seven other authors (Bezzi, Curran, Efflatoun, Karsch, Lindner, Macquart, Wiedemann). In my experience, this kind of scenario often leads to a lengthy revisionary process and this has certainly been true in the case of *Ancylorhynchus*. Of the 27 species described by the authors listed above, no fewer than nine (33 %) are now listed as synonyms. Only Bromley (1936) attempted to provide an overview of the Afrotropical species, but left out a number of species that were not available or familiar to him. Oldroyd (1974) also attempted to provide a means by which the Southern African species could be identified. Unfortunately, he too was not familiar with all the species and decided to use Bromley's incomplete coverage and key to construct his own key, which is consequently not particularly useful. The fact that Wiedemann's *Dasypogon humeralis*, described in 1821 and incorporated into *Ancylorhynchus* over a hundred years ago, has only now been shown to belong to a totally different genus clearly illustrates the state of affairs at the commencement of my study. I now accept 29 valid Afrotropical species, including *elbaiensis* which should probably be treated as a Palaearctic species, and 12 newly described species. As mentioned elsewhere, this study was hampered by the unavailability of a few key holotype specimens which has meant that certain of my taxonomic decisions may ultimately prove problematic. This being accepted, I am still of the opinion that this review paves the way toward providing a means for the accurate identification of Afrotropical species of *Ancylorhynchus*.

Although the remarkable form of the proboscis is clearly the most defining generic character, the situation is probably not as simple as here portrayed. For example, Wulp (1870) transferred *nomadus* to *Scylaticus* because it had similarly long and slender antennae (see discussion under *nomadus*), an action accepted by Kertész (1909). Although the grounds for Wulp's action appear trivial, he may have been onto something because species of *Ancylorhynchus* and *Scylaticus* do have much in common and are now known to be sister species within the Stenopogoninae (Dikow 2009*a*). In redefining *Scylaticus* I stated 'Proboscis straight or rarely slightly arched' (Londt 1992: 100), and I used this feature in my key to separate two species (*albofasciatus* Engel, 1932 & *camptus* Londt, 1992) from others—also using the terms 'bow-shaped' and 'gently

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downcurved' when describing the proboscis of these species. While the proboscis of *Ancylorhynchus* is clearly distinctive, the condition found in a few species of *Scylaticus* may well represent an intermediate character state that should perhaps be given greater attention in any future cladistical assessment of relationships between these taxa. It should also be noted that species of *Scylaticus* also exhibit the two different forms of antennae that are discussed below for *Ancylorhynchus*, and so this may also prove of greater significance in future research on these genera.

I am not the first to recognise that there are two groups within *Ancylorhynchus* (see Oldroyd 1974: 30). Group 1 (*reynaudii* group): Antenna with a small, but distinctive terminal stylus. The pedicel is relatively long, while the postpedicel is relatively short. The mystax is not U-shaped in anterior view. The mesothoracic trochanter does not possess a ventral row of curved spine-like setae (may possess a few pale, slightly curved, fairly elongate setae). Species in this group are: *dilobion*, *fulvicollis*, *gessi*, *insignis*, *reynaudii*, *tricolor*, *unifasciatus*, *variabilis*, *whiteheadi* and *zophos*. Group 2 (*nomadus* group): Antenna lacks a terminal stylus, and ends in an obliquely positioned pit. The pedicel is relatively short, while the postpedicel is relatively long. The mystax is commonly U-shaped in anterior view. The mesothoracic trochanter possess a ventral row of curved (usually black) spine-like setae. Species in this group are: *cruciger*, *doryphorus*, *feijeni*, *funebris*, *greatheadi*, *hylaeiformis*, *magnificus*, *nomadus*, *nyukinus*, *oldroydi*, *phelpsi*, *prunus*, *similis*, *simpsoni*, *snowi*, *sokokensis* and *susurrus*. Although I would not presently be prepared to consider these groups to be subgenera, it is useful to provide these groups with names. It is probably significant to note that all members of the *reynaudii* species-group are confined to Southern Africa, while those of the *nomadus* species-group are fairly widely distributed (although not particularly so within Southern Africa, where they are found chiefly in the more subtropical north-eastern parts).

Distribution, phenology and biology

Ancylorhynchus is a widely distributed genus in the afrotropics, being found in West, East, Central and Southern Africa (Table 1, Fig. 147). As yet the genus has not been recorded from the southern parts of the Arabian peninsula or from the Atlantic and Indian ocean islands (except for Zanzibar). While the majority of recorded localities are in Southern Africa this is certainly a consequence of biased sampling. It is my impression that population numbers are never high and this is borne out by the generally small series that are usually collected at any one locality. While there are two samples of 12 specimens recorded, at least one of these was a series collected in a Malaise trap over a number of days. Not unexpectedly, most of the species are active in the adult phase during the warmer (and usually wetter) months of the year and many appear to have quite extended 'seasons' or periods of adult activity (Table 2). Almost nothing is known about the biology of species in this genus. Most appear to inhabit biomes such as Grassland and Savanna while a few are known from the Fynbos of South Africa, as well as more arid environments. There are only five known prey records (*cruciger* 2, *fulvicollis* 2, *magnificus* 1). Three of the five prey items belong to the Hemiptera (Cicadellidae, Membracidae, Scutelleridae), the others being a hymenopteran (Vespidae) and a dipteran (Tachinidae).

Oldroyd (1970: 271) believed that the unusual shape of the proboscis found in *Ancylorhynchus* 'must be related to some peculiarity of diet, but as far as I know no-

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TABLE 2

The phenology of Afrotropical *Ancylorhynchus* species.
● – dates confirmed from specimen labels, ○ – unlikely records.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
cruciger	-	-	-	●	●	●	●	●	●	●	●	●
dilobion	-	-	-	●	●	-	-	-	-	-	-	-
doryphoros	-	●	●	-	-	-	-	-	-	-	-	-
elbaiensis	-	-	-	-	-	-	-	-	●	●	-	-
feijeni	-	-	-	●	-	-	-	●	●	●	-	-
fulvicollis	-	-	●	●	●	●	●	●	●	●	-	●
funebris	○	-	-	-	-	●	●	-	-	○	○	○
gessi	-	-	-	-	-	-	-	-	●	-	-	-
greatheadi	-	-	●	-	-	-	-	-	●	●	-	-
hylaeiformis	-	-	-	-	-	●	●	-	-	-	●	●
insignis	-	-	-	-	●	●	-	●	●	-	-	-
magnificus	-	-	●	●	●	●	●	●	●	●	●	-
nomadus	●	-	-	-	-	-	-	-	●	●	-	-
nyukinus	●	-	-	-	●	●	●	-	●	-	●	●
oldroydi	-	-	-	-	-	●	-	●	-	●	-	●
phelpsi	-	-	-	●	-	-	-	-	-	-	-	-
pretoriensis	-	-	-	-	-	●	-	-	-	-	-	-
prunus	-	-	-	-	-	-	-	●	-	-	-	-
reynaudii	-	-	-	●	●	●	●	-	●	-	-	-
similis	-	-	-	-	-	-	-	-	-	●	-	●
simpsoni	-	-	-	-	●	-	-	-	-	-	-	-
snowi	-	-	-	-	-	-	-	-	-	-	●	-
sokokensis	-	-	-	-	-	-	-	-	-	-	●	-
susurrus	-	●	-	-	-	-	-	-	-	-	-	-
tricolor	-	-	-	●	●	●	●	-	-	●	-	-
unifasciatus	-	-	-	-	●	●	●	●	-	●	-	-
variegatus	-	-	-	-	-	-	●	●	●	-	-	-
whiteheadi	-	-	-	-	-	-	-	-	●	-	-	-
zophos	-	-	-	-	●	-	-	-	-	-	-	-
	2(3)	2	4	8	11	12	10	9	13	11(12)	6(7)	6(7)

one has attempted to speculate what it might feed upon. Some observations on this proboscis will be the subject of a separate small paper.' This 'separate small paper' does not appear to have been published, but Oldroyd (1974: 28–30) did devote a paragraph and a group of illustrations (his figs 17–20) to details of the morphology of a dissected specimen. Oldroyd, who had obviously not seen any prey items associated with this genus, was nonetheless convinced that the unusually shaped proboscis was entirely functional. He suggested that 'the proboscis has every appearance of being a specialized organ for feeding upon some unusual kind of prey' and that 'the prey must be exceptionally difficult to penetrate'. Now that there are a few prey records it appears

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that there is nothing unusual about the choice of prey and indeed the genus probably has catholic tastes.

It is of interest that many *Ancylorhynchus* species appear to resemble Hymenoptera (e.g. Vespidae) in physical appearance. Of note in this regard is the fact that of the 48 specimens recorded as having been collected in Malaise traps, only 17 (35 %) were female. In my experience Malaise traps are generally not very effective in collecting Asilidae, probably because asilids do not usually display the kind of sustained flight normally associated with insects that readily find their way into these traps. It is possible, therefore, that males of *Ancylorhynchus* also mimic hymenopteran flight chacteristics as well as bodily appearance and hence are more effectively trapped.

Of the 485 specimens studied 239 (49 %) were males, 237 (49 %) females and 9 (2 %) could not be sexed. The gender ratio was therefore almost identical.

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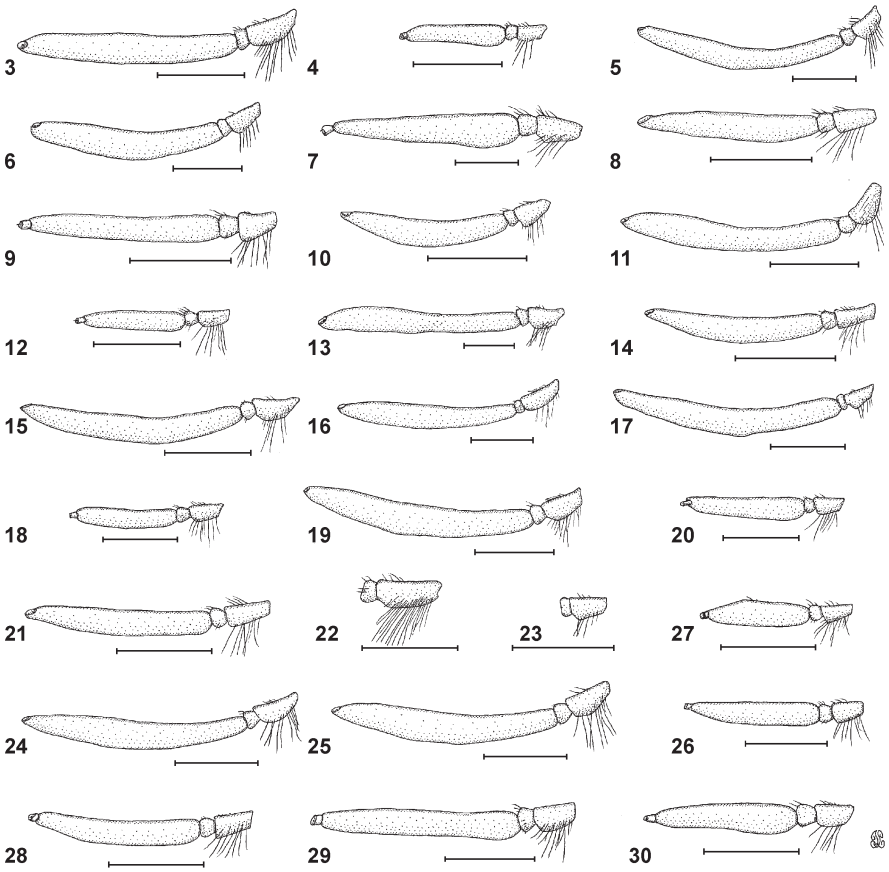

Figs 3–30. Antennae of *Ancylorhynchus* species: (3) *A. cruciger* (Loew, 1858), holotype, left side outer view; (4) *A. dilobion* sp. n., holotype, left side outer view; (5) *A. doryphorus* sp. n., holotype, right side inner view; (6) *A. feijeni* sp. n., holotype, left side outer view; (7) *A. fulvicollis* (Bigot, 1879), ♂ Pietermaritzburg, left side outer view; (8) *A. funebris* Bromley, 1936, ♂ Masiene, left side outer view; (9) *A. gessi* sp. n., holotype, left side outer view; (10) *A. greatheadi* sp. n., holotype, left side outer view; (11) *A. hylaeiformis* Speiser, 1910, holotype, left side outer view; (12) *A. insignis* Bromley, 1936, holotype, left side outer view; (13) *A. magnificus* Bromley, 1936, holotype, left side outer view; (14) *A. nomadus* (Wiedemann, 1828), ♂ Zungeru, right side outer view (reversed); (15) *A. nyukinus* Speiser, 1910, holotype, right side outer view (reversed); (16) *A. oldroydi* Lindner, 1961, holotype, right side outer view (reversed); (17) *A. phelpsi* sp. n., holotype, left side outer view; (18) *A. pretoriensis* Bromley, 1936, holotype, left side outer view; (19) *A. prunus* Oldroyd 1974, holotype, left side outer view; (20) *A. reynaudii* (Macquart, 1838), ♀ Kommetjie, left side outer view; (21) *A. similis* sp. n., paratype, left side outer view; (22) *A. simpsoni* sp. n., holotype, left side outer view (postpedicel missing); (23) *A. snowi* sp. n., holotype, left side outer view (postpedicel missing); (24) *A. sokokensis* sp. n., paratype, left side outer view; (25) *A. susurrus* (Karsch, 1879), holotype, left side outer view; (26) *A. tricolor* (Loew, 1863), holotype *braunsi*, right side outer view (reversed); (27) *A. unifasciatus* (Loew, 1858), ♂ Cumberland, left side outer view; (28) *A. variabilis* nom. n., ♂ Hotazel, left side outer view; (29) *A. whiteheadi* sp. n., paratype, left side outer view; (30) *A. zophos* sp. n., holotype, right side inner view. Scale lines = 1 mm.

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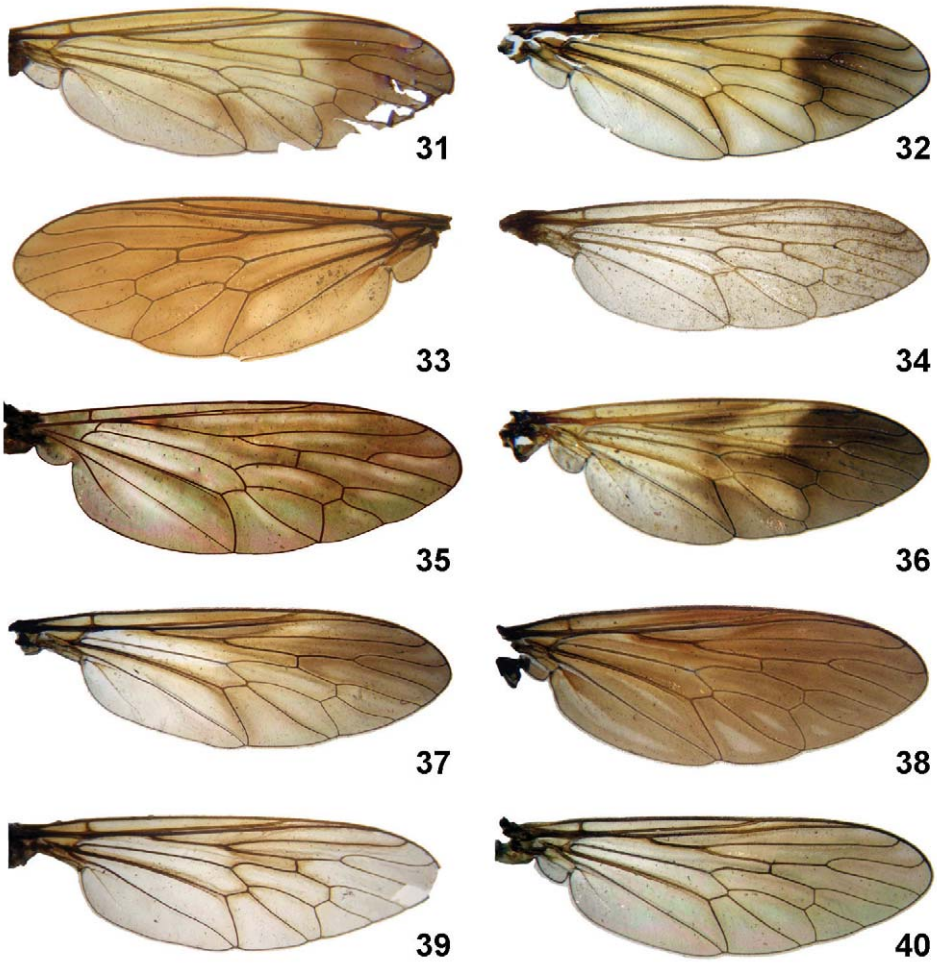

Figs 31–40. Wings of *Ancylorhynchus* species: (31) *A. cruciger* (Loew, 1858), holotype; (32) *A. cruciger*, ♂ N. Vumba; (33) *A. dilobion* sp. n., ♂ paratype Paleisheuvel; (34) *A. doryphorus* sp. n., holotype; (35) *A. elbaiensis* Efflatoun, 1937 (from Efflatoun, 1937, pl. V, fig. 48); (36) *A. feijeni* sp. n., paratype ♂ Soutpan; (37) *A. fulvicollis* (Bigot, 1879), ♂ Pietermaritzburg; (38) *A. funebris* Bromley, 1936, ♂ Lourenço Marques [= Maputo]; (39) *A. gessi* sp. n., holotype; (40) *A. greatheadi* sp. n., paratype ♂ Salamona. Not to scale, see text for measurements.

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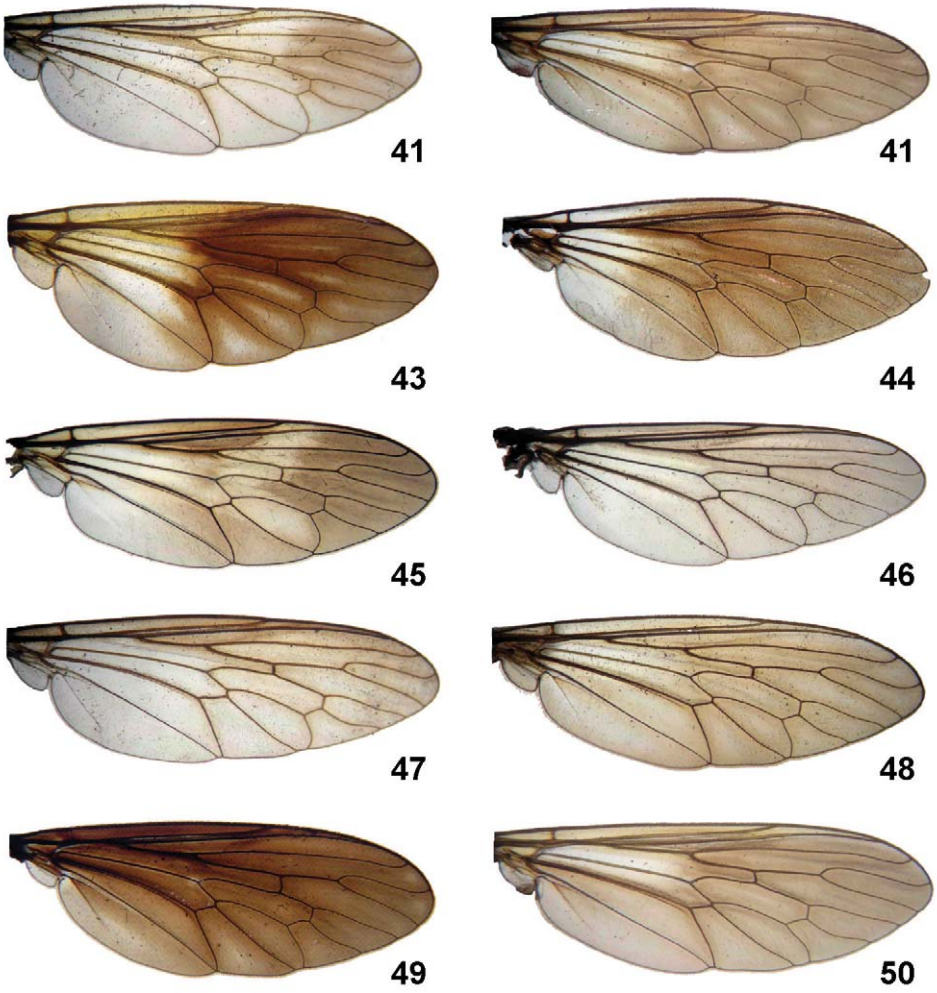

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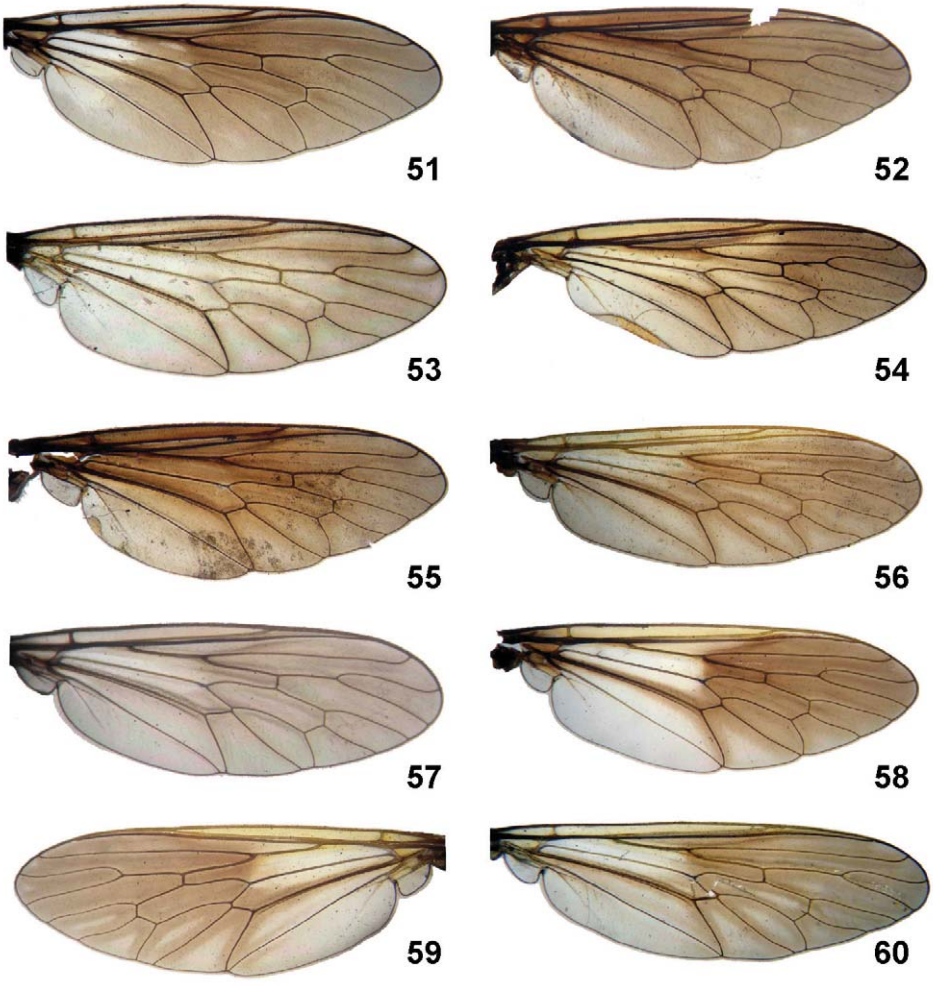

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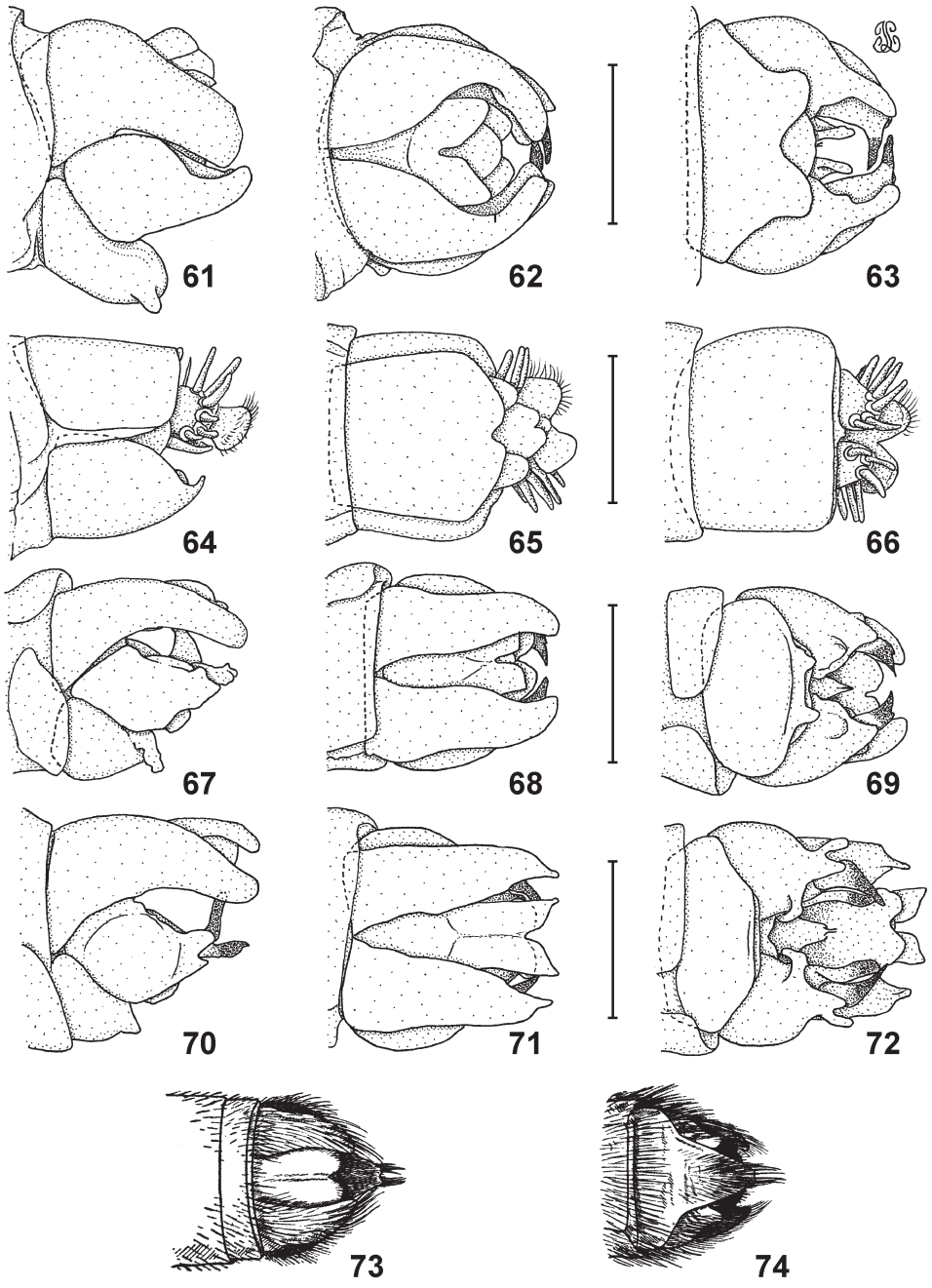

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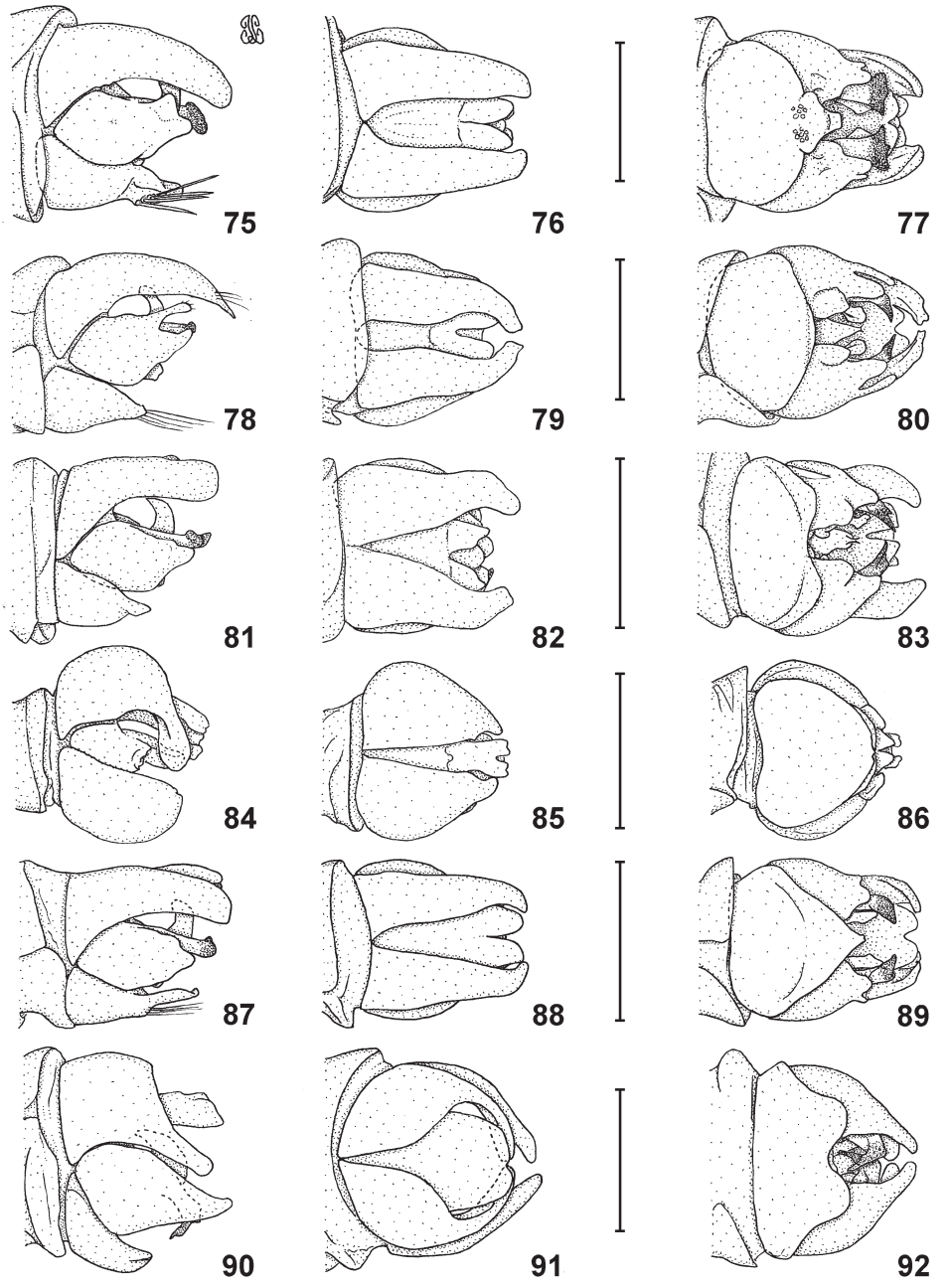

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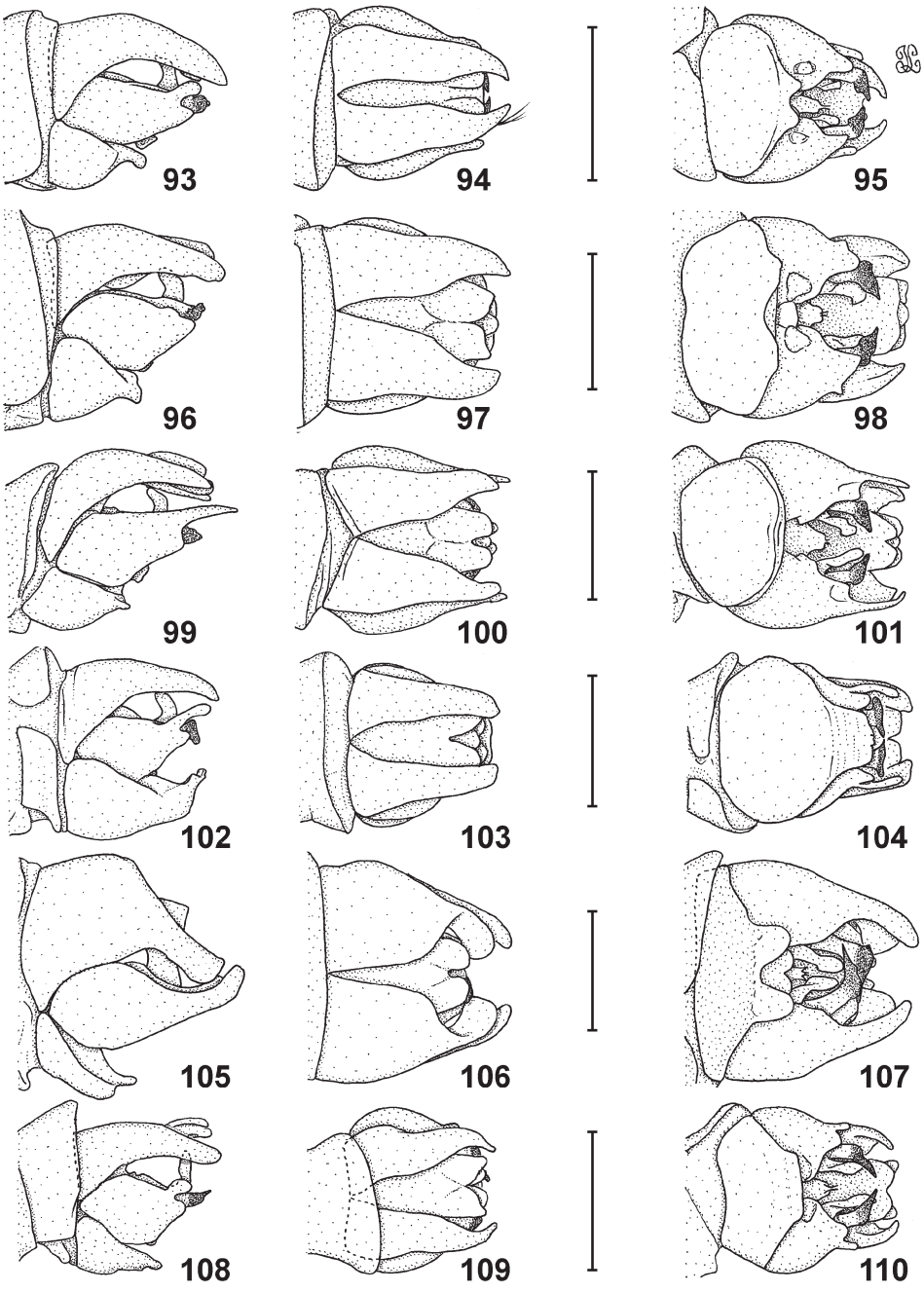

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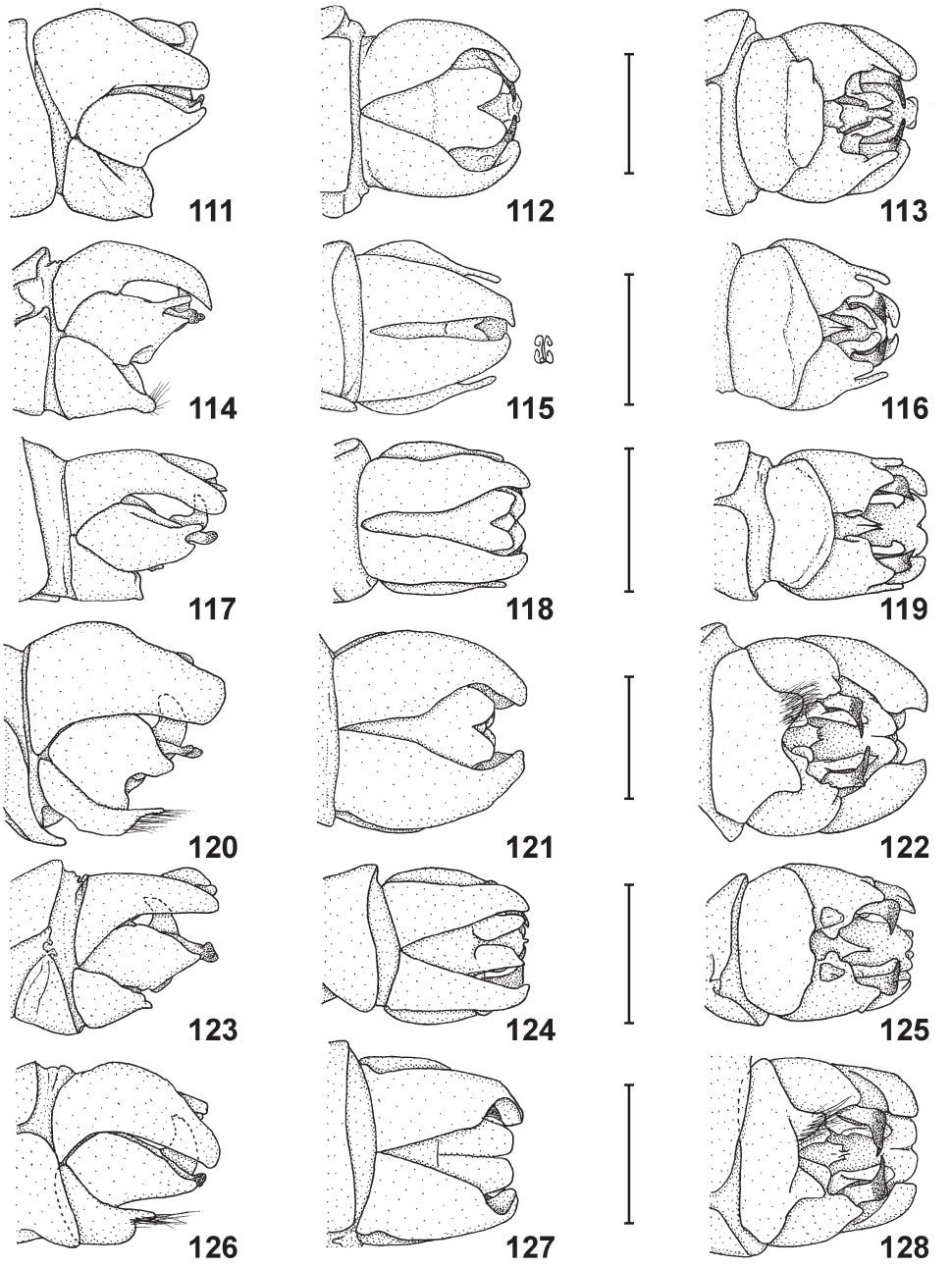

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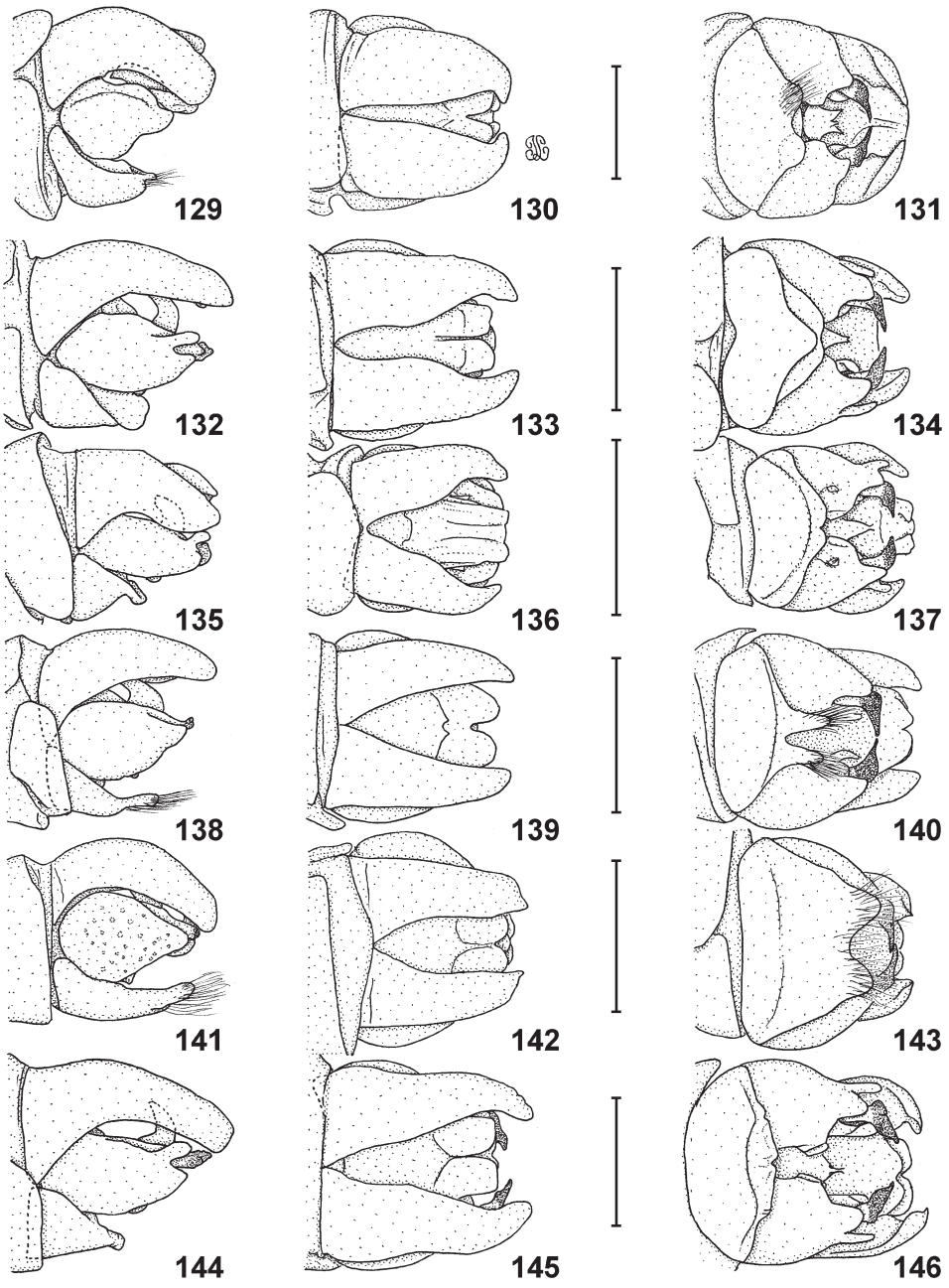

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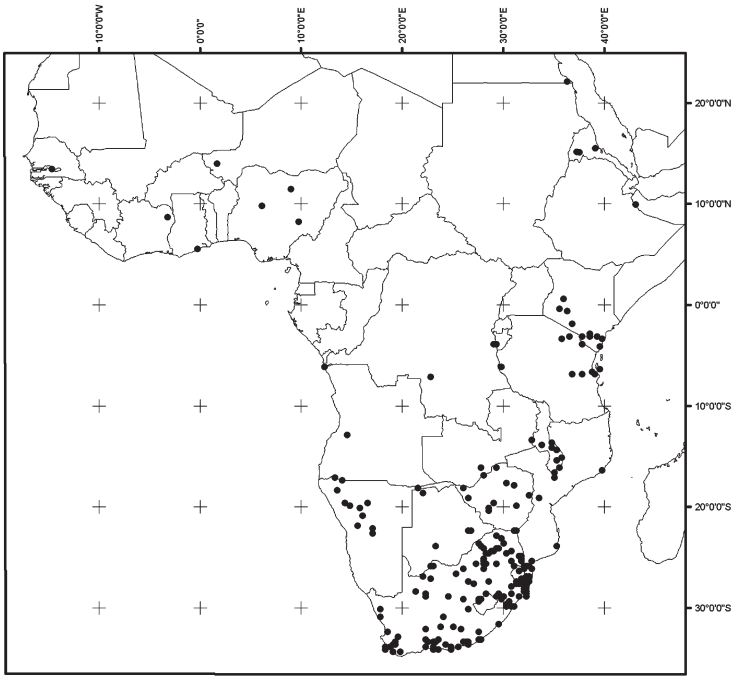

Fig. 147. Distribution of all Afrotropical *Ancylorhynchus* species.

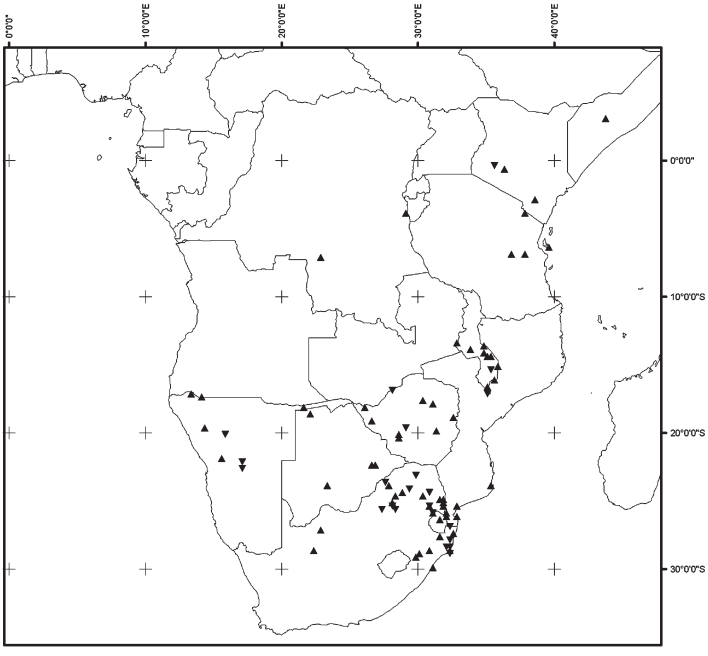

Fig. 148. Distribution of *Ancylorhynchus* species in Africa: ▲ = *A. cruciger* (Loew, 1858); ▼ = *A. magnificus* Bromley, 1936.

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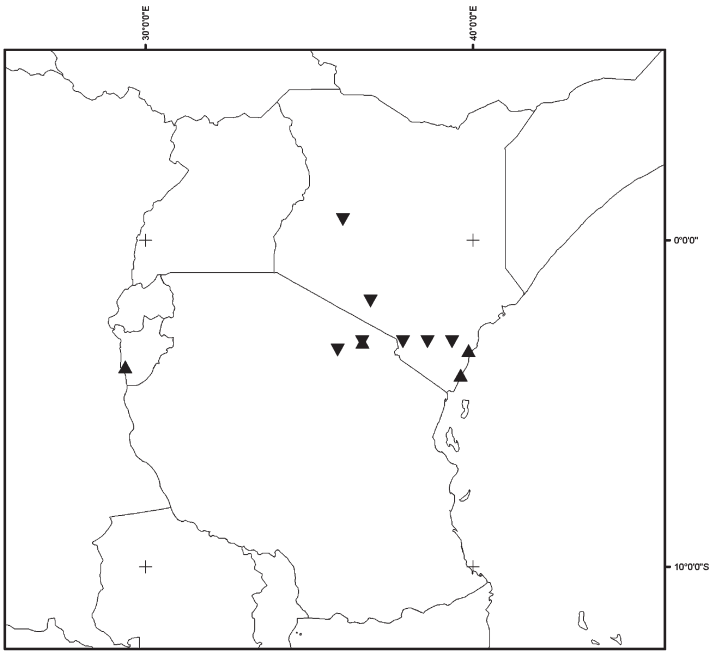

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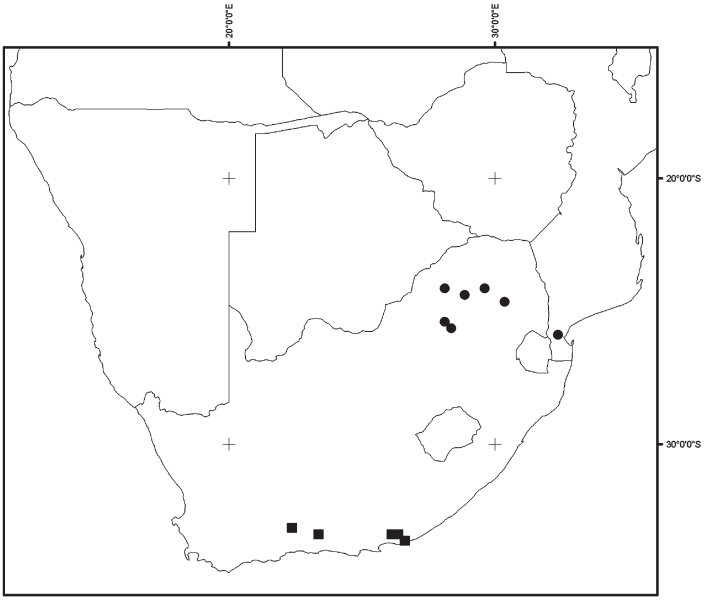

Fig. 150. Distribution of *Ancylorhynchus* species in Southern Africa: ● = *A. feijeni* sp. n.; ■ = *A. insignis* Bromley, 1936.

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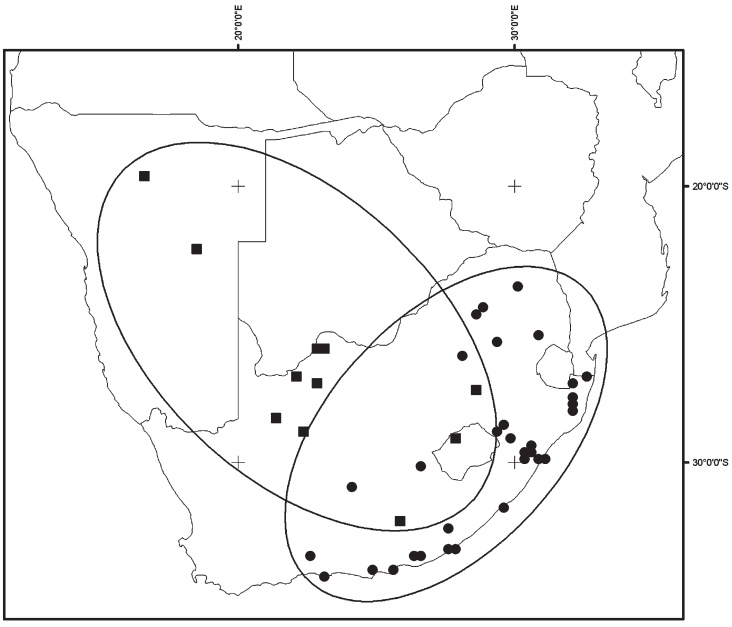

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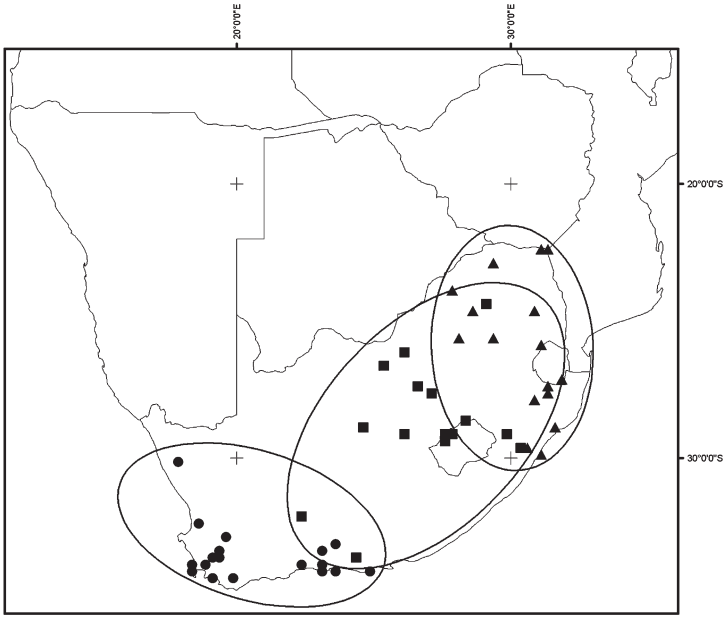

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