1* Dorsal surface of thorax and upper half of mesopleuron yellow, femora nearly entirely black, dorsal surface of abdomen predominantly black, ventral surface yellow ……***D. bevisi* Forsius**

Genus *Durbadnus* Pasteels, 1954

Durbadnus taegeri Koch & Liston, 2012

Genus *Trisodontophyes* Enslin, 1911

Trisodontophyes diversa Koch, 2001

Subfamily Heterarthrinae

Key to genera

1 Fore wing with crossvein Rs present, sometimes partly obliterated, thus here are four cells (Fig. 41C); hind wing with cells Rs and M present (Fig. 41C), both absent, or either Rs or M present; tarsal claw with enlarged basal lobe (Fig. 164A) ……***Caliroa* Costa**

1* Fore wing with crossvein Rs absent, cells 1R1 and 1Rs are fused, thus here only three cells (Fig. 41D); hind wing with cells Rs and M absent (Fig. 41D); tarsal claw simple (Fig. 166A) ……***Fenusa* Leach**

Genus *Caliroa* Costa, 1859

Key to species

1 Fore wing with anal veins 2A+3A completely outlined, anal crossvein (a) present (Fig.v 41C); mid and hind legs blackish. Introduced species in southern Africa ……***C. cerasi* (Linnaeus)**

1* Fore wing with anal veins 2A+3A reduced to a furcated stub, with upper branch curved up and meeting or nearly meeting first anal vein 1A to form a small basal anal cell (similar to Fig. 41E); legs almost entirely yellow. Native to southern Africa, known from Limpopo and Mpumalanga Provinces ……***C. blanki* Koch & Smith**

Genus *Fenusa* Leach, 1817

Fenusa dohrnii (Tischbein, 1846)

Subfamily Nematinae

Genus *Nematus* Panzer, 1801

Nematus oligospilus Förster, 1854

Subfamily Selandriinae

Genus *Dulophanes* Konow, 1907

Dulophanes obscurus Forsius, 1931

9.4 Presentation of the genera and species

The genera of the families and the corresponding species are arranged in alphabetical order (Taeger *et al*. 2010).

Family Argidae

(http://www.waspweb.org/Tenthredinoidea/Argidae/index.htm)

Genus *Arge* Schrank, 1802

Arge Schrank, 1802: 236. Type species: *Tenthredo enodis* Linnaeus, 1767 [= *Arge enodis* (Linnaeus, 1767)], designated by Rohwer, 1911.(http://www.waspweb.org/Tenthredinoidea/Argidae/Arginae/Arge/index.htm)

Synonyms only included if relevant to Afrotropical fauna. The full synonymy is listed by Taeger *et al.* (2010).

Hylotoma Latreille, 1803: 302. Type species: *Tenthredo ochropus* Gmelin, 1790 [= *Arge ochropus* (Gmelin, 1790)], by subsequent designation of Blank *et al*. (2009).

Didocha Konow, 1907b: 306. Type species: *Didocha braunsi* Konow, 1907 [= *Arge hansi* Forsius, 1930], by monotypy.

Alloscenia Enderlein; 1919: 115. Type species: *Alloscenia maculitarsis* Enderlein, 1919 [= *Arge massajae* Gribodo, 1879], by original designation.

Description

Antennae 3-segmented, scape and pedicel short, flagellum very long and unsegmented (Fig. 44D). Interantennal area with a pair of more or less sharply ridged interantennal carinae (Fig. 44C); clypeus not separated by an epistomal suture from the supraclypeal area (Fig. 44A). Hind tibia with preapical spine (Fig. 40C); tarsal claws simple (Fig. 44E). Fore wing with radial crossvein (2r) absent and crossvein 2r-m present, with basal anal cell (1A) closed and anal cell (2A) long petiolate (1A) (Fig. 41M); radial cell of hind wing (R1) closed, with anal cell (A) and two middle cells (Rs and M) present (Fig. 41M); tergum 1 with a more or less narrow and deep median split (Fig. 44F).

The colouration of the species is all black or black with yellowish/orange markings or yellowish with black markings, black parts may be with more or less blue metallic lustre.

Ranging from 5.0 to 12.0 mm in length.

Remarks

The species of the genus *Arge* are distributed in all biogeographical regions except Australia and the Antarctic Region; in the Neotropics only south to Colombia. According to Taeger *et al*. (2010) 113 valid *Arge* species are documented for the Afrotropical Region, and thus it is the most species-rich sawfly genus of this region.

This list is based especially on the important revisions by Pasteels (1953a, 1963). In subsequent years, an additional 18 species were described, and four species are synonyms (Koch & Goergen 2010, Koch 2011, 2012a, 2013, Koch & Eardley 2011, Koch & Liston 2012a, b), thus currently in total 127 species are known.

Arge urgently needs a revision for all species including clear definitions for the species groups postulated by Pasteels (1953a, 1963). Only the *Arge capensis*

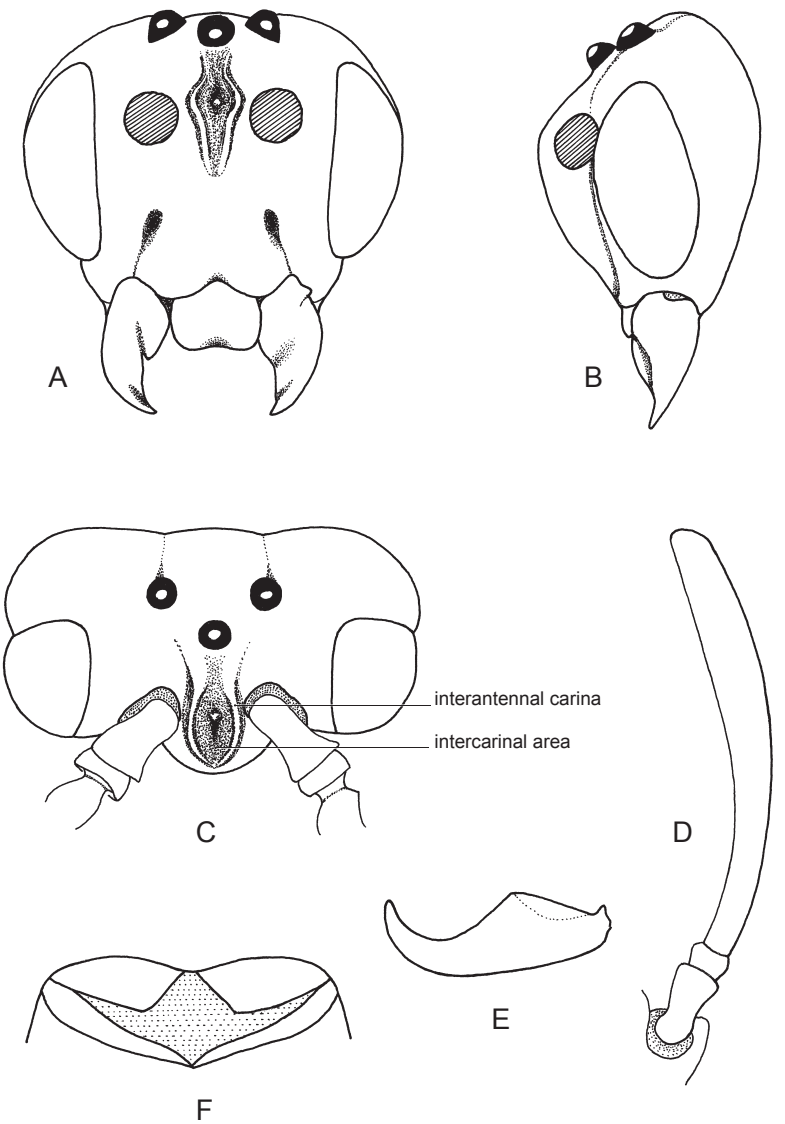

Fig. 44. A-F. *Arge* sp. **A**. Head (frontal aspect). **B**. Head (lateral aspect). **C**. Head (dorsal aspect). **D**. Antenna. **E**. Tarsal claw. **F**. Tergum 1**.**

species group (Koch & Liston 2012a) and the *A. mirabilipes* species group (Koch & Eardley 2011, Koch 2012a) have been defined and revised.

Host plants

Very little is known about the host plants of the species occurring in the study region. *Arge taeniata* is known as Pelargonium sawfly and its larvae feed on *Pelargonium* L'Héritier de Brutelle ex Aiton (Geraniaceae) (Prinsloo 1985). The larvae of *A. capensis* and *A. cochraneae* feed on *Geranium* sp. (Geraniaceae) (Pasteels 1953), and *A. dirce* is associated with *Diospyros lycioides* Desfontaines (bluebush, red star-apple) (Ebenaceae).

Arge angulifera Pasteels, 1953

Arge angulifera Pasteels, 1953a: 72, 76. ♀. Type locality: Viljoens Pass (Western Cape Province, South Africa) (BMNH).

Arge nigrofulva Pasteels, 1953a: 72, 79. ♂. Type locality: Pinelands, C. P. [Cape Province] (Western Cape Province, South Africa) (DEUS).

Female

Head and antenna black; apical half of mandible light brown becoming dark reddish to blackish apically. Thorax yellow with following black: one spot on ventral surface of propleuron, mesoscutum except for narrow lateral stripe of lateral lobe, mesoscutellum, metascutellum ventral half of mesopleuron, mesosternum, katepimeron except for its posterior margin, metapleuron with two spots on anterior and posterior margin. Legs black. Wings uniformly flavescent-hyaline throughout; fore wing with small smoky substigmal spot; intercostal area yellow; costa, subcosta, yellow with dark brown at extreme apex adjacent to dark brown stigma, rest of venation yellow to light brown in apical half. Abdomen yellow, tergum1 with two small blackish medial spots, tergum 2 with very small medial spot on anterior margin, terga 5-8 with very small black medial spots, sawsheath with black apex.

Head very slightly enlarged behind eyes. Antenna 1.4× as long as maximum head width; flagellum conspicuously enlarged towards apex, quadrangular in cross section, interior surface with moderately compressed longitudinal carina, weaker apically, other longitudinal carinae weakly compressed. Eyes converging below. Anterior margin of clypeus circularly emarginate medially, supraclypeal area rounded to start of interantennal carinae, interantennal carinae sharply ridged between antennae, very slightly converging downwards, extending about one third way to clypeus.

Vertex nearly impunctate, shiny; gena and frons sparsely micropunctate, shiny, supraclypeal area moderately densely punctate, shiny, clypeus shallowly rugose sculptured, shiny; pubescence brownish. Mesoscutum very shallowly punctate,

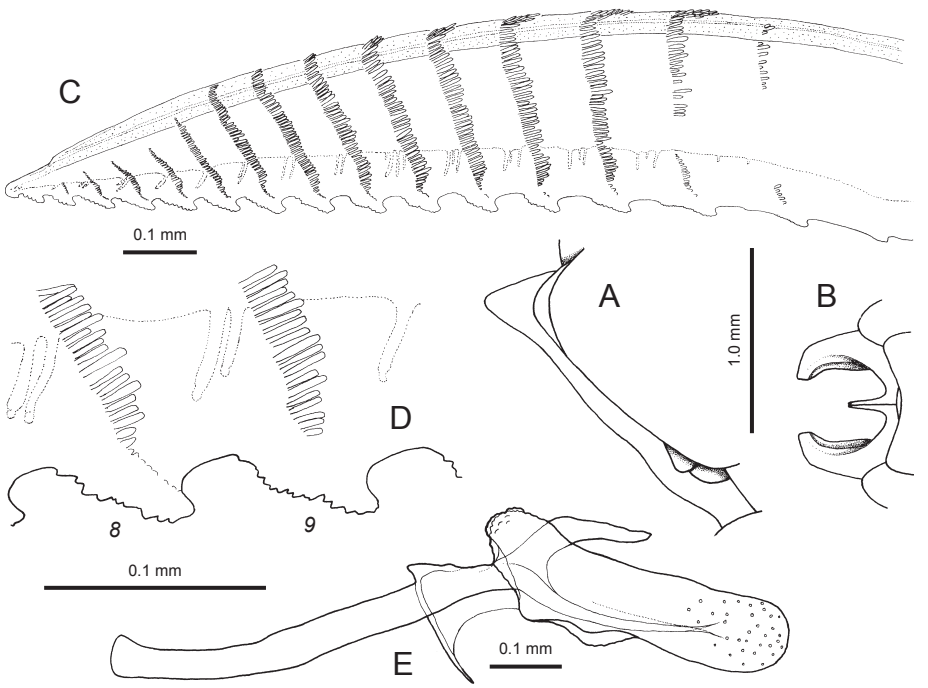

Fig. 45. A-E. *Arge angulifera*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 8-9. **E**. Penis valve (left, lateral aspect).

shiny; pubescence similar to that on head. Abdomen irregularly microsculptured, shiny. Sawsheath: Figs 45A, B. Lancet with about 16 serrulae (Figs 45C, D).

Length: 8.3 mm.

Male (Figs 46A, B)

Head and antenna black; apical half of mandible reddish to dark reddish apically. Thorax black with pronotum and tegula yellow. Legs black; tibiae and tarsi brown to dark brown. Abdomen yellow; tergum1 nearly entirely black, terga 2-8 with black medial markings of various widths, the whole appearing like a median stripe, sternum1 blackish medially.

Head very slightly narrowed behind eyes. Antenna 1.8× as long as maximum head width; flagellum not enlarged towards apex, triangular in cross section, interior surface with conspicuously compressed longitudinal carina, the other longitudinal carinae weaker. Head moderately densely punctate, shiny; supraclypeal area somewhat more densely punctate, shiny; pubescence yellowish. Mesoscutum sparsely micropunctate, shiny. Other features as for female. Genitalia: Fig. 45F.

Length: 7.3-8.3 mm.

Etymology

From Latin; *angulus* (corner), *-fera* (bearing), but it is not clear to which part of the body this refers.

Distribution

South Africa (Western Cape Province) (Fig. 173).

Host plant

Unknown.

Ecology and habitat

The habitats are located in the Fynbos Biome, which is situated in the winter rainfall zone. The flight season is poorly known, some records are documented in November and December.

Remarks

In males the medial stripe of the abdomen varies in its width from a nearly entirely black dorsal surface to a conspicuously narrowed stripe, especially in the middle, and the sternum 1 may be entirely yellow.

The general colouration of *Arge angulifera* closely resembles that of *A. langebergensis* and *A. montana*, but the latter have an infuscate intercostal area. Additionally, there are differences in the genitalia, especially in females. The serrulae of the lancet of *A. langebergensis* are rounded apically (Figs 77C, D) and the serrulae of *A. montana* are more flattened (Figs 77C, D) than those of *A. angulifera*.

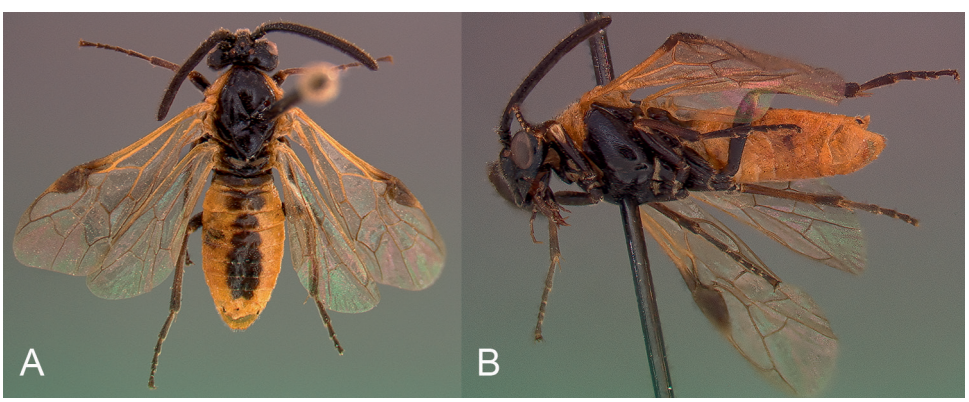

Fig. 46. A-B. *Arge angulifera*, habitus, male. **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

Arge annulipes (Klug, 1834)

Hylotoma annulipes Klug, 1834: 234. ♀. Type locality: Uitenh.[Uitenhage], Pr. [Promontorium] b. [Bonae] sp. [Spei] [Cape of Good Hope] (Western Cape Province, South Africa) (MFN).

Hylotoma pretoriensis Buysson, 1898: 351. ♀. Type locality: Pretoria, South Africa (MNHN).

Female (Figs 47A, B)

Head black; apical half of mandible light brown becoming dark reddish apically, scape and pedicel black, flagellum brown with dirty yellow dorsal surface. Thorax black; metepimeron yellow. Legs yellow; fore coxa entirely black, mid coxa black with narrow apical margin, hind coxa black with apical half and ventral surface yellow, trochanters blackish, mid and hind tibia black apically, tarsomeres1-3 of fore-, mid- and hind legs black ringed apically, tarsomeres 4/5 entirely black. Wings uniformly flavescent-hyaline throughout; fore wing with small brown substigmal spot; intercostal area of fore wing blackish infuscate, stigma and costa black, subcosta black with dirty yellow basal half, venation in basal half yellow, in apical half brown. Abdomen yellow; sawsheath with black apex.

Head very slightly enlarged behind eyes. Antenna 1.5× as long as maximum head width; flagellum slightly enlarged towards apex, and slightly quadrangular in cross section, dorsal surface with conspicuously compressed longitudinal carina, the other longitudinal carinae weaker. Eyes scarcely converging below. Anterior margin of clypeus circularly emarginate medially, supraclypeal area very flatly rounded up to start of interantennal carinae, interantennal carinae ridged between antennae, converging downwards, extending about one third distance to clypeus.

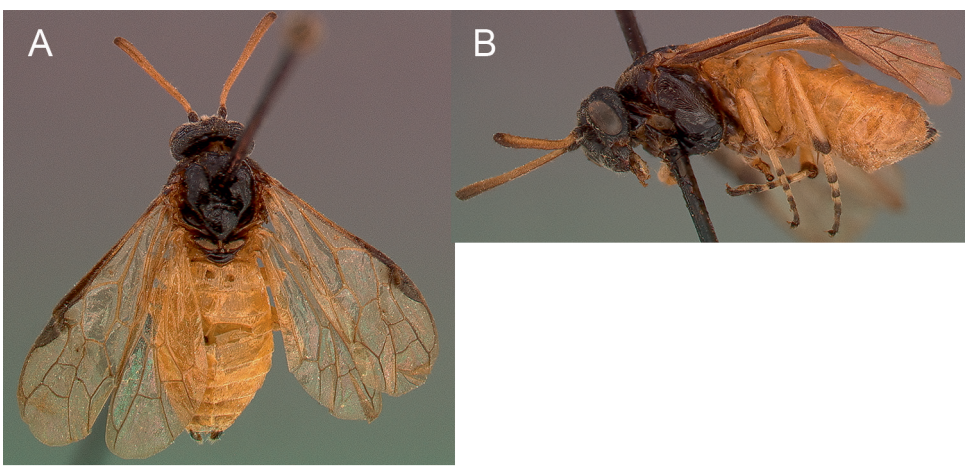

Fig. 47. A-B. *Arge annulipes*, habitus, female. **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

Vertex and gena scattered micropunctate, shiny; frons moderately densely punctate, shiny; clypeus and supraclypeal area densely, irregularly sculptured, shiny; pubescence yellowish. Mesoscutum moderately, densely punctate, shiny; pubescence similar to that on head. Abdomen with basal terga obscurely microsculptured, shiny. Sawsheath: Figs 48A, B. Lancet with about 16 serrulae (Figs 48C, D).

Length: 8.7-9.2 mm.

Male

Head and antenna black; apical half of mandible light brown becoming dark reddish to black towards apex. Thorax black; katepimeron and metapleuron yellow. Legs similar to female except for mid tibia with black basal half and entirely yellow hind tibia.

Head slightly narrowed behind eyes. Antenna 1.9× as long as maximum head width; third antennomere not enlarged towards apex, triangular in cross section, ventral carina more sharply compressed than in female. Supraclypeal area rugosely sculptured, dull; clypeus irregularly transversely sculptured, subshiny. Mesoscutum rather densely micropunctate. Other features as for female. Genitalia: Fig. 48E.

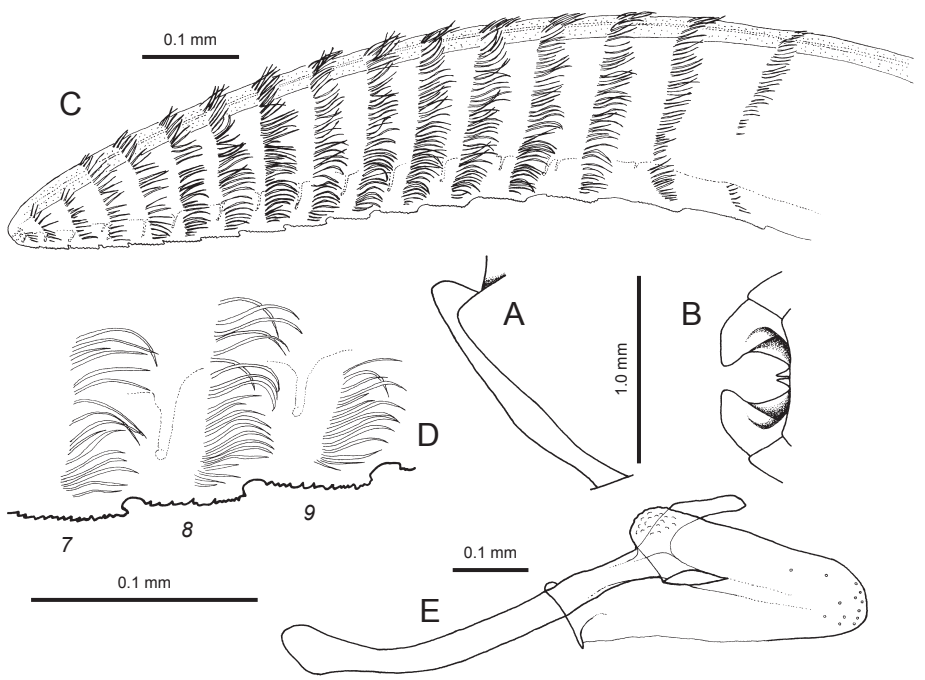

Fig. 48. A-E. *Arge annulipes*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 7-9. **E**. Penis valve (left, lateral aspect).

Length: 6.7-7.6 mm.

Etymology

Derived from Latin; *annulus* (ring) and *pes* (foot), referring to the black-ringed tarsomeres.

Distribution

South Africa (Province: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, Western Cape) (Fig. 173).

Host plant

Not known, but one female has been found on *Ricinus communis* L. (Euphorbiaceae), Morgan Bay (Eastern Cape Province); and one male on flowering *Foeniculum vulgare* Miller (Apiaceae), Belmont Valley, Grahamstown (Eastern Cape Province).

Ecology and habitat

In the Wolkberg area (Limpopo Province) specimens were observed on the dense riverine vegetation. In the study region only three records from the Cape of Good Hope (Fig. 49) and from Mossel Bay (Western Cape Province) are known.

Fig. 49. The habitat of *Arge annulipes* in the Olifantsbos area comprising **-** West Coast Strandveld or "Cape Flats Dune Strandveld" (Mucina & Rutherford 2006) **-** on the Cape Peninsula, where shrubs of *Sideroxylon inerme* (white milkwood) (Sapotaceae) form dense thickets (Western Cape Province).(Photo by F. Koch)

The localities mentioned belong to the Coastal Fynbos vegetation type. In the area of Grahamstown (Eastern Cape Province) the flight season is from January to March.

Remarks

Variability is present, especially in the colouration of the mid- and hind coxae from more or less black to entirely yellow (hind coxa). The same applies to the katepimeron and the metapleuron. In pale forms of female the katepimeron and the metapleuron are entirely yellow, and the pronotum is yellow spotted laterally. In males, sometimes the mid and hind coxa is entirely black. The colouration of the katepimeron varies from entirely yellow to black and sometimes the metepimeron has only a yellow spot. The dark form differs in having small blackish medial spots on terga 6-8.

The differences between *A. annulipes* and the similarly coloured *A. spei* are discussed under the latter species and given in the key to species.

Arge bensoni Pasteels, 1953

Arge bensoni Pasteels, 1953a: 71, 84. ♀. Type locality: Lupane, South Rhodesia [Zimbabwe] (BMNH).

Female (Figs 50A, B)

Head black with slight bluish metallic lustre; labrum dark brown, apical half of mandible light brown becoming reddish apically; antenna blackish. Thorax black with following yellow: pronotum, postspiracular sclerite, a very narrow lateral margin of median and lateral lobe of mesoscutum, tegula, anepimeron, partly katepimeron, metepimeron, partly metepisternum. Legs black; extreme apex of fore femur and fore tibia yellowish. Wings uniformly flavescent-hyaline throughout, with obscure substigmal spot on fore wing; stigma dark brown, costa and subcosta

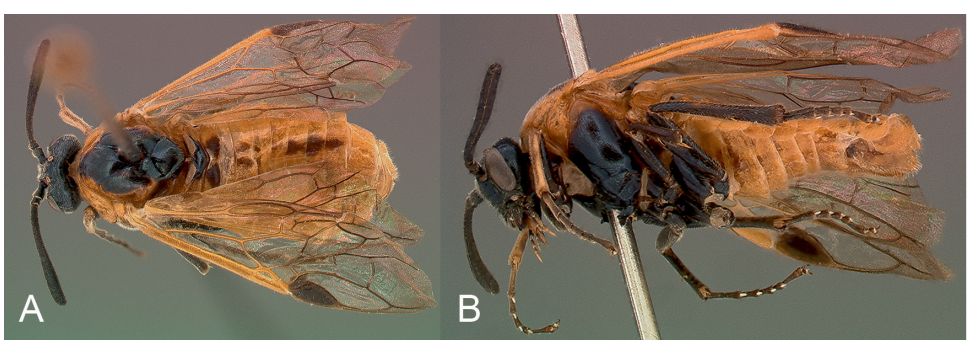

Fig. 50. A-B. *Arge bensoni*, habitus, female. **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

entirely yellow, venation in basal half yellow, in apical half brown. Abdomen yellow with following black; tergum 1 predominantly, tergum 2 with large narrowly divided medial spot, small medial spot of tergum 3, terga 4-7 with medial spots becoming larger towards apex.

Head very slightly enlarged behind eyes. Antenna 1.5× as long as maximum head width; flagellum conspicuously enlarged towards apex, and slightly quadrangular in cross section, the compressed longitudinal carina of inner surface not very strongly developed, the other longitudinal carinae weaker. Eyes slightly converging below. Anterior margin of clypeus shallowly circularly emarginate medially, supraclypeal area rising gently up to start of interantennal carinae, interantennal carinae obtusely ridged between antennae, conspicuously converging downwards, very short, extending approximately to the ventral margin of toruli. Hind and mid tibia conspicuously enlarged apically (Fig. 51A).

Vertex and gena densely punctate, shiny; frons and supraclypeal area very densely, nearly rugosely punctate, dull; clypeus irregularly transversely sculptured, subshiny; pubescence whitish. Mesoscutum moderately, densely micropunctate,

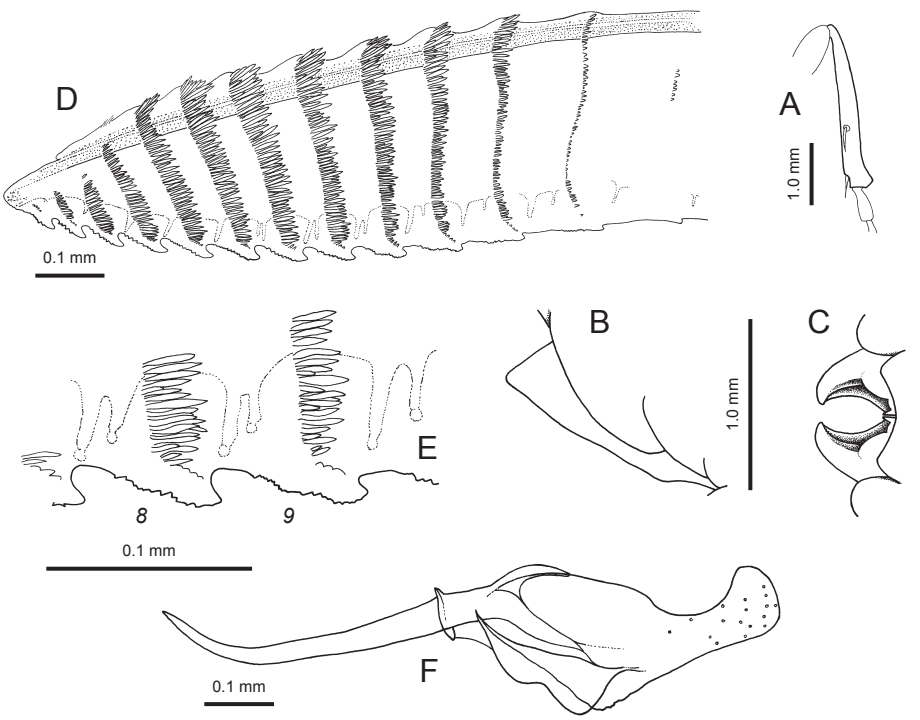

Fig. 51. A-F. *Arge bensoni*: **A**. Hind tibia. **B**. Sawsheath (lateral aspect). **C**. Sawsheath (dorsal aspect). **D**. Lancet. **E**. Serrulae 8-9. **F**. Penis valve (left, lateral aspect).

shiny; pubescence similar to that on head. Abdomen with tergum1 irregularly transversely microsculptured, shiny, following terga smooth and shiny. Sawsheath: Figs 51B, C. Lancet with about 13 serrulae (Figs 51D, E).

Length: 8.0-8.6 mm.

Male

Head and antenna black; apical half of mandible light brown becoming reddish towards apex. Thorax black with following yellow; pronotum except for its medial part, postspiracular sclerite, tegula. Legs black; apex of fore femur fore tibia and fore tarsus yellow, mid tibia and tarsus brown. Abdomen yellow; tergum1 predominantly black, tergum 2-7 with smaller blackish medial spots.

Head slightly narrowed behind eyes. Antenna 2.2× as long as maximum head width; flagellum not enlarged towards apex, triangular in cross section, ventral carina more sharply compressed than in female. Supraclypeal area rugosely sculptured, dull; clypeus irregularly transversely sculptured, subshiny. Thorax rather densely micropunctate, shiny. Other features as for female. Genitalia: Fig. 51F.

Length: 6.7-8.0 mm.

Etymology

This species was named after the well-known Symphyta specialist Robert Bernard Benson (1904-1967), curator of Hymenoptera at The Natural History Museum [formerly British Museum (Natural History)], London, United Kingdom.

Distribution

Botswana, Namibia (Region: Caprivi, Kunene, Okavango, Otjozondjupa) (Fig. 170), Zimbabwe.

Host plant

Unknown.

Ecology and habitat

Based on environmental conditions at the collecting localities Shakawe (Botswana) and Caprivi Strip, Nhoma River, Northern Kalahari (Namibia) *A. bensoni* seems to prefer more moist and vegetation-rich habitats. The localities are located in the Thornbush Savanna Biome and Woodland Savanna Biome. The flight season is from December to March.

Remarks

The apically enlarged mid and hind tibia clearly distinguishes *A. bensoni* from all other species (Pasteels 1953a).

This species is especially variable in its colouration. Occasionally in females the dorsal margin of the mesopleura is marked with yellow. The extent of yellow colouration on the mesepimeron and metapleuron is variable. The blackish dorsal stripe varies in width. Sometimes in males the black medial spots on tergum 3/4 are nearly entirely absent.

Based on the shape of the hind tibia and the ratio of the length of hind basitarsus to hind tibia (about 1.0 : 4.5) *A. bensoni* could belong to the *A. mirabilipes* species group (Koch & Eardley 2011), but members of the *A. mirabilipes* group are distinguished by the shape of the sawsheath and serrulae.

Arge bisignata Konow, 1907

Arge bisignata Konow, 1907b: 308. ♀. Type locality: Natal [KwaZulu-Natal Province] (South Africa) (SDEI).

Arge tibiale [sic!] Pasteels, 1963: 558. ♀. Type locality: Middlefontein, near Nylstroom [Modimolle] (Limpopo Province), South Africa (BMNH).

Arge tibialis: Taeger *et al*. (2010: 141), correction of spelling.

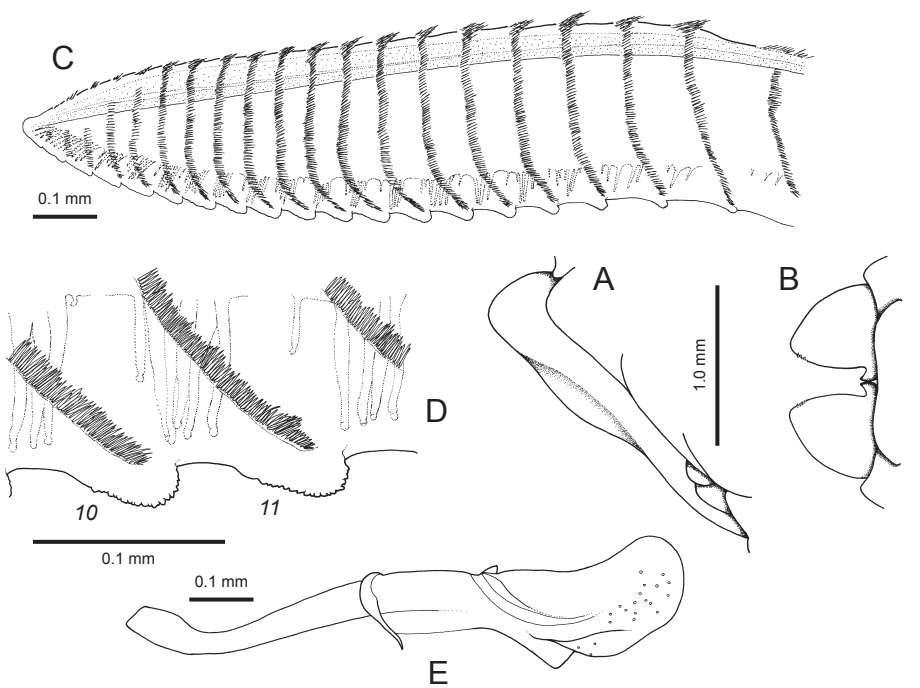

Fig. 52. A-E. *Arge bisignata*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 10-11. **E**. Penis valve (left, lateral aspect).

Female

Head black; mandible broadly yellow-ringed medially; antenna black, dorsal surface of scape brown. Thorax black; metanotum yellow. Legs yellow except for: fore coxa and trochanter as well as mid coxa and trochanter blackish, tarsi black, only fore basitarsomere yellowish with blackish apex. Wings sharply bicoloured, basal half slightly flavescent-hyaline and apical half fuscous; substigmal spot of fore wing indistinctly; stigma blackish with yellowish centre, costa, subcosta and basal half of venation yellow, rest of venation blackish. Abdomen yellow.

Head very slightly enlarged behind eyes. Antenna 1.3× as long as maximum head width; flagellum enlarged towards apex, and triangular in cross section, interior surface with compressed longitudinal carina, other longitudinal carinae more weakly compressed. Eyes scarcely converging below. Anterior margin of clypeus shallowly emarginate, supraclypeal area flatly protruding up to start of interantennal carinae, interantennal carinae very obtusely ridged between antennae, converging downwards, very short, extending approximately to the ventral margin of toruli.

Vertex and gena scattered micropunctate, shiny; frons, supraclypeal area and clypeus densely punctate, subshiny; pubescence whitish. Micropunctures and pubescence of mesoscutum similar to that on vertex, shiny. Abdomen smooth and shiny. Sawsheath: Figs 52A, B. Lancet with about 19 serrulae (Figs 52C, D).

Length: 9.7-11.7 mm.

Male (Figs 53A, B)

Colouration similar to that of female. Scape and pedicel brown; fore and mid coxa only blackish at base, basitarsomeres entirely yellow. Tergum 8 with two blackish medial spots.

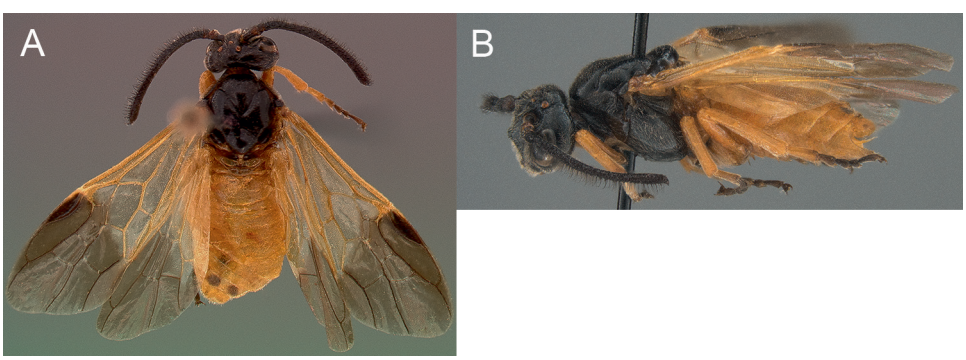

Fig. 53. A-B. *Arge bisignata*, habitus, male. **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

Head scarcely enlarged behind eyes. Antenna 1.8× as long as maximum head width; flagellum not enlarged towards apex, triangular in cross section, ventral surface with conspicuously compressed longitudinal carina, the other longitudinal carinae weaker. Eyes scarcely converging below. Other features as for female. Genitalia: Fig. 53E.

Length: 7.2-8.8 mm.

Etymology

Derived from Latin; *bi* (two) and *signatus* (marked), with reference to two black medial spots on terga 7,8.

Distribution

Mozambique, Namibia (Caprivi Region) (Fig. 170), South Africa (Province: Limpopo, Mpumalanga, KwaZulu-Natal), Zambia, Zimbabwe; detailed distribution is presented by Koch & Eardley (2011).

Host plant

Unknown.

Ecology and habitat

Based on the sampling localities in the Caprivi Strip (Namibia), *A. bisignata* seems to prefer more moist and vegetation-rich habitats. All localities belong to the Woodland Savanna Biome. The flight season is from November to March.

Remarks

Variability of *A. bisignata* is apparent in the pattern of colouration. According to Konow (1907b) the presence of the above mentioned two black medial spots on terga 7,8 is confirmed only in the holotype. Mostly the abdomen is entirely yellow, or in some specimens only tergum 8 is marked with two medial spots.

In old material, the bicolouration of the wings is somewhat faded and thus lacks contrast.

Arge capensis (Klug), 1814

Hylotoma capensis Klug, 1814: 297. ♂. Type locality: Pr. b. sp. [Promontorium Bonae Spei] [Cape of Good Hope], Capland (Western Cape Province, South Africa) (MFN).

Female (Figs 54A, B)

Head black with very slight blue metallic lustre; apical half of mandible reddish to dark reddish apically; antenna black. Thorax orange with following black:

propleuron, a very narrow antero-lateral margin of pronotum, a small patch in apical half of median lobe of mesoscutum adjacent to lateral lobe and mesoscutellum, a small spot on centre of mesoscutellum, metascutellum, the posterior margin of katepimeron and metapleuron. Legs black. Wings slightly infuscate throughout; fore wing with a small smoky substigmal spot; intercostal area somewhat darker, stigma, costa, subcosta and venation black. Abdomen black with blue metallic lustre; terga 8-10 and sawsheath orange.

Head slightly enlarged behind eyes. Antenna 1.4× as long as maximum head width; flagellum slightly enlarged towards apex, and quadrangular in cross section, ventral surface with conspicuously compressed longitudinal carina, other longitudinal carinae more weakly compressed. Eyes converging below. Anterior margin of clypeus shallowly circularly emarginate, supraclypeal area flatly rising up to start of interantennal carinae, interantennal carinae moderately ridged between antennae, converging downwards, short, extending about one third way to clypeus.

Vertex and gena moderately densely micropunctate, shiny; frons, supraclypeal area and clypeus somewhat more densely punctate, shiny; pubescence brown. Mesoscutum nearly impunctate, shiny; pubescence yellowish. Abdomen irregularly transversely microsculptured, shiny. Sawsheath: Figs 55A, B. Lancet with about 15 serrulae (Figs 55C, D).

Length: 6.8-7.8 mm.

Male

Colouration similar to that of female. Third antennomere dark brown. Thorax black with following orange: pronotum except for its narrow antero-lateral margin, postspiracular sclerite, lateral lobe of mesoscutum except for its posterior downturned portion, tegula. Abdomen black with blue metallic lustre; tergum 8 and sterna 7-9 orange.

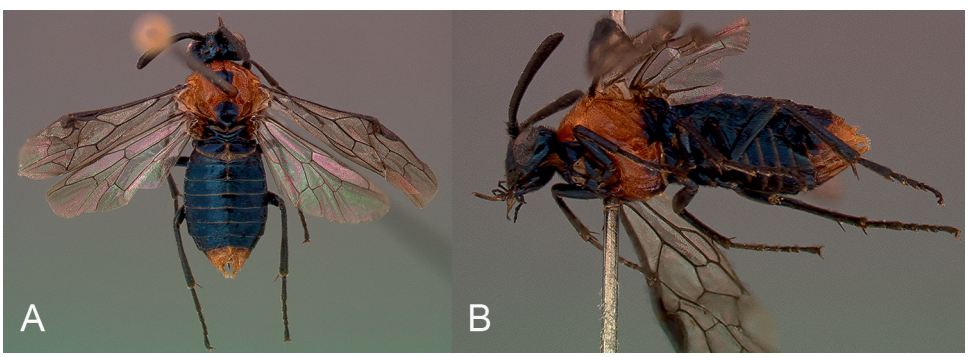

Fig. 54. A-B. *Arge capensis*, habitus, female. **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

Head scarcely enlarged behind eyes. Antenna 1.8× as long as maximum head width; flagellum not enlarged towards apex, triangular in cross section, ventral surface with conspicuously compressed longitudinal carina, the other longitudinal carinae weaker. Other features as for female. Genitalia: Fig. 55E.

Length: 7.0 mm.

Etymology

This species is named after its collection locality, the Cape of Good Hope.

Distribution

South Africa (Fig. 171) (Western Cape Province).

Host plant

According to Pasteels (1953) “ex larvae on foliage on cultivated *Geranium* (Geraniaceae) and causing extensive damage”; but see comments under *Arge cochraneae*. Some females were observed on *Euphorbia* plants (Euphorbiaceae) in Langebaan (Western Cape Province).

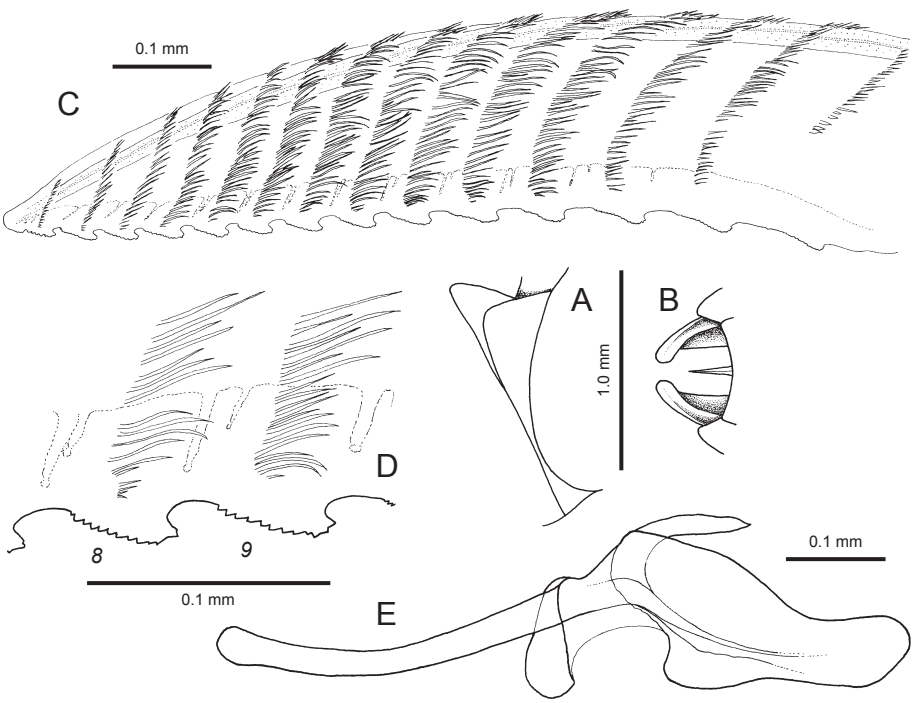

Fig. 55. A-E. *Arge capensis*: **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 8-9. **E**. Penis valve (left, lateral aspect).

Ecology and habitat

The habitats belong to the Succulent Karoo Biome and the Fynbos Biome (West Coast Strandveld vegetation type (Fig. 56) and Sand Plain Fynbos vegetation type) in the winter rainfall zone. The flight season appears to be from May to October.

Remarks

Variability of *A. capensis* is apparent in the pattern of colouration. Sometimes the black medial patch on the median lobe of the mesoscutum is extended to a broad longitudinal stripe. The same holds for the black spot situated in the centre of mesoscutellum, in which case the posterior margin of mesoscutellum is also black. Furthermore the mesosternum and the ventral part of mesopleuron as well as the complete katepimeron can be black. In one female the medial lobe of the mesoscutum is nearly entirely black, and the orange colouration of the mesopleuron is reduced to a large antero-dorsal patch.

The similarly coloured *A. namaensis*, only known from males, differs from *A. capensis* in the entirely black mesoscutum and in the shape of the penis valve (Figs 84C, D). The differential diagnosis to the similarly coloured *A. rufocyanea* is presented under that species.

Fig. 56. The habitat of *Arge capensis* and *A. namaensis* (West Coast Strandveld) in the Koeberg Nature Reserve with view to the Table Mountain (Western Cape Province). (Photo by S. van Noort)

Arge cochraneae Koch & Goergen, 2010

Arge cochraneae Koch & Goergen, 2010: 20. ♀. Type locality: Fort Beaufort, Cape Province (Western Cape Province, South Africa) (SAMC).

Female (Fig. 57A, B)

Head black; apical half of mandible dark reddish apically; scape and pedicel black, flagellum dark brown. Thorax orange with the following black: propleuron except for two orange spots on posterior margin, a medial longitudinal stripe on median lobe of mesoscutum, ventral half of posterior downturned portion of lateral lobe, mesoscutellum, mesopleuron, mesosternum, katepimeron, metapleuron. Legs black. Wings slightly infuscate throughout; fore wing with a small smoky substigmal spot; intercostal area somewhat more infuscate, stigma, costa, subcosta, and rest of venation dark brown. Abdomen black with conspicuous blue metallic lustre and with following orange: narrow posterior margin of tergum 1, lateral parts of terga 2-4, narrow posterior margins and lateral parts of sterna 2,3, sternum 4 light brown laterally, terga 9,10 yellow, sawsheath yellow with blackish medio-lateral spot.

Head parallel-sided behind eyes. Antenna 1.4× as long as head maximum width; flagellum very slightly enlarged towards apex, more or less triangular in cross section, interior surface with moderately compressed longitudinal carina, other longitudinal carinae weakly compressed. Eyes converging below. Anterior margin of clypeus circularly emarginate medially, supraclypeal area roundly protruding up to base of interantennal carinae, interantennal carinae moderately ridged between antennae, slightly converging downwards, short, extending about a quarter way to clypeus.

Head moderately densely micropunctate, shiny; supraclypeal area and clypeus somewhat rugose, moderately shiny; pubescence white. Mesoscutum nearly impunctate, shiny; pubescence similar to that on head. Abdomen shiny; terga 1-5 with transverse microsculpture, following terga irregularly microsculptured. Sawsheath: Figs 58A, B. Lancet with about 15 serrulae (Figs 58C, D).

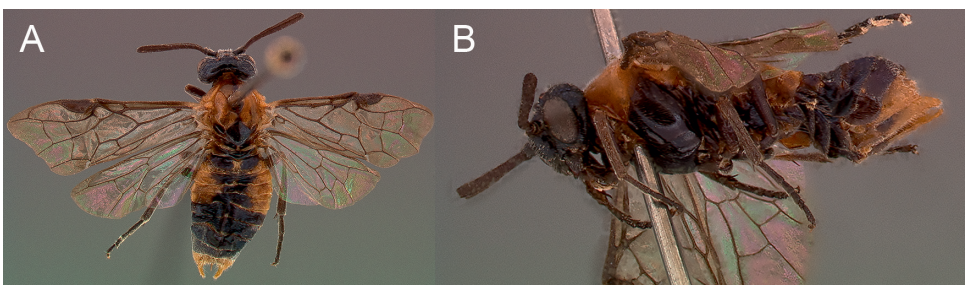

Fig. 57. A-B. *Arge cochraneae*, habitus, female (holotype). **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

Length: 7.0 -8.2 mm.

Male

Unknown.

Etymology

This species was named after Margie A. Cochrane, the former collection manager of the Department of Entomology, Iziko South African Museum, Cape Town, South Africa.

Distribution

South Africa (Western Cape Province) (Fig. 175).

Host plant

Pelargonium spp. In South African collections three females were found with the following indication: “Ex larvae on foliage of cultivated *Geranium*, and causing extensive damage” or “Ex larvae *Geranium* foliage”. The same note is given by Pasteels (1953a: 79) for the biology of *Arge capensis* (Klug, 1814). Probably, the mentioned *Geranium* refers to *Pelargonium graveolens* L’Héritier de Brutelle, which is cultivated in the Cape Region, and used for the distillation of the so-called rose oil.

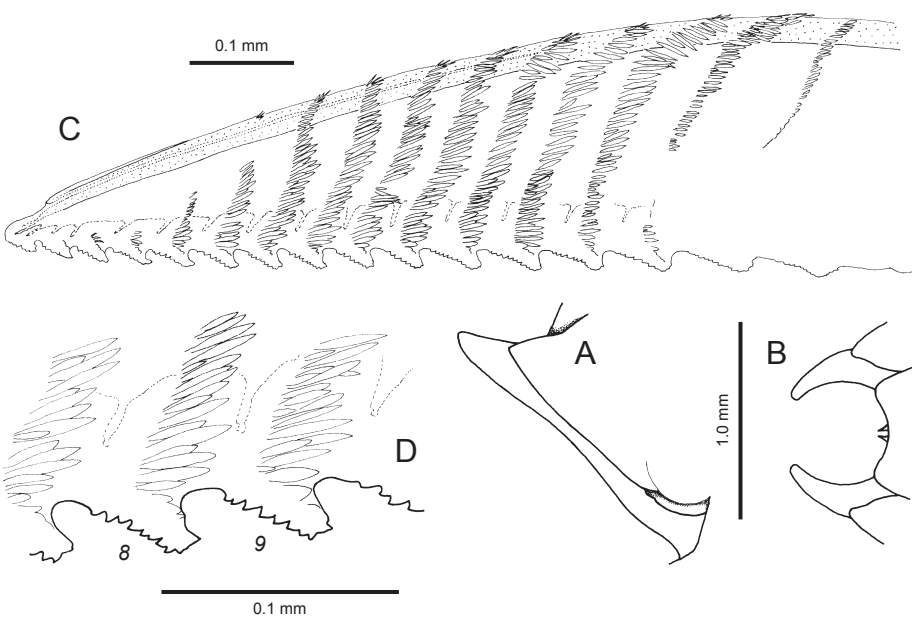

Fig. 58. A-D. *Arge cochraneae*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D** Serrulae 8-9.

Ecology and habitat

The habitat belongs to the Coastal Fynbos vegetation type of the winter rainfall zone. The flight season is not well known; only a few adults have been collected in December and January.

Remarks

Arge cochraneae belongs to the *A. capensis* species group (Koch & Liston 2012a).

Variability of *A. cochraneae* is apparent in the pattern of colouration. In one paratype the orange markings of the abdomen are missing. In the other paratypes the orange colour of the sterna is more or less reduced. The black medial longitudinal stripe on the median lobe of mesoscutum may be more extended, so that the median lobe appears almost entirely black.

Arge cochraneae differs from *A. whiteheadi* in the entirely black mesopleuron and the yellow terga 9,10 including sawsheath. One female was investigated by R.B. Benson in 1951 and labelled as "*A. capensis* (?)". Probably, this specimen was examined by J. Pasteels when he wrote his comments on host plants of *A. capensis* (Pasteels 1953a: 79).

Arge capensis is distinguished by the almost entirely orange mesoscutum, mesopleuron and mesosternum. In addition, the species is clearly distinct in the shape of lancets (Figs 55C, D, 58C, D).

Arge deckerti Koch, 2005

Arge deckerti Koch, 2005c: 194. ♀. Type locality: Otjiamongombe [Erichsfelde], Okahandja, Namibia (NNIC).

Female (cover photograph)

Head and antenna black; base of mandible yellow, apical half reddish becoming dark reddish to blackish towards apex. Thorax yellow; mesoscutum except for narrow lateral margin of median lobe and lateral lobe black, mesoscutellum, metascutellum, narrow ventral part of mesopleuron and mesosternum black. Legs yellow; apical tarsomere of fore leg and tarsus of middle leg blackish, apex of hind tibia and hind tarsus black. Wings slightly flavescent-hyaline with apical half very slightly infuscate; fore wing with a small smoky substigmal spot; intercostal area of fore wing flavescent-hyaline, stigma and venation in apical half blackish, costa and subcosta entirely yellow, venation in basal half more or less yellowish. Abdomen yellow; two medial spots on terga 1,2 and one medial spot on terga 3,5-7 blackish.

Head parallel behind eyes. Antenna 1.6× as long as maximum head width; flagellum slightly enlarged towards apex, and slightly quadrangular in cross section, ventral surface with conspicuously compressed longitudinal carina, the other longitudinal carinae weaker. Eyes very slightly converging below. Anterior margin of clypeus

shallowly, circularly emarginate medially, supraclypeal area rounded up to base of interantennal carinae, interantennal carinae ridged between antennae, converging downwards, extending about half way to clypeus.

Vertex and gena scattered micropunctate, shiny; frons and clypeus with scattered, shallow punctures, shiny; supraclypeal area densely punctate and subshiny; pubescence whitish. Mesoscutum very sparsely micropunctate, shiny; pubescence similar to that on head. Abdomen irregularly microsculptured, shiny. Sawsheath: Fig. 59A. Lancet with about 17 serrulae (Figs 59B, C).

Length: 6.0-7.5 mm.

Male (Fig. 60)

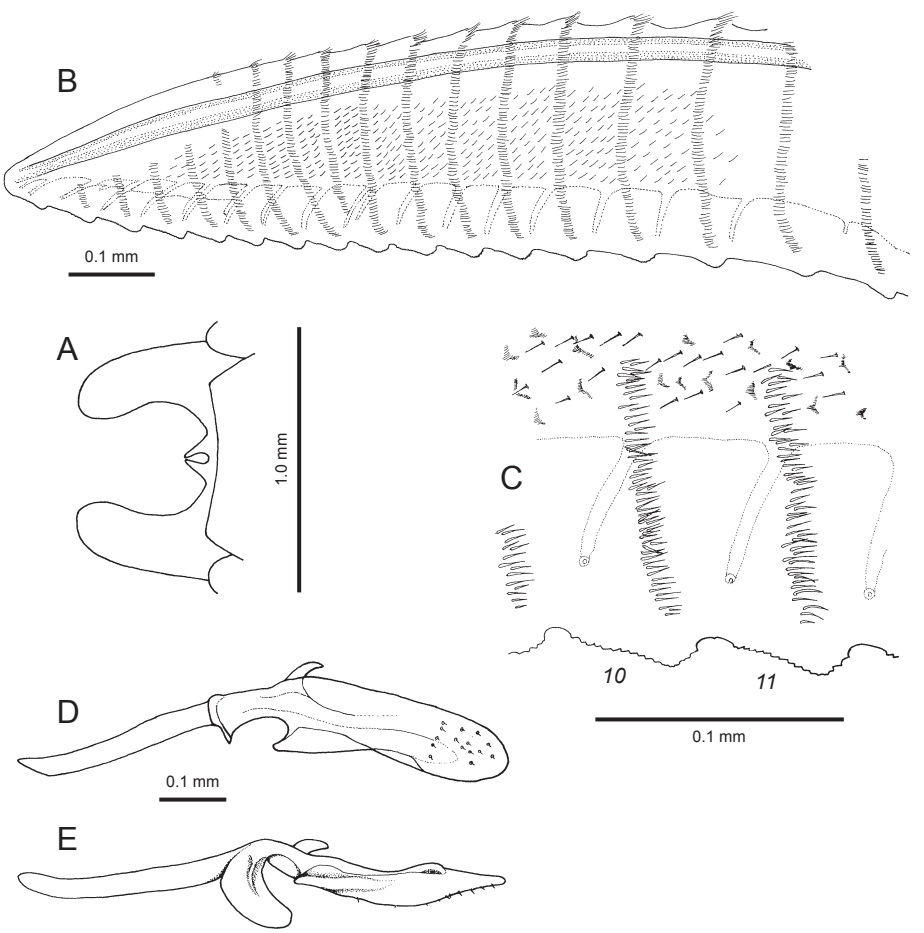

Fig. 59. A-E. *Arge deckerti*. **A**. Sawsheath (dorsal aspect). **B**. Lancet. **C**. Serrulae 10-11. **D**. Penis valve (left, lateral aspect). **E**. Penis valve (left, dorsal aspect).

Fig. 60. *Arge deckerti*, habitus, male. alive. (Photo by J. Deckert)

Head and antenna black; apical half of mandible yellow becoming dark reddish apically. Thorax black; pronotum yellow with black medial marking, tegula and lateral lobe of mesoscutum laterally narrowly dirty yellow. Legs yellow with coxae, trochanters and base of femora broadly black, apex of hind tibia and hind tarsus blackish. Abdomen yellow; terga 1,2,5-7 broadly and terga 3,4 narrowly black medially.

Fig. 61. The habitat of *Arge deckerti* on the Farm “Erichsfelde”, near Okahandja, Namibia (Thornbush Savanna Biome) with yellow flowering *Nidorella resedifolia* (Asteraceae) in the foreground and *Acacia mellifera* trees (Mimosoideae) in the background. (Photo by J. Deckert)

Head slightly narrowed behind eyes. Antenna 2.2× as long as maximum head width; flagellum not enlarged towards apex, ventral carina more sharply compressed than in female. Other features as for female. Genitalia: Figs 59D, E.

Length: 5.5-7.0 mm.

Etymology

This species was named after Dr. Jürgen Deckert, entomologist at the Museum für Naturkunde, Berlin, Germany.

Distribution

Botswana, Ethiopia, Kenya, Namibia (Region: Kunene, Otjozondjupa) (Fig. 172), South Africa (Province: KwaZulu-Natal, Limpopo, Mpumalanga), Tanzania, Zambia, Zimbabwe; detailed distribution is presented by Koch (2005c) .

Host plant

Unknown.

Ecology and habitat

In Otjiamongombe (Namibia), adults were found feeding on pollen of *Nidorella resedifolia* (Asteraceae) (Fig. 61) and *Chyphostemma congestum* (Vitaceae) (cover photo, Fig. 60). In Ndumu Game Reserve in the South African province KwaZulu-Natal males were observed feeding on pollen in the flowers of *Nidorella auriculata*. (Asteraceae). The Namibian habitats are located in the Thornbush Savanna Biome. The flight season in Namibia is from January to March.

Remarks

Arge deckerti is very similar to *A. stuhlmanni* but *A. deckerti* differs mostly by the entirely yellow costa of fore wing. The lancet of *A. deckerti* is uniformly covered with sensilla (Fig. 59B), which are absent in *A. stuhlmanni* (Fig. 59B), and the serrulae are flatter (Figs 59B, C). In lateral aspect, the penis valve of *A. stuhlmanni* is distinctly broader than in *A. deckerti* (Figs 59D, 94D).

The colour pattern is especially variable. In females, the black markings on the abdomen may be reduced to very small median spots on terga 1,6,7, and the lateral lobes of the mesoscutum may have two yellow medial stripes. In males, the black on tergum1 is either reduced to very small median spots or is more extended laterally, and the upper surface of the abdomen may be almost entirely black except for terga 8,9. Sometimes the black on the femora extends from the base almost to the apex, the hind tibia may be entirely yellow, and the hind tarsus only slightly blackish.

Arge deckerti and *A. stuhlmanni* often live in the same habitat and the adults are active at the same time of year.

Arge dirce (W.F. Kirby, 1882)

Hylotoma dirce W.F. Kirby, 1882: 74. ♀. Type locality: Lake Ngami (Botswana) (BMNH).

Female (Figs 62A, B)

Head and antenna black; apical half of mandible dark reddish apically. Thorax black with the following yellow: pronotum except for narrow anterior margin, postspiracular sclerite, tegula, narrow lateral margin of median and lateral lobe of mesoscutum, a small antero-dorsal spot on mesopleuron adjacent to postspiracular sclerite. Legs black, especially hind legs with very slight blue metallic lustre. Wings infuscate; fore wing with a small smoky substigmal spot; intercostal area conspicuously darker, costa light brown becoming blackish towards stigma; stigma, subcosta and rest of venation blackish. Dorsal surface of abdomen black with blue metallic lustre; terga 1-6 yellow laterally, ventral surface of abdomen yellow, sternum 7 blackish, sawsheath black with slight blue metallic lustre.

Head slightly enlarged behind eyes. Antenna 1.3× as long as maximum head width; flagellum conspicuously enlarged towards apex, quadrangular in cross section, interior surface with moderately compressed longitudinal carina, other longitudinal carinae weakly compressed. Eyes slightly converging below. Anterior margin of

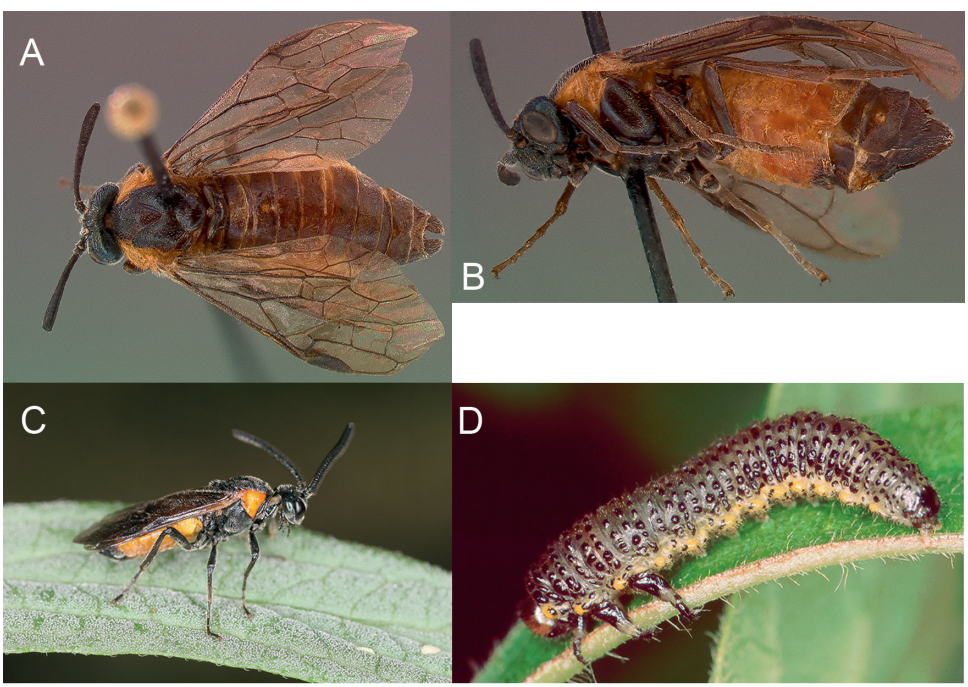

Fig. 62. A-D. *Arge dirce*, habitus. **A**. Female (dorsal aspect). **B**. Female (lateral aspect). **C**. Male, alive. **D**. Larva on *Diospyros lycioides* (Ebenaceae). (Photos C–D by J. Deckert, A–B by A.D. Liston)

clypeus circularly emarginate medially, supraclypeal area roundly protruding up to base of interantennal carinae, interantennal carinae obtusely ridged between antennae, converging downwards, short, extending about a quarter of distance to clypeus.

Vertex and gena moderately densely micropunctate, shiny; frons, supraclypeal area and clypeus densely punctate, moderately shiny; pubescence white. Mesoscutum moderately densely punctate, shiny; pubescence similar to that on head. Abdomen irregularly transversely microsculptured, shiny. Sawsheath: Figs 63A, B. Lancet with about 25 serrulae (Figs 63C, D).

Length: 8.5-10.2 mm.

Male (Fig. 62C)

Colouration similar to that of female. Wings slightly infuscate, substigmal spot of fore wing more weakly developed than in female; intercostal area scarcely darker,

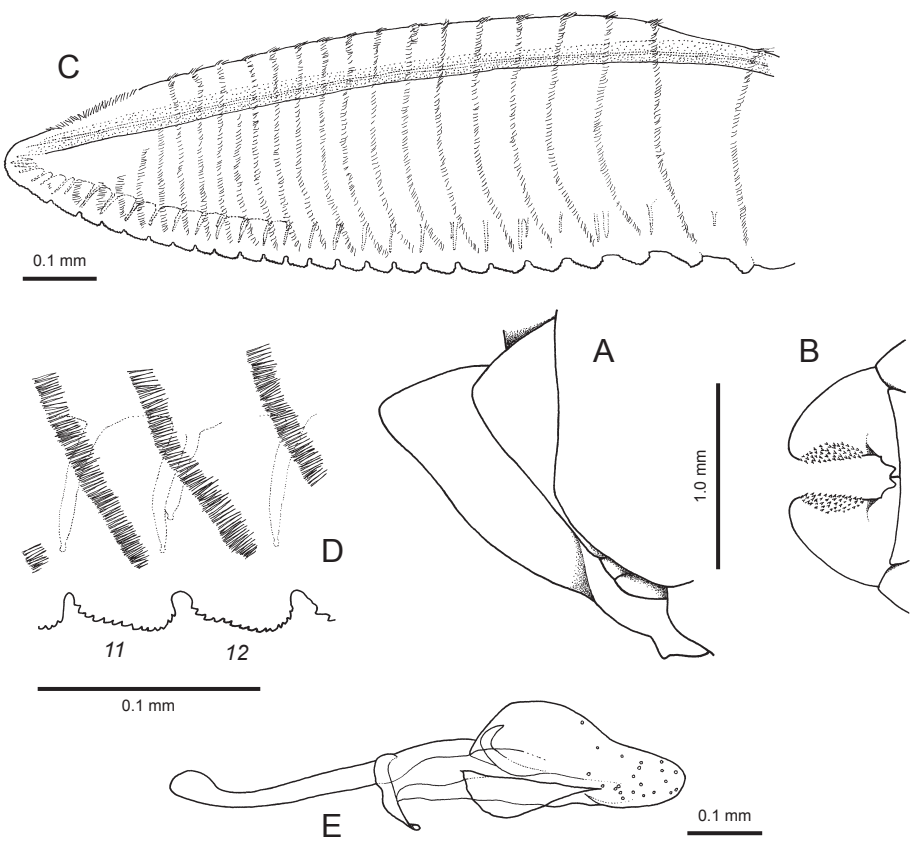

Fig. 63. A-E. *Arge dirce*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 11-12. **E**. Penis valve (left, lateral aspect).

costa dirty whitish with blackish apex adjacent to light brown, subcosta pale, dark brown. Dorsal surface of abdomen more or less blackish striped with slight blue metallic lustre, tergum 9 entirely black, ventral surface of abdomen yellow, sternum 9 black with blue metallic lustre.

Head parallel behind eyes. Antenna 2.4× as long as maximum head width; flagellum not enlarged towards apex, triangular in cross section, interior surface with conspicuously compressed longitudinal carina, the other longitudinal carinae weaker. Other features as for female. Genitalia: Fig. 63E.

Length: 6.8-8.2 mm.

Etymology

Dirce (Ancient Greek: Δίρκη, pronounced *Dirke*, modern Greek pronunciation *Dirki*, meaning “double” or “cleft”) was the wife of Lycus in Greek mythology.

Distribution

Botswana, Namibia (Region: Caprivi, Okavango) (Fig. 171), Zimbabwe.

Host plant

In Rhodes Inyanga Nature Reserve (Eastern Highlands, Zimbabwe) larvae (Fig. 62D) were found feeding on leafs of the shrubby tree *Diospyros lycioides* Desfontaines (bluebush, red star-apple) (Ebenaceae).

Ecology and habitat

The habitats of this species are located in the Woodland Savanna Biome. It seems that the Caprivi Strip is a suitable area for this species. Trees and shrubs of the riverine vegetation (Fig. 23) appear to be the preferred habitat. The flight season is from January to March.

Remarks

Arge dirce belongs to the *A. sugillata* species group (Pasteels 1953a).

Variability affects the colouration, especially of the ventral surface of abdomen. In females the colour of the sterna varies from black with broad yellow lateral and narrow posterior margins, to predominantly yellow with only the distal sterna and the sawsheath black. The black colouration of the distal sterna of the male can also be more extensive. Furthermore, in males sometimes tergum 2 is entirely yellow. The development of the blue metallic lustre is variable: it may be extensive or conspicuously reduced. The colouration of stigma, costa and subcosta also varies from pale to blackish, especially in males.

Sometimes the interspaces between punctures of the head are very finely microsculptured and the surfaces especially of the supraclypeal area, clypeus and frons are dull.

Arge elandsbayensis Koch & Goergen, 2010

Arge elandsbayensis Koch & Goergen, 2010: 22. ♀. Type locality: Leipoldtville, Eland's Bay (Western Cape Province, South Africa) (SAMC).

Female (Figs 64A, B)

Head black; apical half of mandible reddish to somewhat darker apically; scape and pedicel black, flagellum dark brown. Thorax black. Legs black; tibiae and tarsi dark brown, basal quarter of hind tibia pale. Wings slightly infuscate; substigmal spot of fore wing obscurely; intercostal area infuscate, stigma brown, costa, subcosta, and rest of venation brown, somewhat paler at base. Abdomen black with very slight blue metallic lustre; posterior margin of tergum 2, terga 3,4 orange with dark brown medially, sterna 3,4 orange.

Head scarcely narrowed behind eyes. Antenna 1.6× as long as maximum head width; flagellum scarcely enlarged towards apex, slightly quadrangular in cross section, interior surface with moderately compressed longitudinal carina, other longitudinal carinae weakly compressed. Eyes slightly converging below. Anterior margin of clypeus shallowly circularly emarginate medially, supraclypeal area nearly flatly rising up to the base of interantennal carinae, interantennal carinae moderately sharply ridged between antennae, conspicuously converging downwards, extending about one third of distance to clypeus.

Vertex and gena moderately densely micropunctate, shiny; frons, supraclypeal area and clypeus more densely punctate with larger punctures, shiny; pubescence white. Mesoscutum sparsely micropunctate, shiny; pubescence similar to that of head. Abdomen shiny; terga 1-5 transversely microsculptured, following terga irregularly micropunctate. Sawsheath: Figs 65A, B. Lancet with about 11 serrulae (Figs 65C, D).

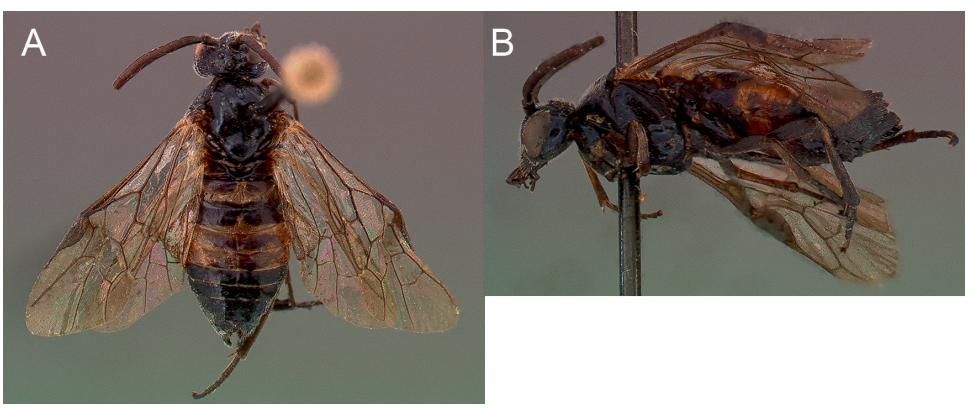

Fig. 64. A-B. *Arge elandsbayensis*, habitus, female (holotype). **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston).

Length: 6.3-7.0 mm.

Male

Unknown.

Etymology

This species is named after its type locality Eland's Bay on the Atlantic Ocean, in the neighbourhood of Leipoldtville (Western Cape Province).

Distribution

South Africa (Western Cape Province) (Fig. 175).

Host plant

Unknown.

Ecology and habitat

The habitats are located in the Sand Plain Fynbos vegetation type (Fynbos Biome) of the winter rainfall area. The flight season is not well known. Very few adults have been collected from September to October.

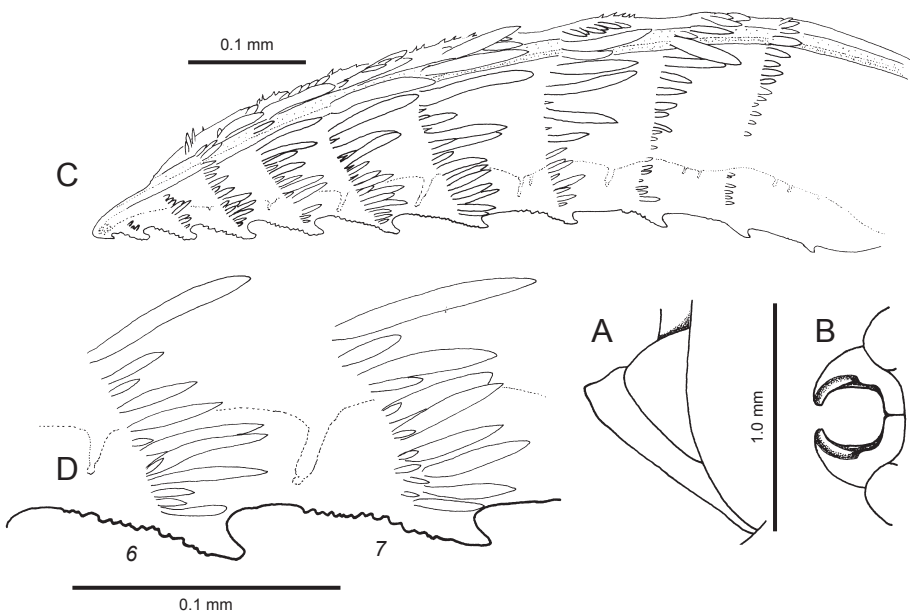

Fig. 65. A-D. *Arge elandsbayensis*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 6-7.

Remarks

Arge elandsbayensis belongs to the *A. capensis* species group (Koch & Liston 2012a).

Variability is visible in the colouration of the abdomen. Terga 3-5 can be entirely yellowish brown; also terga 6-8 can be broadly yellowish brown laterally. Additionally, the blue metallic lustre is more or less conspicuously visible.

With its yellowish-brown coloured zone on the abdomen, *A. elandsbayensis* could be confused with *Arge zona* (Enslin, 1911), but the pronotum and the mesoscutum of *A. zona* are nearly entirely orange. Furthermore, in *A. zona* terga 3-5 are entirely and terga 8-10 are medially broadly yellowish coloured.

Arge zona is also a member of the *A. capensis* species group (Koch & Liston 2012a), however *A. zona* is known from Eastern Cape Province, and does not occur in the area here discussed.

Arge furvipes Konow, 1907

Arge furvipes Konow, 1907b: 308. ♂♀. Type locality: Caput b. sp. [Caput Bonae Spei] (Cape of Good Hope, Western Cape Province, South Africa) (SDEI).

Hylotoma pallidiventris Enslin, 1911: 661. ♂. Type locality: Oudtshorn, Kapland (Western Cape Province, South Africa) (TMSA).

Hylotoma sternalis Enslin, 1911: 659. ♀. Type locality: Oudtshorn, Kapland (Western Cape Province, South Africa) (TMSA).

Female

Head and antenna black: apical half of mandible reddish to somewhat darker apically. Thorax black with the following yellow: propleuron, pronotum, postspiracular sclerite, narrow lateral margin of lateral lobe of mesoscutum, tegula, dorsal half of mesopleuron, anepimeron, posterior margin of katepimeron and metapleuron. Legs yellow with following black; coxae, trochanters, base of fore femur, mid and hind femur except for broad apices, apex of mid tibia, apical quarter of hind tibia, tarsomeres black-ringed apically. Wings slightly flavescent-hyaline throughout; fore wing with small infuscate substigmal spot; intercostal area yellow, stigma brown, costa and subcosta yellow becoming brown to blackish at extreme apex adjacent to stigma, rest of venation yellow to light brown in apical half.

Abdomen yellow; tergum1 with two blackish medial spots, terga 6,7 with small black medial spot, sawsheath with black apex.

Head parallel-sided behind eyes. Antenna 1.5× as long as maximum head width; flagellum slightly enlarged towards apex, quadrangular in cross section, ventral surface with moderately compressed longitudinal carina, other longitudinal carinae

weakly compressed. Eyes slightly converging below. Anterior margin of clypeus conspicuously circularly emarginated medially, supraclypeal area rounded up to the base of interantennal carinae, interantennal carinae sharply ridged between antennae, slightly converging downwards, extending about nearly half way to clypeus.

Vertex and gena nearly impunctate, shiny; frons, supraclypeal area and clypeus moderately densely punctate, shiny; pubescence light yellow. Mesoscutum smooth and shiny; pubescence similar to that on head. Abdomen shiny; terga 1-5 nearly smooth. Sawsheath: Figs 66A, B. Lancet with about 14 serrulae (Figs 66C, B).

Length: 7.2-8.3 mm.

Male (Figs 67A, B)

Colouration somewhat different to that of female. Flagellum dark brown. On thorax only pronotum except for its ventral angle, postspiracular sclerite and tegula yellow. Legs yellow; fore femur black with yellow apex, mid and hind femur black with narrow yellow apically. Abdomen yellow with tergum 1 black, tergum 2 broadly black medially, tergum 3 with small black medial spot, terga 4-7 with black markings continuously broadened towards apex, sternum 2 blackish.

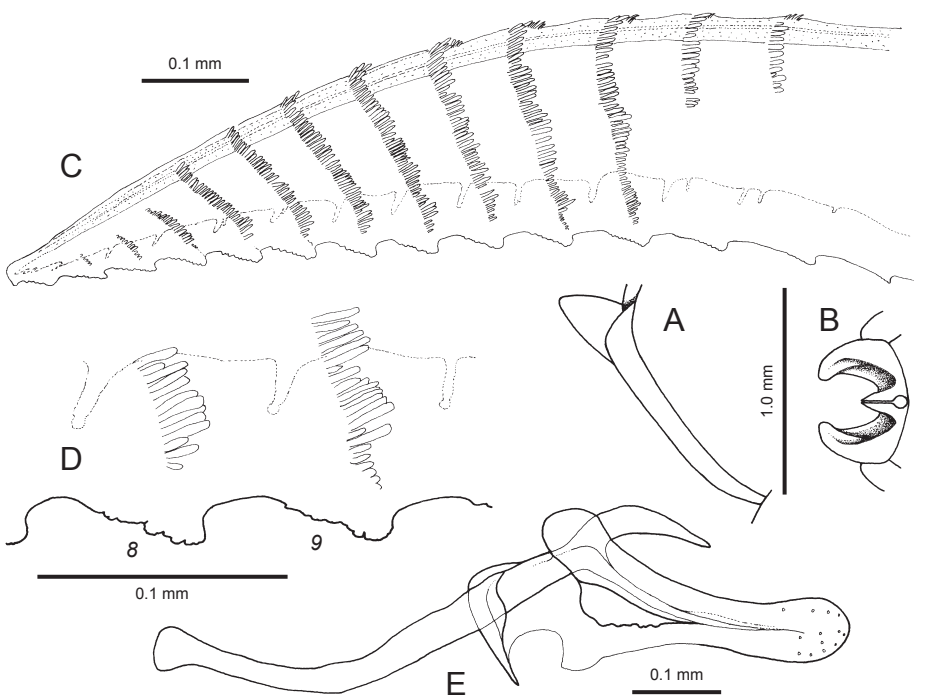

Fig. 66. A-E. *Arge furvipes*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 8-9. **E**. Penis valve (left, lateral aspect).

Antenna 2.1× as long as maximum head width; flagellum not enlarged towards apex, flattened apically, triangular in cross section, interior surface with conspicuously compressed longitudinal carina, the other longitudinal carinae weaker.

Other features as for female. Genitalia: Fig. 66E.

Length: 6.8-8.2 mm.

Etymology

From Latin; *furvus* (deep black), *pes* (feet).

Distribution

South Africa (Western Cape Province) (Fig. 174).

Host plants

Unknown.

Ecology and habitat

The habitats of *A. furvipes* are located in the Coastal Fynbos of the winter rainfall zone. The flight season is not well known. A few adults have been collected from November to March.

Remarks

Variability is apparent in the pattern of colouration. In females terga 1-8 may be more or less blackish marked medially. In males sometimes the dorsal surface of the abdomen is nearly entirely black, only narrowly yellow-margined laterally and tergum 8 yellow with blackish medial spot. Additionally, the yellow dorsal half of the mesopleuron may be more or less reduced to a large spot at the dorso-anterior margin, and the black colouration of femora may be more extensive.

Fig. 67. A-B. *Arge furvipes*, habitus, male. **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

Arge hereroensis Koch & Goergen, 2010

Arge hereroensis Koch & Goergen, 2010: 29. ♀. Type locality: Witvlei, Namibia (NNIC).

Female (Figs 68A, B)

Head yellow, ocelli very narrowly margined with blackish; mandible with dark reddish apex; antenna dark brown with yellow scape. Thorax yellow with the following black: apical half of median lobe including median suture, lateral half and a small spot of lateral lobe adjacent to apex of median lobe of mesoscutum, mesoscutellum, metanotum, mesosternum. Legs yellow; apical spot on fore femur brown, mid and hind femur broadly blackish ringed apically, apex of mid tibia narrowly, hind tibia broadly blackish ringed, tarsomeres 4,5 of mid tarsus brown, tarsomeres 1-3 of hind tarsus broadly blackish ringed apically, tarsomeres 4,5 entirely black. Wings hyaline; fore wing with large flavescent-hyaline substigmal spot; intercostal area flavescent-hyaline, stigma brown, costa, subcosta and venation yellow. Abdomen yellow; terga 5-7 with blackish medial spot.

Head very slightly enlarged behind eyes. Antenna 1.7× as long as maximum head width; flagellum scarcely enlarged towards apex, slightly quadrangular in cross section, interior surface with moderately compressed longitudinal carina, other longitudinal carinae weakly compressed. Eyes scarcely converging below. Anterior margin of clypeus shallowly, triangularly emarginated medially, supraclypeal area flatly rounded up to the base of interantennal carinae, interantennal carinae sharply ridged between antennae, conspicuously converging downwards, very short and ending somewhat below the ventral margin of toruli.

Vertex and gena conspicuously punctate, frons except for the scarcely punctate interantennal area, supraclypeal area and clypeus rugosely sculptured, subshiny;

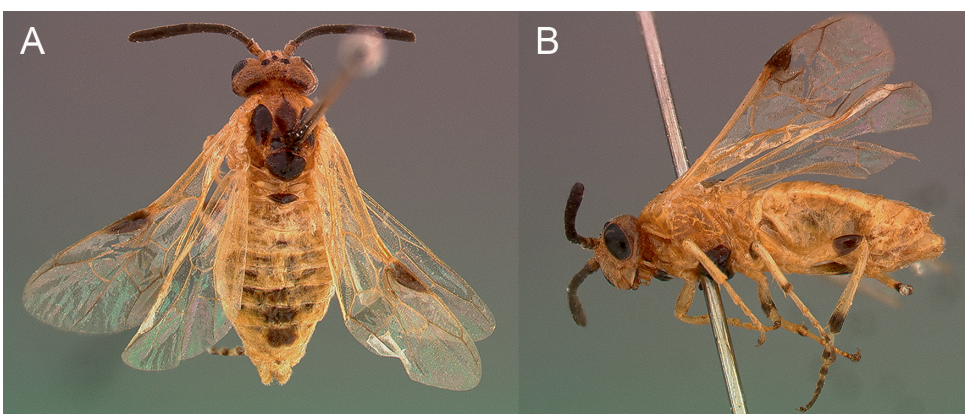

Fig. 68. A-B. *Arge hereroensis*, habitus, female (holotype). **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

pubescence yellowish. Lateral lobes of mesoscutum nearly impunctate, shiny; median lobe shallowly, rugosely microsculptured; pubescence similar to that on head. Abdomen shiny; tergum1 with irregular transverse microsculpture, following terga smooth and shiny. Sawsheath: Figs 69A, B. Lancet with about 14 serrulae (Figs 69C, D).

Length: 8.7 mm.

Male

Unknown.

Etymology

This species is named after the Hereroland in Namibia, the landscape around Witvlei, the type locality.

Distribution

Namibia (Omaheke Region) (Fig. 172).

Host plant

Unknown.

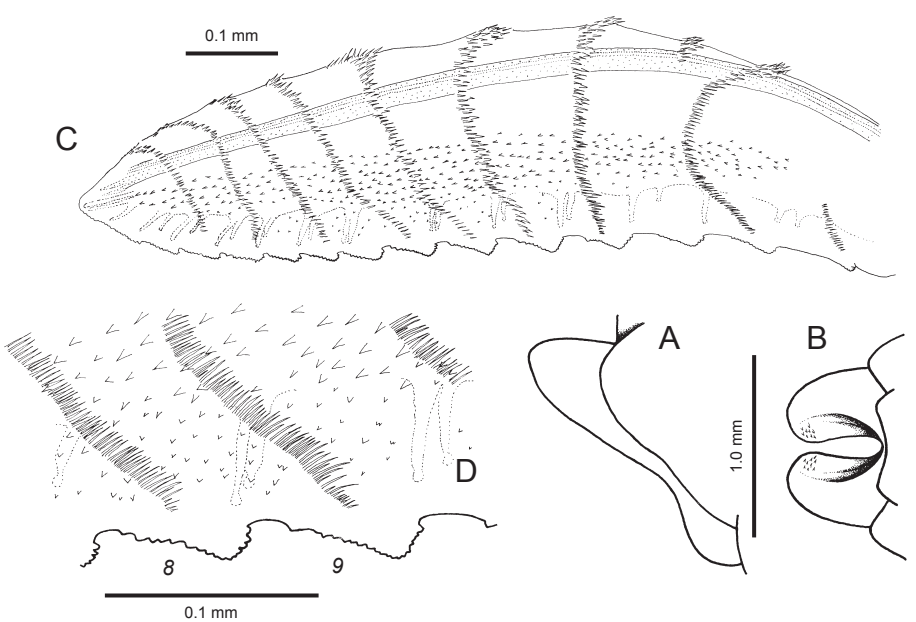

Fig. 69. A-D. *Arge hereroensis*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 8-9.

Ecology and habitat

The habitat of *A. hereroensis* is characterized by short, open grassland, and belongs to the Thornbush Savanna Biome. The flight season is not well known, with only one female collected in March.

Remarks

Arge hereroensis belongs to the *Arge aesculapii* species group (Pasteels 1953a, Koch & Goergen 2010).

In colouration this species is similar to *Arge meyi*, which is known from the Brandberg Massif in western Namibia. *Arge meyi* may be separated by a large black spot on vertex which comprises the postocellar and interocellar area including the margin of front ocellus, the black colour of the median lobe is more extensive, whereas the mesoscutellum is entirely yellow. The antenna of *A. meyi* is shorter (1.1× as maximum head width) and conspicuously enlarged towards the apex. *Arge meyi* differs mostly by the shape of lancet, with its much flattened serrulae, without distinct anterior subbasal teeth. Furthermore, the ventral half of the lancet of *A. hereroensis* is uniformly covered with thorn-like setae.

Arge iota Pasteels, 1953

Arge iota Pasteels, 1953a: 8, 37. ♂. Type locality: Gaberones [Gaborone], Bechualand [Bechuanaland, Botswana] (MNHN).

Male (Figs 70A, B)

Head black; apical half of mandible yellow becoming dark reddish apically; antenna dark brown. Thorax black; pronotum yellow with blackish irregular markings on margins, tegula yellow to blackish, katepimeron with narrow yellow posterior margin, metapleuron yellow with irregular blackish markings. Legs yellow except for following black: fore and mid coxa, hind coxa with black lateral spot at base,

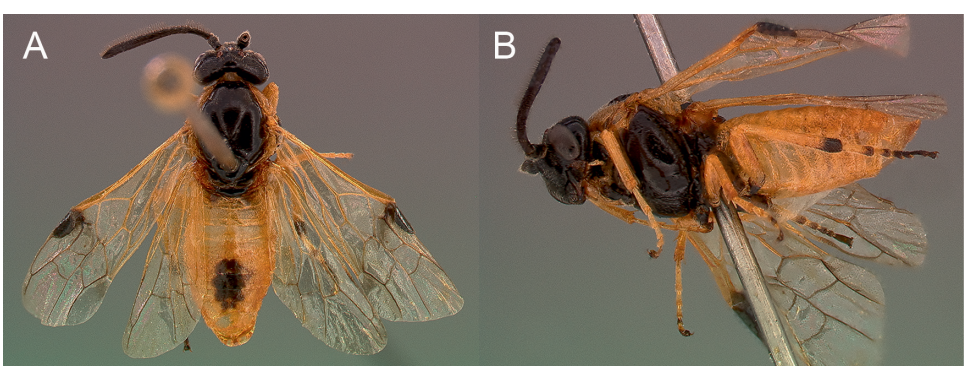

Fig. 70. A-B. *Arge iota*, habitus, male. **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

fore trochanter blackish, apex of hind tibia, tarsomere 4 of mid tarsus blackish, basitarsomere and tarsomere 2 of hind leg blackish ringed apically, tarsomeres 3-5 entirely black. Wings sharply bicoloured with flavescent-hyaline basal half and infuscate apical half; fore wing with small smoky substigmal spot; intercostal area flavescent, stigma black, costa, subcosta and basal half of venation yellow, rest of venation blackish. Abdomen yellow; tergum1 with two small blackish medial spots, terga 5-8 with black patches medially, various widths, all together resulting in a large medio-apical spot.

Head very slightly enlarged behind eyes. Antenna 1.5× as long as maximum head width; flagellum not enlarged towards apex, and quadrangular in cross section, interior surface with compressed longitudinal carina, other longitudinal carinae more weakly compressed. Eyes very slightly converging below. Anterior margin of clypeus shallowly circularly emarginate, supraclypeal area flatly protruding up to start of interantennal carinae, interantennal carinae sharply ridged between antennae, converging downwards, extending about one third way to clypeus.

Vertex and gena moderately densely micropunctate, shiny; frons and clypeus densely punctate, subshiny, supraclypeal area rugosely sculptured, dull; pubescence whitish. Mesoscutum similarly micropunctate and pubescent like the vertex, shiny. Abdomen smooth and shiny. Genitalia: Fig. 71.

Length: 7.7-8.5 mm.

Female

Unknown.

Etymology

The name *iota* may be derived from either Greek or Latin, and refers to a letter of the alphabet in both languages. Possibly it refers to the shape of the black abdominal markings.

Distribution

Botswana, Namibia (Region: Khomas, Omaheke) (Fig. 171).

Host plant

Unknown.

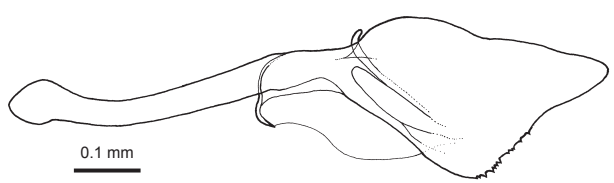

Fig. 71. *Arge iota*. Penis valve (left, lateral aspect).

Ecology and habitat

The species was collected in different habitats of the *Acacia* thornveld and in open grassland belonging to the Thornbush Savanna Biome. The flight season is not well known. Only males have been collected from February to March.

Remarks

Arge iota is very variable in colouration. The large abdominal patch is sometimes reduced to small medial spots on terga 6,7 and the blackish markings on tergum 1 are obscure. The black colouration of the legs may extend so that the coxae are entirely black, the femora predominantly blackish and the apex of mid tibia blackish. The mesepimeron and metapleuron may also be more or less black.

Arge krabbefonteinensis Koch & Goergen, 2010

Arge krabbefonteinensis Koch & Goergen, 2010: 30. ♂. Type locality: Krabbefontein (Western Cape Province, South Africa) (MFN).

Male (Figs 72A, B)

Head black; apical half of mandible reddish brown; flagellum dark brown. Thorax black with following yellow; pronotum, except for ventro-lateral angle and anterior margin, postspiracular sclerite, tegula, marking on the dorsal angle of mesopleuron. Legs black. Wings uniformly flavescent-hyaline; substigmal spot of fore wing obscure; costa yellow with apex light brown, subcosta and rest of venation light brown, stigma brown. Abdomen black with blue metallic lustre.

Head parallel behind eyes. Antenna 1.6× as long as maximum head width; flagellum not enlarged towards apex, triangular in cross section and slightly flattened at apex, ventral surface with conspicuously compressed longitudinal carina, other longitudinal carinae more weakly compressed. Eyes very slightly

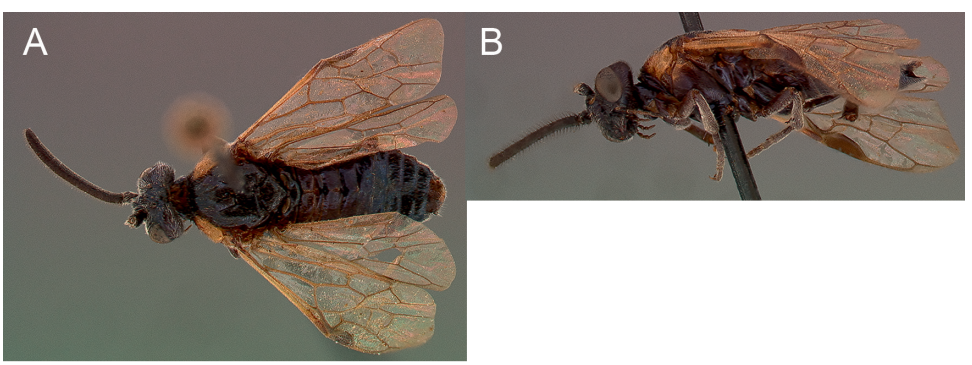

Fig. 72. A-B. *Arge krabbefonteinensis*, habitus, male (holotype). **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

converging below. Anterior margin of clypeus conspicuously circularly emarginate medially, supraclypeal area nearly flatly rising up to base of interantennal carinae, interantennal carinae sharply ridged between antennae, slightly converging downwards, extending about a quarter of distance to clypeus.

Vertex moderately densely micropunctate, shiny, gena, frons and clypeus rather densely punctate, shiny, supraclypeal area very densely punctate, dull; pubescence whitish. Thorax nearly impunctate, shiny; pubescence similar to that on head. Abdomen shiny; terga1, 2 obscurely microsculptured, terga 3, 4 inconspicuously sculptured, following terga shallowly rugose. Genitalia: Figs 73A-C.

Length: 7.5 mm.

Female

Unknown.

Etymology

This species was named after its collection locality, Krabbefontein near Cape Town (Western Cape Province, South Africa).

Distribution

South Africa (Western Cape Province) (Fig. 172).

Host plant

Unknown.

Ecology and habitat

The habitat of *A. krabbefonteinensis* is located in the Coastal Fynbos of the winter rainfall zone. The flight season is not well known. Only one male has been collected in December.

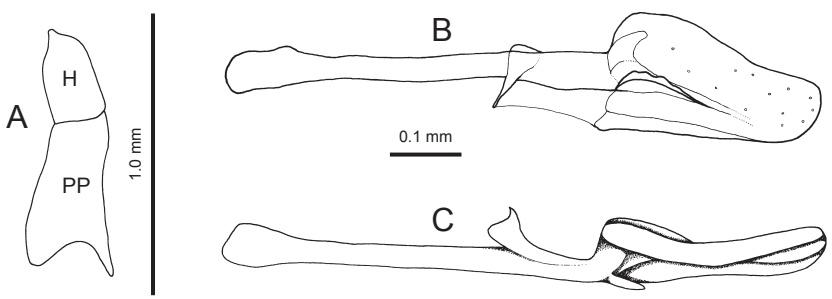

Fig. 73. A-C. *Arge krabbefonteinensis*. **A**. Harpe and parapenis (right, ventral aspect). **B**. Penis valve (left, lateral aspect). **C**. Penis valve (right, dorsal aspect).

Remarks

Arge krabbefonteinensis cannot be assigned to any of the species groups defined by Pasteels (1953a, 1963).

Its colouration comes close to *Arge namaensis*, which is known from the Succulent Karoo biome of Northern Cape Province. *Arge namaensis* is separated by the yellow apex of abdomen and in the conspicuously developed median hollow of tergum 8 (Fig. 84A).

Arge kungveldensis Koch & Eardley, 2011

Arge kungveldensis Koch & Eardley, 2011: 460. ♀. Type locality: Tsumkwe, Kungveld [Northern Kalahari] (Namibia) (TMSA).

Female (Fig. 74A, B)

Head and antenna black, postocellar area dirty yellow, frons and base of clypeus dark brown; labrum with light brown margin; apical half of mandible dark brown. Thorax black with pronotum except for its dark brown ventral part and centre yellow, tegula dark brown, mesoscutellum and metascutellum yellow. Legs dark brown. Wings conspicuously infuscate; substigmal spot of forewing moderately developed; intercostal area slightly darker, stigma blackish, costa brown, somewhat darker apically, subcosta and rest of venation blackish becoming brown apically. Abdomen yellow; terga 1-8 broadly black, tergum 9 black, sterna 6,7 brown with yellow posterior margin, sawsheath black, ventral margin and apex yellow.

Head enlarged behind eyes. Interior margins of eyes nearly parallel. Anterior margin of clypeus circularly emarginated medially, supraclypeal area flatly rounded up to start of interantennal carinae (Fig. 75A), interantennal carinae obtusely ridged

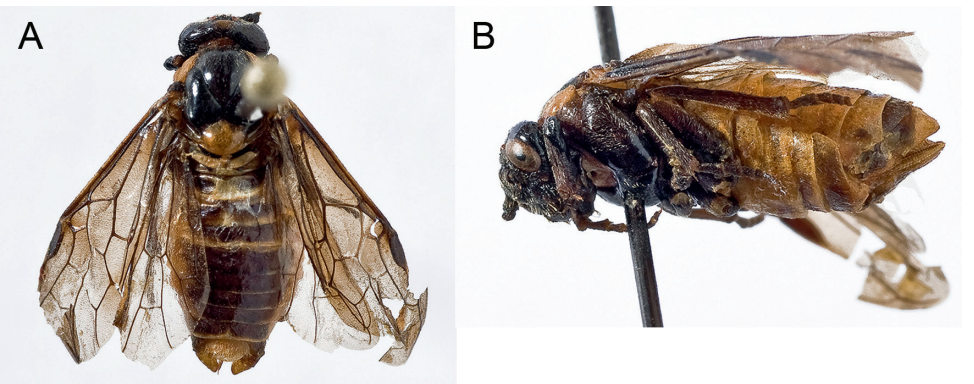

Fig. 74. A-B. *Arge kungveldensis*, habitus, female (holotype). **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by G. Goergen)

between antennae, scarcely converging downwards, short, extending about a quarter of distance to clypeus.

Vertex and gena very sparsely micropunctate, shiny; frons, supraclypeal area and clypeus moderately densely punctate, shiny; pubescence whitish. Mesoscutum nearly impunctate, shiny; pubescence similar to that on head. Abdomen smooth and shiny; tergum1 transversely microridged. Sawsheath: Figs 75B, C. Lancet with about 22 serrulae (Figs 75D, E).

Length: 9.3 mm.

Male

Unknown.

Etymology

This species is named after its collection locality Kungveld, the former name of the Namibian Bushmanland [Northern Kalahari] in North-East Namibia.

Distribution

Namibia (Otjozondjuba Region) (Fig. 171).

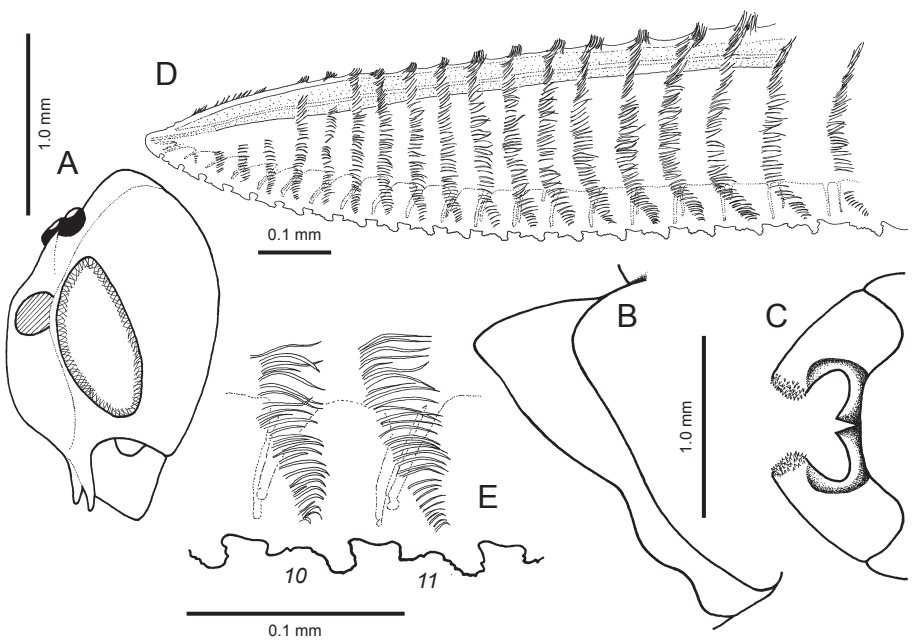

Fig. 75. A-E. *Arge kungveldensis*. **A**. Head (lateral aspect). **B** Sawsheath (lateral aspect). **C**. Sawsheath (dorsal aspect). **D**. Lancet (lateral aspect). **E**. Serrulae 10-11.

Host plant

Unknown.

Ecology and habitat

The so called Kungveld belongs to the Kalahari Desert as part of the Woodland Savanna Biome. Details of the preferred habitat are unknown. In recent years many collecting trips have taken place throughout Northern Kalahari, but no further specimens were found.

The flight season is not well known, the only known specimen was collected in January.

Remarks

Arge kungveldensis belongs to the *A. mirabilipes* species group (Pasteels 1963) revised by Koch & Eardley (2011). This species group includes also *A. mirabilipes* Pasteels, 1955b, *A. taitaensis* Koch & Eardley, 2011 and *A. gusenleitneri* Koch, 2012.

The species of the *A. mirabilipes* species group are characterized by the combination of a very short hind basitarsomere (a quarter of the tibia length), the slightly medially widened hind tibia (Fig. 74B), and the broad sawsheath that is obtusely pincer-shaped apically (Fig. 75C). Both flagella of the holotype are missing.

Arge langebergensis Koch & Goergen, 2010

Arge langebergensis Koch & Goergen, 2010: 24. ♂♀. Type locality: Montagu (Western Cape Province, South Africa) (SAMC).

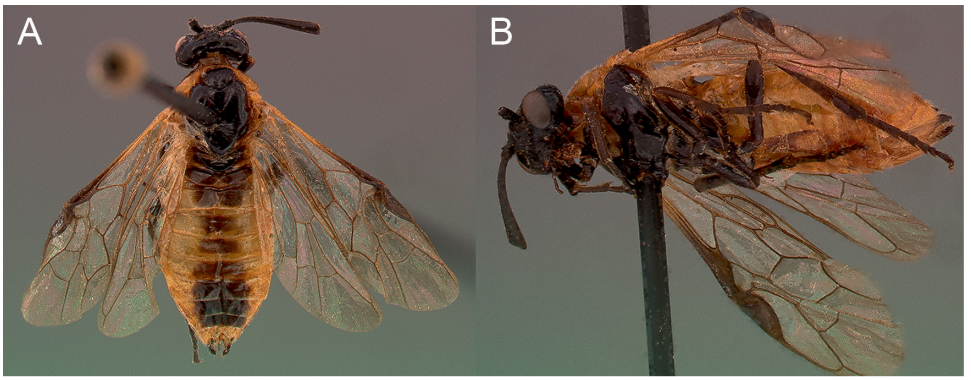

Fig. 76. A-B. *Arge langebergensis*, habitus, female (holotype). **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

Female (Figs 76A, B)

Head and antenna black; apical half of mandible light brown, gradually becoming dark reddish apically. Thorax black with the following yellow: propleuron, except for anterior margin, pronotum, postspiracular sclerite, lateral margin of median lobe and lateral margin of lateral lobe of mesoscutum, tegula, anepimeron, posterior margin of katepimeron, dorsal half of metepimeron. Legs black. Wings slightly infuscate; fore wing with very small smoky substigmal spot; intercostal area flavescent hyaline at base becoming infuscate apically, stigma brown, costa, subcosta and base of veins yellow, becoming light brown to brown apically. Abdomen yellow; tergum1 black, terga 2-8 with black medial patches of various widths, all together forming a broad longitudinal stripe, cerci and apex of sawsheath black.

Head parallel-sided behind eyes. Antenna 1.5× as long as maximum head width; flagellum conspicuously enlarged towards apex, slightly quadrangular in cross section, interior surface with slightly compressed longitudinal carina, gradually disappearing apically, other longitudinal carinae more weakly compressed. Eyes slightly converging below. Anterior margin of clypeus shallowly circularly emarginate medially, supraclypeal area moderately rounded up to the base of interantennal carinae, interantennal carinae sharply ridged between antennae, converging downwards, extending about one third of distance to clypeus.

Vertex and gena very sparsely micropunctate, shiny, supraclypeal area and frons irregularly transversely wrinkled and shiny except for the scarcely sculptured interantennal area and more or less longitudinally wrinkled, shiny, clypeus; pubescence yellowish. Mesoscutum moderately densely micropunctate; pubescence similar to that on head. Abdomen shiny; terga 1-4 with transverse microsculpture, following terga smooth. Sawsheath: (Figs 77A, B). Lancet with about 15 serrulae (Figs 77C, D).

Length: 8.8-9.0 mm.

Male

Colouration similar to that of female. Thorax black with following yellow: pronotum, except for ventro-lateral angle and centre of posterior margin, tegula. Dorsal surface of abdomen except tergum 9 nearly entirely black, only terga 3-6 laterally narrow yellow, sternum 2 blackish.

Antenna 2.0× as long as maximum head width; flagellum not enlarged towards apex, triangular in cross section, interior surface with conspicuously compressed longitudinal carina. Mesoscutum more densely and coarsely punctate. Other features as for female. Genitalia: Fig. 77E.

Length: 6.7-7.3 mm.

Etymology

This species is named after the Langeberg Mountains around the town of Montagu (Western Cape Province, South Africa) its type locality.

Distribution

South Africa (Province: Eastern Cape, Western Cape) (Fig. 175).

Host plant

Unknown.

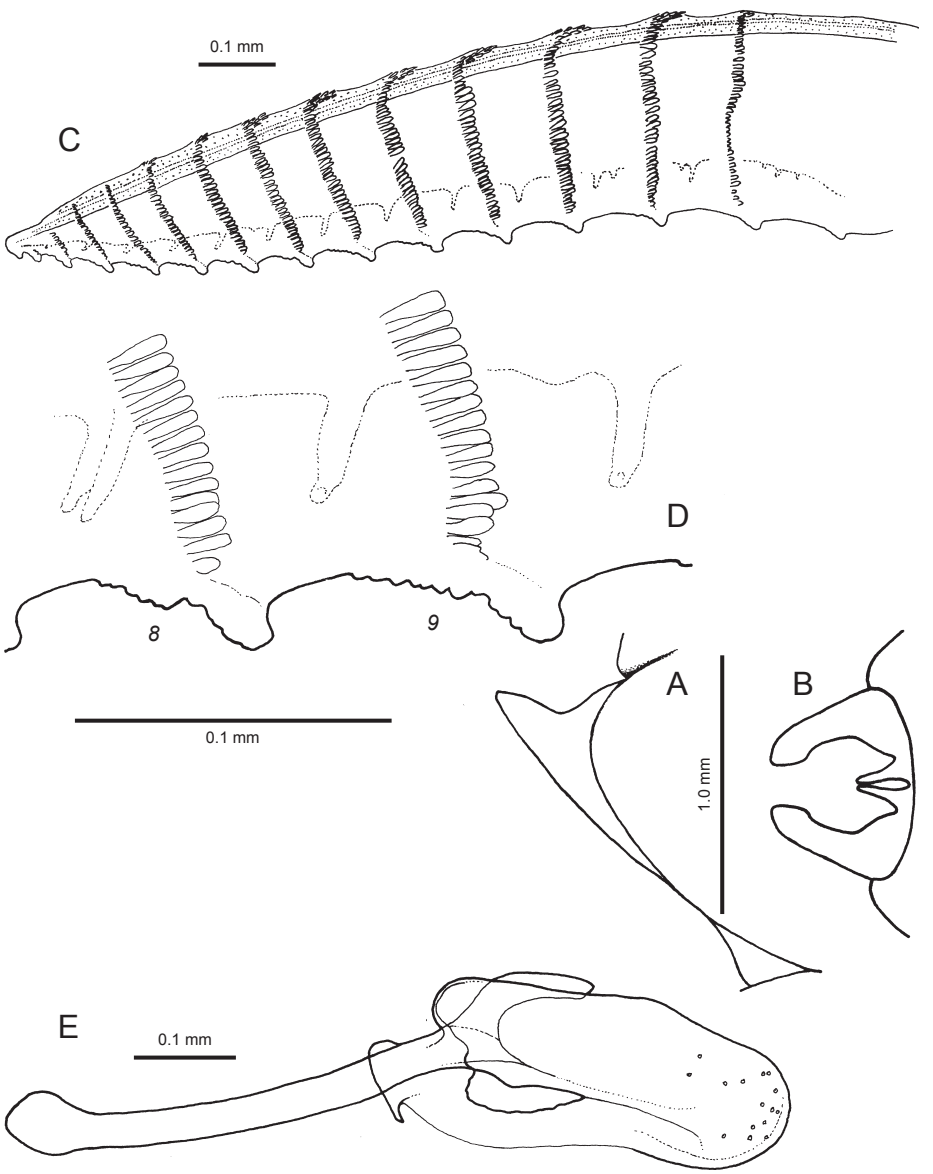

Fig. 77. A-E. *Arge langebergensis*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 8-9. **E**. Penis valve (left, lateral aspect).

Ecology and habitat

Material of this species is about one hundred years old. Details about the habitat are unknown. However, the known localities belong to the Mountain Fynbos of the winter rainfall zone. The flight season is not well known. Specimens have been collected in October and February. No new specimens or locality records have been assimilated.

Remarks

One female differs in having yellowish markings on the dorsal angle of the mesopleuron.

Superficially, *Arge langebergensis* might seem to be a variety of *A. furvipes* or *A. taeniata*. However, with the nearly entirely black coloured mesopleuron the females differ conspicuously from *A. taeniata* and *A. angulifera*. A further clear distinguishing character is the shape of serrulae, which are rounded apically (Fig. 77D). The males of *A. langebergensis* are separated from similarly coloured *A. angulifera* by the black sternum 2, the almost entirely black dorsal surface of the abdomen and the different penis valve (Figs 45E, 77E). Furthermore, in the pattern of colouration *A. langebergensis* resembles *A. montana*. The differences between these two species are discussed under *A. montana*.

Arge meyi Koch, 2006

Arge meyi Koch, 2006a: 117. ♂♀. Type locality: Brandberg Massif, Namibia (NNIC).

Female (Figs 78A, B)

Head yellow, postocellar and interocellar area including margin of front ocellus black; mandible apically dark brown; antenna black, narrow base of scape yellow. Thorax yellow with following black: on mesoscutum, one large medial patch on median lobe adjacent to pronotum, a large lateral-longitudinal stripe and a small

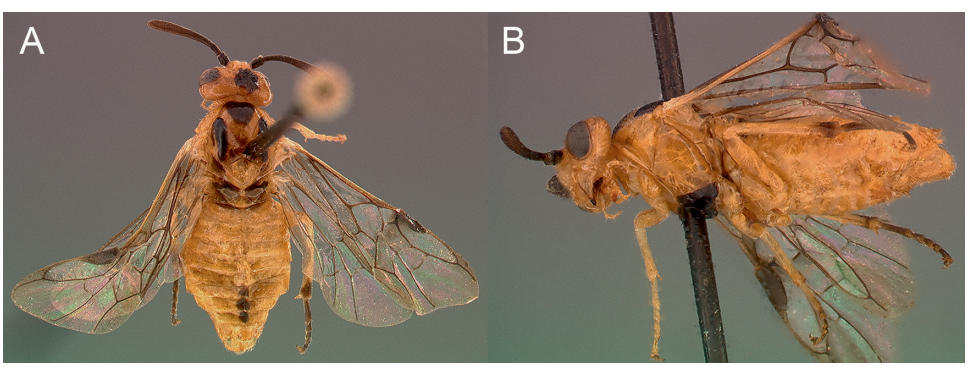

Fig. 78. A-B. *Arge meyi*, habitus, female. **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

spot near the posterior margin of lateral lobe, posterior downturned portion of lateral lobe, mesosternum. Legs yellow; dorsal surface of hind coxa and narrow apex of hind femur, hind tibia apically, mid and hind tarsi blackish. Wings subhyaline; fore wing with a slight smoky substigmal spot; intercostal area flavescent-hyaline, costa entirely yellow, subcosta brown, stigma and rest of venation blackish. Abdomen yellow with blackish narrow anterior margin on tergum1, terga 5-8 with small blackish medial spot.

Head very slightly enlarged behind eyes. Antenna 1.3× as long as maximum head width; flagellum conspicuously enlarged towards apex, quadrangular in cross section, interior surface with slightly compressed longitudinal carina, disappearing apically, other longitudinal carinae more weakly compressed. Eyes slightly

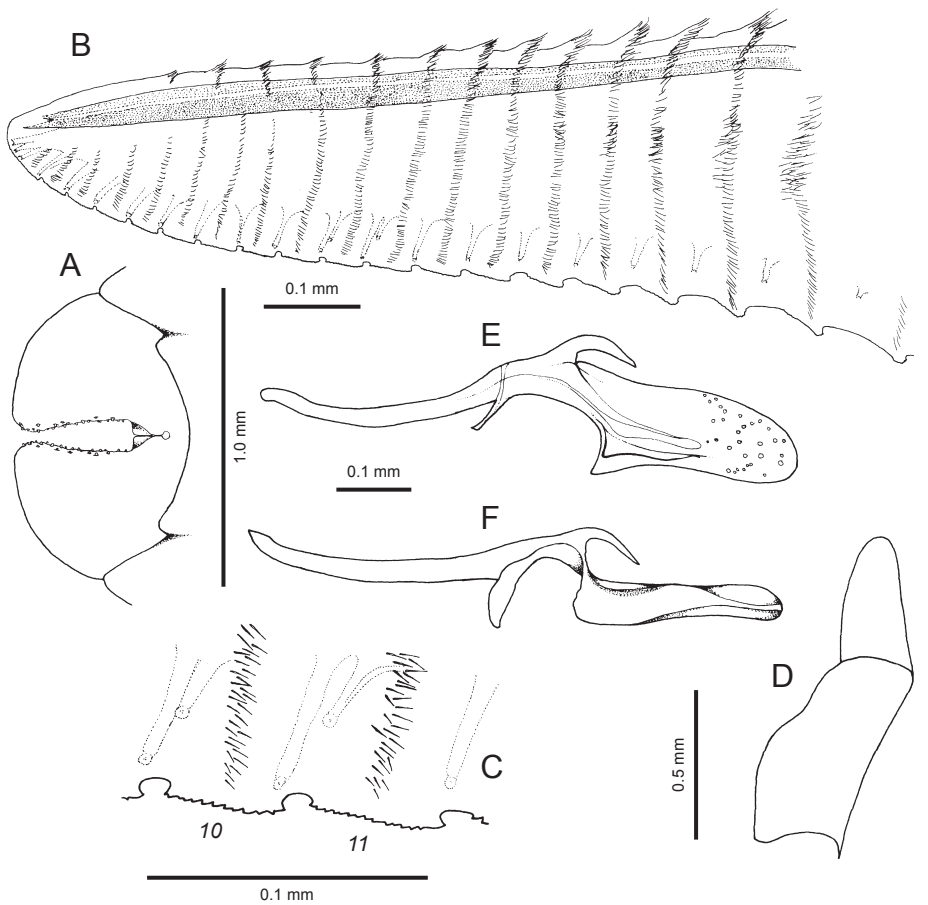

Fig. 79. A-F. *Arge meyi*. **A**. Sawsheath (dorsal aspect). **B**. Lancet. **C**. Serrulae 10-11. **D**. Harpe and parapenis (right, ventral aspect). **E**. Penis valve (left, lateral aspect). **F**. Penis valve (right, ventral aspect).

converging below. Anterior margin of clypeus with triangular medial excision to about one third of its median length. Supraclypeal area rounded and protruding up to base of interantennal carinae, interantennal carinae obtusely ridged between antennae, slightly converging downwards, extending about one quarter of distance to clypeus.

Vertex and gena scattered micropunctate, shiny, frons, supraclypeal area and clypeus moderately densely punctate, shiny; pubescence yellowish. Mesoscutum nearly impunctate, shiny; pubescence similar to that on head. Abdomen shiny; tergum 1 irregularly transversely microsculptured, following terga smooth. Sawsheath: Fig. 79A. Lancet with about 19 serrulae (Figs 79B, C).

Length: 7.0-7.5 mm.

Male

Head black, frons, gena brownish yellow; clypeus and labrum yellow, mandible yellow with apex dark brown; flagellum brown, narrow base of scape yellow. Thorax black; pronotum yellow with black medial marking, tegula yellow, mesoscutellum brownish yellow with black at base. Legs yellow, coxae, mid and hind trochanters black, narrow apex of hind femur, hind tibia apically, and hind tarsus blackish, distal tarsomeres of mid tarsus brownish. Costa of fore wing brown. Abdomen yellow; terga 1,2,5-7 broadly black, terga 3,4 with narrow blackish transverse markings, tergum 8 with black medial spot.

Antenna 1.5× as long as maximum head width, flagellum slightly enlarged towards apex, interior surface with sharply compressed longitudinal carina. Other features as for female. Genitalia: Figs 79D-F.

Length: 6.0-6.5 mm.

Etymology

This species was named after Dr. Wolfram Mey, Curator of Lepidoptera at the Museum für Naturkunde, Berlin, Germany.

Distribution

Namibia (Erongo Region) (Fig. 171).

Host plant

In 2002 the material was collected selectively by using a sweep-net on Rock Commiphora (*Commiphora saxicola* Engler), Burseraceae. This bush or small tree is endemic to the south-west African semi-desert vegetation type, occurring on stony hills and rocky mountain slopes in the fringes of the Namib. Therefore, if *A. meyi* is monophagous on this plant, it seems likely that the sawfly is also endemic to this region.

Ecology and habitat

The Brandberg Massif is an isolated mountain range in western Namibia on the eastern edge of the Namib Desert, located in the Nama Karoo Biome (Fig. 16). The type locality “Mason Shelter” (1,800 m) is a more or less flat open plain, dissected by some small river beds and fringed by rocky hills with huge boulders and rock slabs (Fig. 80).

The flight season is not well known, all specimens were collected in March.

Remarks

The colour pattern is variable in this species. In females, the black markings on the abdomen may be extended, with a small spot on tergum 5, and sometimes the ventral surface of the hind coxa is blackish. In males, the black on the abdomen may either reduced to tergum 1 and median spots on terga 5-8 or extended to broad markings on terga 1,2,4-7 and median spots on terga 3,8.

According to Koch (2006a) *Arge meyi* is similar to *A. aesculapii* Forsius, 1925, known from Botswana, South Africa and Zimbabwe. *Arge aesculapii* differs mostly by the bicoloured, sharply contrasted fore wings with flavescent hyaline basal and blackish infuscate apical halves and the entirely black mesonotum including the mesoscutellar appendage. Furthermore, *A. aesculapii* is characterized by the

Fig. 80. The so called “Mason Shelter” on the Brandberg Massif (western Namibia) is the habitat of *Arge meyi*, *Pampsilota brandbergensis* and *Xenapates damaraensis.* (Photo by W. Mey)

black apical half of the postocellar area, as well as the black apical third of mid and hind femora, and the apices of the mid and hind tibiae. Additionally, in *A. aesculapii* the inside of the sheath is covered with bristle-like hairs apically and longer hairs in the basal half.

Arge montana Koch & Goergen, 2010

Arge montana Koch & Goergen, 2010: 26. ♂♀. Type locality: Great Winterhoek Mountains, Tulbagh, Cape Province (Western Cape Province, South Africa) (SAMC).

Female (Figs 81A, B)

Head black; apical half of mandible light brown, gradually becoming dark brown apically; flagellum dark brown. Thorax black with the following yellow: propleuron, except for anterior margin, pronotum, postspiracular sclerite, lateral margin of lateral lobe of mesoscutum, posterior downturned portion of lateral lobe, tegula, anepimeron, posterior margin of katepimeron, metapleuron; only metepisternum black margined. Legs black. Wings very slightly infuscate; fore wing with very small smoky substigmal spot; intercostal area infuscate, stigma dark brown, costa dark brown with yellow close to base, subcosta yellow with apical half dark brown, rest of veins narrow yellow at base, becoming light brown to brown apically. Abdomen yellow; tergum 1 with two large black medial spots, terga 2-8 with black spot medially various widths, all together resulting in a narrow longitudinal stripe, cerci and apex of sawsheath black.

Head slightly enlarged behind eyes. Antenna 1.6× as long as maximum head width; flagellum moderately enlarged and somewhat flattened towards apex, slightly quadrangular in cross section, interior surface with conspicuously compressed longitudinal carina, other longitudinal carinae more weakly compressed.

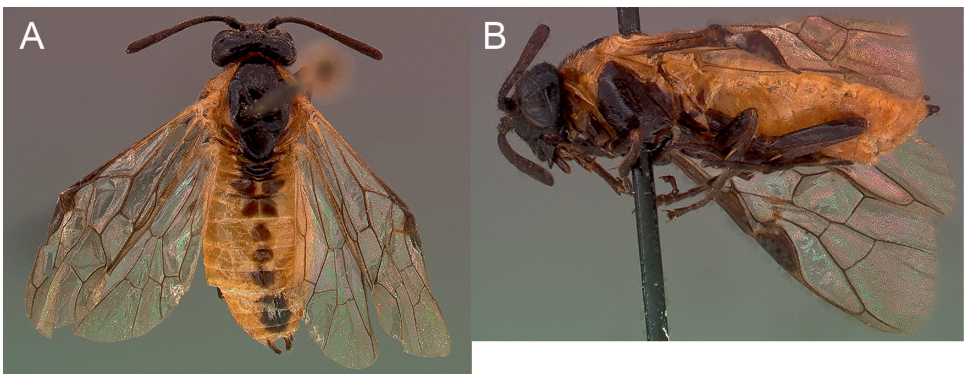

Fig. 81. A-B. *Arge montana*, habitus, female (holotype). **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

Eyes slightly converging below. Anterior margin of clypeus shallowly, triangularly emarginated. Supraclypeal area flatly rounded up to base of interantennal carinae, interantennal carinae sharply ridged between antennae, conspicuously converging downwards, extending about one third distance to clypeus.

Dorsal half of gena nearly impunctate, shiny, ventral half longitudinally wrinkled, dull; vertex, frons, supraclypeal area and clypeus more densely punctate, latter rugose laterally, shiny; pubescence light brown. Mesoscutum scarcely punctate and shiny, pubescence similar to that on head. Abdomen shiny; terga with transverse microsculpture. Sawsheath: Figs 82A, B. Lancet with about 17 serrulae (Figs 82C, D).

Length: 9.2 mm.

Male

Colouration similar to that of female. Thorax black with following parts yellow: pronotum, except for ventro-lateral angle and centre of posterior margin, tegula.

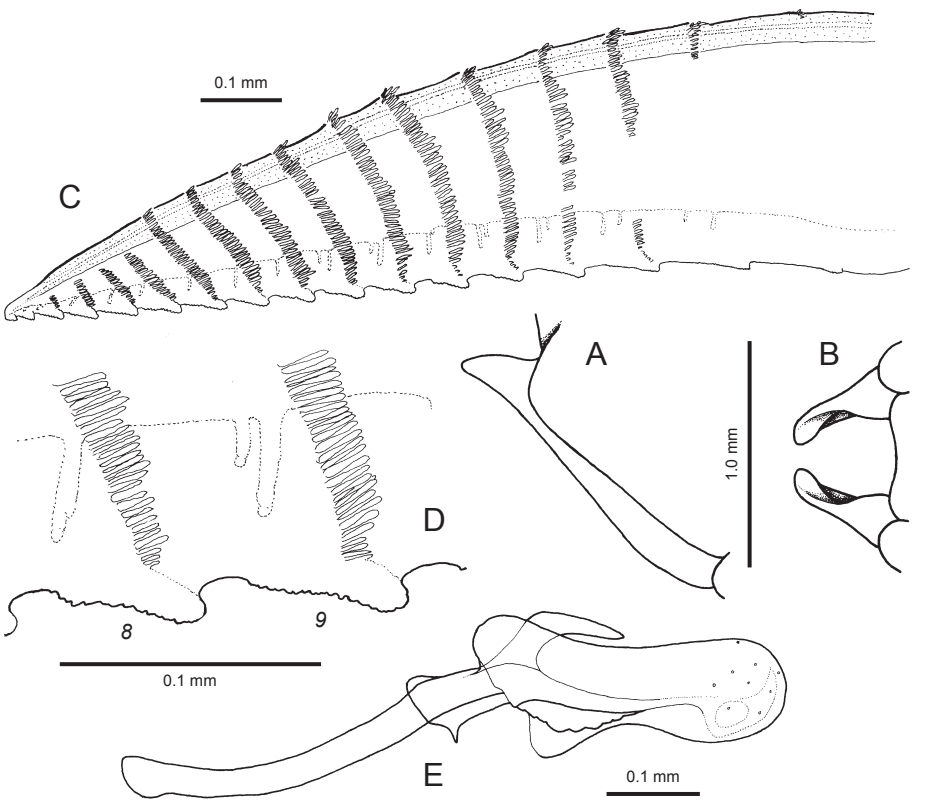

Fig. 82. A-E. *Arge montana*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 8-9. **E**. Penis valve (left, lateral aspect).

Tergum 1 entirely black, except for postero-lateral angle, following terga with black medial markings of various widths.

Antenna 2.0× as long as maximum head width; flagellum not enlarged towards apex, slightly flattened, ventral surface with conspicuously compressed longitudinal carina. Mesonotum more densely and coarsely punctate. Other features as for female. Genitalia: Fig. 82E.

Length: 7.3 mm.

Etymology

The name of this species refers to its montane origins in the Great Winterhoek Mountains (Western Cape Province).

Distribution

South Africa (Western Cape Province) (Fig. 175).

Host plant

Unknown.

Ecology and habitat

The habitat belongs to the Mountain Fynbos vegetation type of the winter rainfall zone.

The flight season is not well known; specimens have been collected in November.

Remarks

In colouration pattern this species resembles *A. langebergensis.* In *A. langebergensis* the antenna is shorter and more enlarged apically. In *A. montana* the head is conspicuously enlarged behind the eyes. The serrulae of the lancet are more flattened, and in lateral view the penis valve is more compressed than that of *A. langebergensis* (Fig. 77E).

Arge namaensis Koch & Goergen, 2010

Arge namaensis Koch & Goergen, 2010: 32. ♂. Type locality: Klein Namaland, Steinkopf (Northern Cape Province, South Africa) (MFN).

Male (Figs 83A, B)

Head black with slight blue metallic lustre; labrum dark brown, apical half of mandible light brown, gradually becoming dark brown apically; flagellum dark brown. Thorax black with slight blue metallic lustre; pronotum yellow with black ventro-lateral angle and narrow median part, tegula yellow. Legs black. Wings

slightly infuscate throughout; substigmal spot of fore wing obscurely; intercostal area negligibly more infuscate, costa and subcosta dark brown, stigma and rest of venation brown. Abdomen black with blue metallic lustre; tergum 8 with broad yellow median patch, sternum 8 light brown, sternum 9 yellow.

Head parallel-sided behind eyes. Antenna 1.7× as long as head maximum width; flagellum not enlarged towards apex, triangular in cross section and slightly flattened at apex, interior surface with conspicuously compressed longitudinal carina, gradually disappearing apically, other longitudinal carinae more weakly compressed. Eyes slightly converging below. Anterior margin of clypeus shallowly triangularly emarginate medially, supraclypeal area very flatly rounded up to start of interantennal carinae, interantennal carinae sharply ridged between antennae, scarcely converging downwards, short and extending about one quarter of way to clypeus.

Vertex and gena moderately densely micropunctate, shiny; frons and supraclypeal area more densely punctate, shiny; clypeus irregularly punctate, shiny; pubescence whitish. Mesoscutum shiny with scattered, irregular, shallow punctures; pubescence similar to that on head. Abdomen dull; terga 1-5 with irregular transverse microsculpture, following terga sparsely sculptured, tergum 8 with large median hollow (Fig. 84A). Genitalia: Figs 84B-D.

Length: 6.2-7.2 mm.

Female

Unknown.

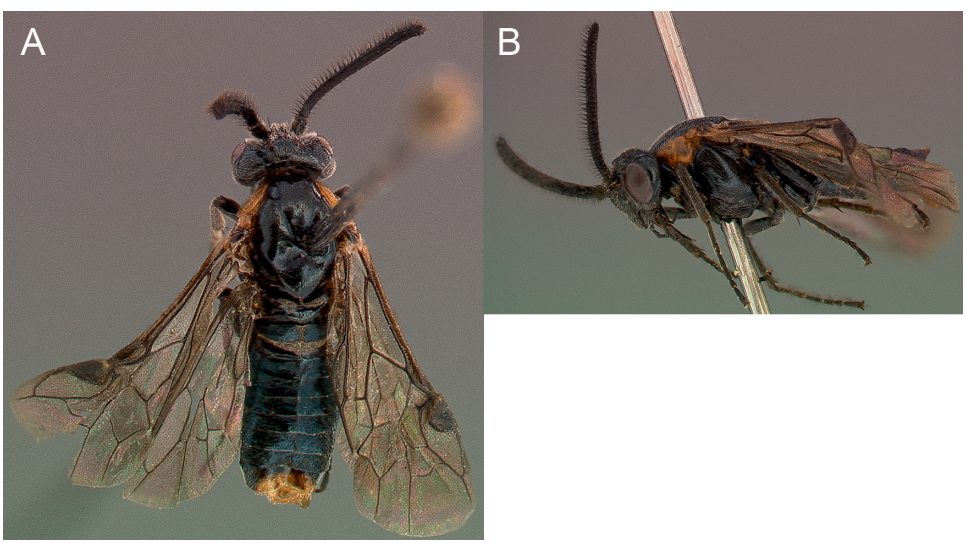

Fig. 83. A-B. *Arge namaensis*, habitus, male. **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

Etymology

This species was named after the Namaland, the area around Steinkopf (Northern Cape Province, South Africa), its collection locality.

Distribution

South Africa (Northern Cape Province, Western Cape Province) (Fig. 172).

Host plant

Unknown.

Ecology and habitat

The habitats are located in the Succulent Karoo Biome and the Fynbos Biome, especially in the Renosterveld vegetation type and West Coast Strandveld vegetation type (Fig. 56) dominated by *Euphorbia* spp. (Euphorbiaceae) and *Rhus* spp. (Anacardiaceae). Both biomes belong to the winter rainfall zone. The flight season is not well known; the species has been recorded from June to August.

Remarks

Arge namaensis belongs to the *A. capensis* species group (Koch & Liston 2012a).

The anterior margin of the pronotum is not always completely black coloured, sometimes the interior margin of tegula is blackish spotted and tergum 7 has a narrow yellow margin on the apex. Furthermore, the blue metallic lustre is more or less distinctly visible on the head and thorax, whereas on the abdomen this lustre is always conspicuously developed.

The differential diagnosis of the similarly coloured *A. krabbefonteinensis* is discussed under that species.

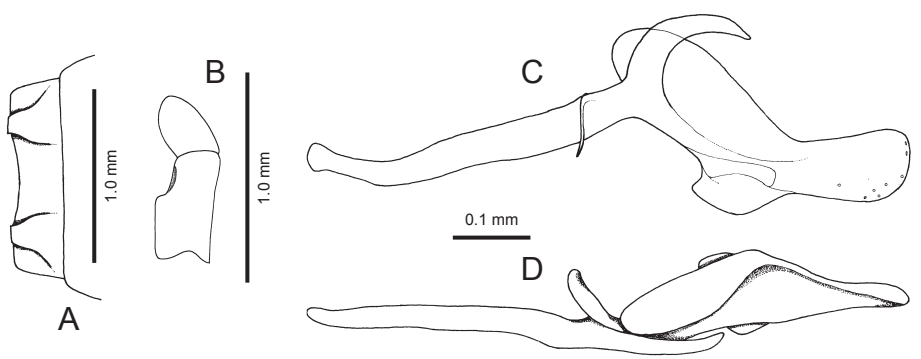

Fig. 84. A-D. *Arge namaensis*. **A**. Tergum 8. **B**. Harpe and parapenis (right, ventral aspect). **C**. Penis valve (left, lateral aspect). **D**. Penis valve (right, dorsal aspect).

Arge rufocyanea (Enslin, 1911)

Hylotoma rufocyanea Enslin, 1911: 663. ♀. Type locality: Capstadt [Cape Town], Capland (Western Cape Province, South Africa] (TMSA).

Female (Figs 85A, B)

Head black with very slight blue metallic lustre; apical half of mandible apically light reddish to dark reddish; flagellum dark brown. Thorax orange with following black: propleuron, a very narrow antero-lateral margin of pronotum, a small patch in apical angle of median lobe of mesoscutum adjacent to lateral lobe and mesoscutellum, metascutellum, the posterior margin of katepimeron and metapleuron. Legs black. Wings slightly infuscate throughout; fore wing with indistinct smoky substigmal spot, intercostal area somewhat darker; stigma, costa, subcosta and venation blackish. Abdomen black with blue metallic lustre; terga 8-10 and sawsheath orange.

Head parallel behind eyes. Antenna 1.5× as long as maximum head width; flagellum slightly enlarged towards apex, and quadrangular in cross section, interior surface with conspicuously compressed longitudinal carina, other longitudinal carinae more weakly compressed. Eyes converging below. Anterior margin of clypeus shallowly circularly emarginate, supraclypeal area very flatly rounded up to base of interantennal carinae, interantennal carinae moderately ridged between antennae, converging downwards, short, extending about one third of way to clypeus.

Vertex and gena moderately densely micropunctate, shiny; frons, supraclypeal area and clypeus somewhat more densely punctate, shiny; pubescence light brown. Mesoscutum nearly impunctate, shiny; pubescence yellowish. Abdomen irregularly transversely microsculptured, shiny. Sawsheath: Figs 86A, B. Lancet with about 15 serrulae (Figs 86B, C).

Length: 7.7-7.8 mm.

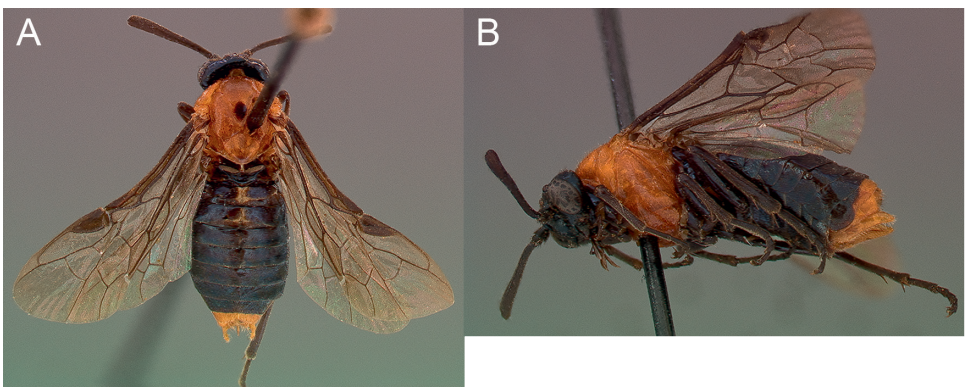

Fig. 85. A-B. *Arge rufocyanea*, habitus, female. **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

Male

Unknown.

Etymology

The name alludes to the colouration of the body: *rufo* (red) and *cyanea* (blue).

Distribution

South Africa (Western Cape Province) (Fig. 174).

Host plant

Unknown.

Ecology and habitat

The habitat belongs to the Coastal Fynbos vegetation type of the winter rainfall zone. Only two specimens are known from Cape Town and the surrounding area collected more than 100 years ago. The flight season is not well known, the species was recorded in October and November.

Remarks

In the course of the revision of the *Arge capensis* species group (Koch & Liston 2012a), *A*. *rufocyanea* (Enslin) was recognized as a valid species and removed from synonymy with *A. capensis* (Klug).

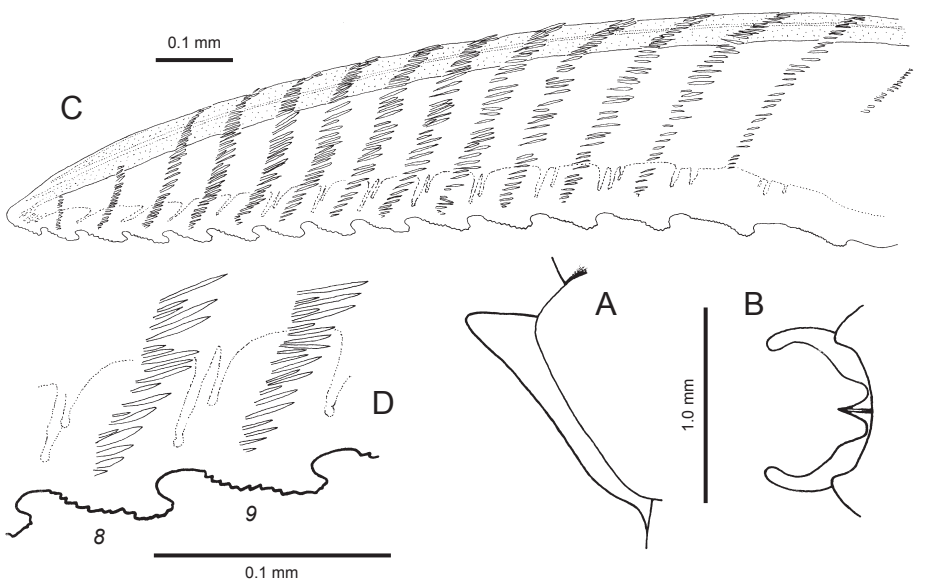

Fig. 86. A-D. *Arge rufocyanea*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 8-9.

Arge rufocyanea belongs to the *A. capensis* species group by Koch & Liston (2012a). It is very similarly coloured to *A. capensis*, and differs especially in the uniformly cigar-shaped trichoid sensilla on the lateral surface of the lancet, which are long and filiform in the latter species.

Arge sjoestedti Konow, 1907

Arge sjoestedti Konow, 1907b: 307. ♀. Type locality: Kaffraria (Eastern Cape Province, South Africa) (SDEI).

Female (Figs 87A, B)

Head yellow, vertex black; mandible apically dark brown; antenna black. Thorax yellow with following black: propleuron, narrow anterior margin and centre of pronotum, postspiracular sclerite, mesoscutum except for narrow lateral margin of median and lateral lobe, mesopleuron, mesosternum, katepimeron, metepisternum. Legs black. Wings flavescent-hyaline, in apical half slightly darker; fore wing with a smoky substigmal spot; intercostal area flavescent, stigma blackish, costa and subcosta entirely yellow, rest of venation bicoloured with yellow in basal and dark brown in apical half. Abdomen yellow; terga1-8 broadly black with slight blue metallic lustre.

Head conspicuously enlarged behind eyes. Antenna as long as maximum head width; flagellum conspicuously enlarged towards apex, quadrangular in cross section, interior surface with conspicuously compressed longitudinal carina, other longitudinal carinae more weakly compressed. Eyes not converging below. Anterior margin of clypeus shallowly emarginate, supraclypeal area rounded and protruding up to base of interantennal carinae, interantennal carinae very obtusely ridged between antennae, slightly converging and later diverging downwards, extending about one quarter of way to clypeus.

Fig. 87. A-B. *Arge sjoestedti*, habitus, female. **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

Vertex and gena moderately densely micropunctate, shiny, frons densely punctate, shiny, supraclypeal area and clypeus rugosely sculptured, subshiny; pubescence whitish. Mesoscutum obscurely micropunctate, shiny; pubescence similar to that on head. Abdomen irregularly transversely microsculptured, shiny. Sawsheath: Figs 88A, B. Lancet with about 35 serrulae (Figs 88C, D).

Length: 11.3-13.0 mm.

Male

Unknown.

Etymology

The species was named after the Swedish naturalist Professor Dr. Y. Sjoestedt (1866-1948), who undertook several expeditions to Africa.

Distribution

Namibia (Region: Otjozondjupa, Outjo), South Africa (Province: Eastern Cape, Limpopo, Northern Cape) (Fig. 174).

Host plant

Unknown.

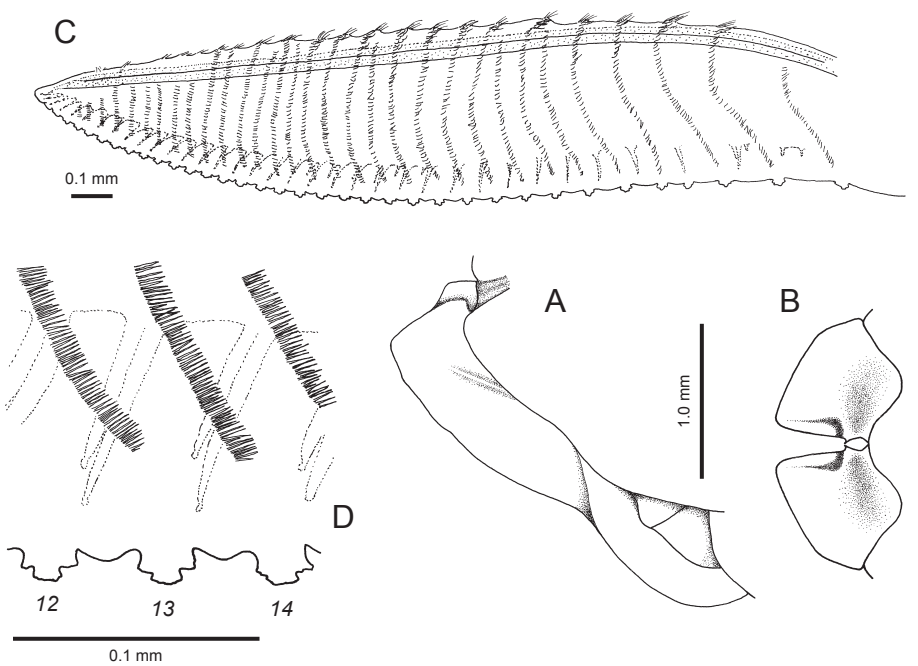

Fig. 88. A-D. *Arge sjoestedti*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 12-14.

Ecology and habitat

All specimens were collected in habitats of the Thornbush Savanna Biome and the Succulent Karoo Biome. The flight season seems to be between January and March.

Remarks

Arge sjoestedti belongs in the *A. sugillata* species group (Pasteels 1953a).

By its colouration and the strongly enlarged head behind the eyes this species is clearly distinguished from all other included *Arge* species from the study region.

Sometimes the black or blackish markings are much more extensive and include the frons, the supraclypeal area, the complete thorax and the ventral surface of abdomen. On the other hand in the pale form the lateral lobe of mesoscutum may be more or less yellow.

Arge speciosa (Klug, 1834)

Hylotoma speciosa Klug, 1834: 233. ♀. Type locality: Pr. b. sp. [Promontorium Bonae Spei] [Cape of Good Hope], Capland (Western Cape Province, South Africa) (MFN).

Hylotoma urania W.F. Kirby, 1882: 75. ♀. Type locality: Natal, [KwaZulu-Natal Province], South Africa (BMNH).

Female (Figs 89A, B)

Head and antenna black with conspicuous blue metallic lustre; apical half of mandible reddish to dark reddish apically. Thorax black with conspicuous blue metallic lustre. Legs black with blue metallic lustre; tibiae and tarsi yellow except for blackish tarsomeres 5. Wings bicoloured, flavescent basally and slightly infuscate

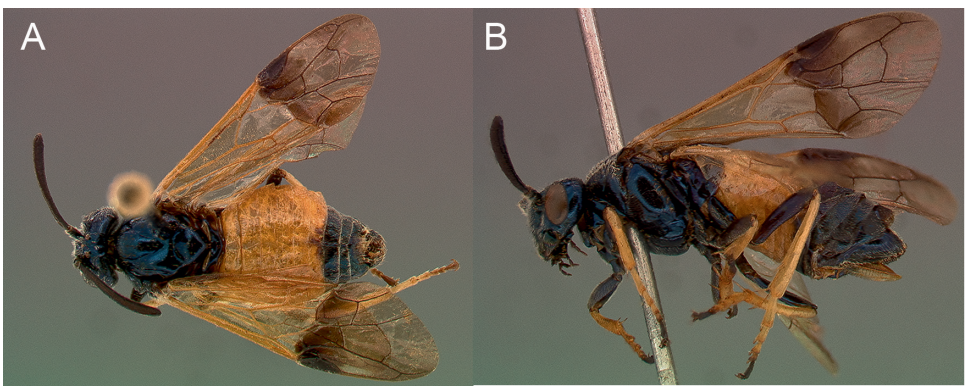

Fig. 89. A-B. *Arge speciosa*, habitus, female. **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

apically separated by a transverse fuscous stripe below the black stigma; stigma blackish, costa and subcosta entirely yellow, rest of venation yellow in basal and light brown in apical half. Abdomen yellow; terga 1,7-10, sterna 6,7 black and sawsheath black with blue metallic lustre.

Head slightly enlarged behind eyes. Antenna 1.3× as long as maximum head width; flagellum conspicuously enlarged towards apex, quadrangular in cross section, ventral surface with conspicuously compressed longitudinal carina, other longitudinal carinae more weakly compressed. Eyes not converging below. Anterior margin of clypeus circularly excised medially, supraclypeal area roundly protruding up to start of interantennal carinae, interantennal carinae moderately ridged between antennae, conspicuously converging downwards and later diverging, extending nearly half way to clypeus.

Vertex and gena moderately densely micropunctate, shiny; frons and clypeus densely punctate, shiny; supraclypeal area rugosely sculptured, subshiny; pubescence whitish. Mesoscutum moderately densely shallowly punctate, shiny; pubescence similar to that on head. Abdomen irregularly microsculptured, shiny. Sawsheath: Figs 90A, B. Lancet with about 20 serrulae (Figs 90C, D).

Length: 11.2-11.7 mm.

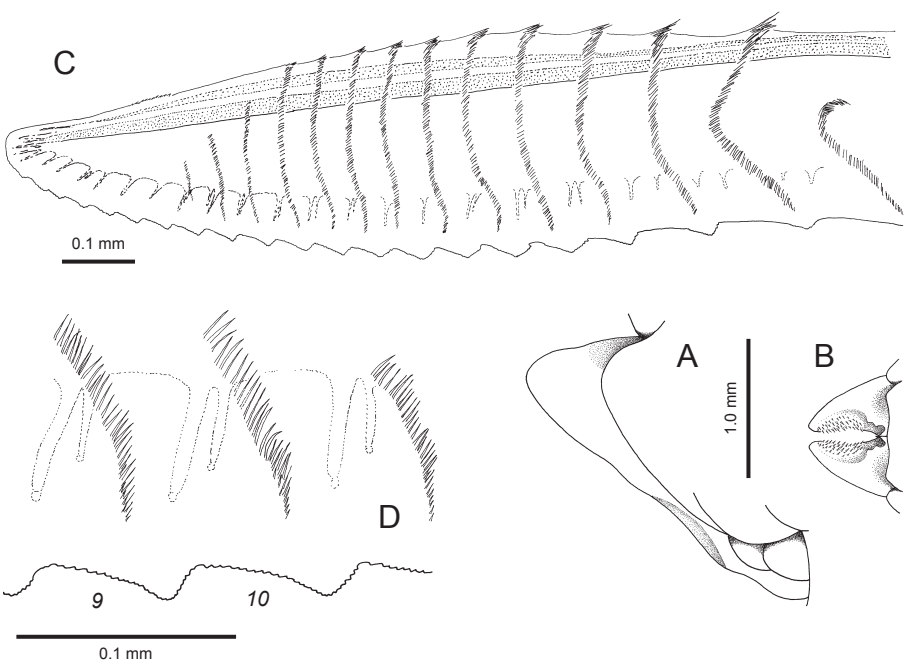

Fig. 90. A-D. *Arge speciosa*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 9-10.

Male

Unknown.

Etymology
The Latin adjective *speciosa* means “beautiful” or “splendid”.

Distribution

South Africa (Province: KwaZulu-Natal, Mpumalanga, Western Cape) (Fig. 175).

Host plant

Unknown.

Ecology and habitat

The type locality belongs to the Coastal Fynbos vegetation type of the winter rainfall zone, but the material collected later is from the Indian Ocean Coastal Belt Biome (Mucina & Rutherford 2006) of the summer rainfall zone. No information is available on the preferred habitats of *A. speciosa*.

In the KwaZulu-Natal Province the species was recorded from October to December and in April.

Remarks

Arge speciosa belongs to the *A. sugillata* species group (Pasteels 1953a).

Comparing the locus typicus “Cape of Good Hope” with the other material from KwaZulu-Natal Province (Indian Ocean Coastal Belt Biome), it seems possible that the published type locality is incorrect, because the flora of the Cape of Good Hope belongs to the Fynbos Biome, which is very distinct to the flora of the Indian Ocean Coastal Belt Biome.

Arge speciosa is well characterized by its black femora, the entirely yellow tibiae, the transverse fuscous stripe of the fore wing and the conspicuous blue metallic lustre of all black body parts.

Sometimes the black colouration of the abdomen is more extensive on tergum 2, with a medial spot to tergum 5 and the following terga entirely black.

Arge spei (Enslin, 1911)

Hylotoma spei ENSLIN, 1911: 657. ♂. Type locality: Bethel, W. Capland (Western Cape Province, South Africa) (MFN).

Male (Figs 91A, B)

Head black; labrum brown, basal half of mandible yellow becoming reddish brown

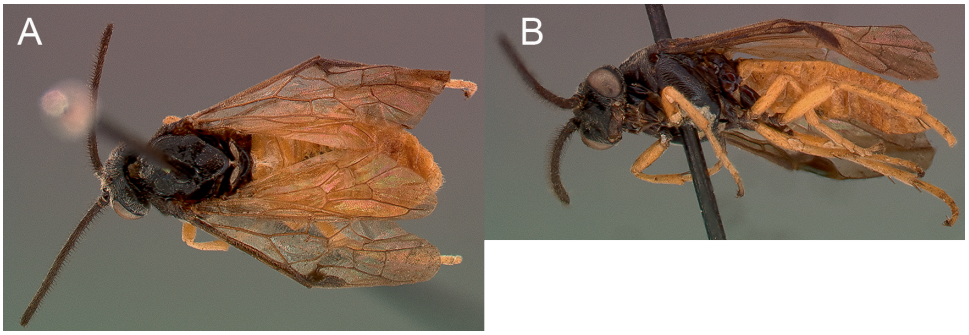

Fig. 91. A-B. *Arge spei*, habitus, male (holotype). **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

apically; scape and pedicel blackish, flagellum brown. Thorax black. Legs yellow; coxae and trochanters black. Wings very slightly infuscate throughout; substigmal spot of fore wing very small; intercostal area conspicuously infuscate, costa blackish, stigma and subcosta dark brown, rest of venation light brown. Abdomen yellow.

Head slightly narrowed behind eyes. Antenna 2.0× as long as maximum haed width of head; flagellum not enlarged towards apex, triangular in cross section, slightly flattened towards apex, ventral surface with conspicuously compressed longitudinal carina, dorsal and outer surface with weaker longitudinal carinae. Eyes slightly converging below. Anterior margin of clypeus very shallowly emarginate medially; supraclypeal area nearly flatly rising up to start of interantennal carinae, interantennal carinae sharply ridged between antennae, very slightly diverging downwards, short, extending about one quarter of way to clypeus.

Vertex and gena with scattered micropunctures, shiny; frons and intercarinal area more densely micropunctate, shiny; clypeus, supraclypeal area densely punctate with larger punctures, shiny; pubescence whitish. Mesoscutum very sparsely micropunctate, shiny; pubescence similar to that on head. Abdomen scarcely microsculptured, shiny. Genitalia: Figs 92A, B.

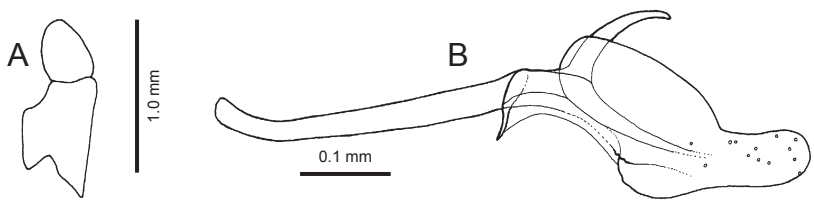

Fig. 92. A-B. *Arge spei*. **A**. Harpe and parapenis (right, ventral aspect). **B**. Penis valve (left, lateral aspect).

Length. 8.2 mm.

Female

Unknown.

Etymology

This species was named after the Latin name “Promontorium Bonae Spei” for the Cape of Good Hope.

Distribution

South Africa (Western Cape Province) (Fig. 170).

Host plant

Unknown.

Ecology and habitat

The type locality belongs to Mountain Fynbos of the winter rainfall zone. The flight season is unknown; the sampling date is not documented (Koch 2013).

Remarks

Arge spei belongs to the *A. annulipes* species group (Pasteels 1953a).

This species is only known from the holotype collected more than 100 years ago (Enslin 1911).

Arge spei is distinguished from the similarly coloured *A. annulipes* by its entirely yellow tibiae and tarsi, the nearly flat supraclypeal area, as well as the downwards slightly diverging interantennal carinae. Furthermore, in *A. annulipes* the dorsal surface of antenna is more or less pale and the metepimeron is partly yellow. The shape of the penis valve of *A. spei* is conspicuously different from *A. annulipes* (Fig. 48E)

Arge stuhlmanni (Kohl, 1893)

Hylotoma stuhlmanni Kohl, 1893: 189. ♀. Type locality: Mossambique [Mozambique] [ZMUH].

Female (Figs 93A, B)

Head and antenna black; apical half of mandible dark reddish becoming blackish apically. Thorax yellow; mesoscutum except for very narrow lateral margin of lateral lobe, mesoscutellum, metascutellum, mesosternum, and narrow ventral part of mesopleuron black. Legs yellow with apical tarsomere of fore leg and tarsus of middle leg blackish, apex of hind tibia and hind tarsus black. Wings subhyaline with apical half very slightly infuscate; fore wing with a small smoky substigmal

spot; intercostal area of fore wing flavescent hyaline, blackish infuscate apically, stigma and venation in apical half blackish, costa and subcosta yellow with more or less blackish apex , venation in basal half more or less yellowish. Abdomen yellow; two medial spots on terga 1,2 and one medial spot on terga 3,5-7 blackish.

Head parallel-sided behind eyes. Antenna 1.6× as long as maximum head width; flagellum slightly enlarged towards apex, and slightly quadrangular in cross section, inner surface with conspicuously compressed longitudinal carina, the other longitudinal carinae weaker. Eyes very slightly converging below. Anterior margin of clypeus shallowly, circularly emarginate medially, supraclypeal area very flatly rounded up to start of interantennal carinae, interantennal carinae ridged between antennae, converging downwards, extending about one third distance to clypeus.

Vertex and gena shining, nearly impunctate; frons and clypeus with scattered, shallow punctures, shiny; supraclypeal area very densely punctate and subshiny; pubescence whitish. Mesoscutum sparsely micropunctate, shiny; pubescence similar to that on head. Abdomen irregularly microsculptured, shiny. Sawsheath: Fig. 94A. Lancet with about 17 serrulae (Figs 94B, C).

Length: 5.5-7.5 mm.

Male

Head and antenna black; apical half of mandible dark reddish becoming blackish apically. Thorax black with pronotum except for black median marking and tegula yellow. Legs yellow with coxae, trochanters, and bases of femora narrowly black, apex of hind tibia broadly black ringed, hind tarsus black, apical tarsomere of fore leg and distal tarsomeres of middle leg blackish. Abdomen yellow with terga 1,2,5-7 broadly and terga 3,4 narrowly black.

Head slightly narrowed behind eyes. Antenna 2.1× as long as maximum head width; flagellum not enlarged towards apex, ventral carina more sharply compressed than in female. Other features as for female. Genitalia: Figs 94D, E.

Length: 5.5-6.5 mm.

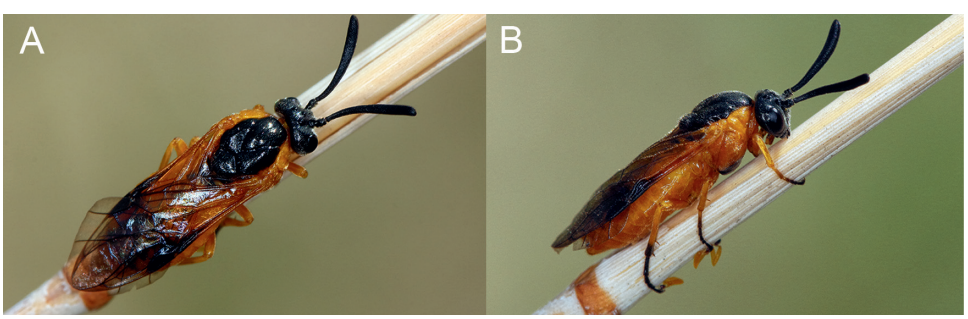

Fig. 93. A-B. *Arge stuhlmanni*, habitus, female. alive. **A**. female, dorsal aspect. **B**. female, lateral aspect. (Photos by J. Deckert)

Etymology

This species was named after Franz Ludwig Stuhlmann (1863-1928), a lieutenant of the German Protectorate Force in Africa who sampled insects, amongst other organisms, especially in East Africa.

Distribution

Botswana, Malawi, Mozambique, Namibia (Region: Caprivi, Erongo, Komas, Kunene, Okavango, Otjozondjupa) (Fig. 175) South Africa (Provinc: Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga), Swaziland, Tanzania, Zambia, Zimbabwe; detailed distribution is presented by Koch (2005c).

Host plant

Unknown.

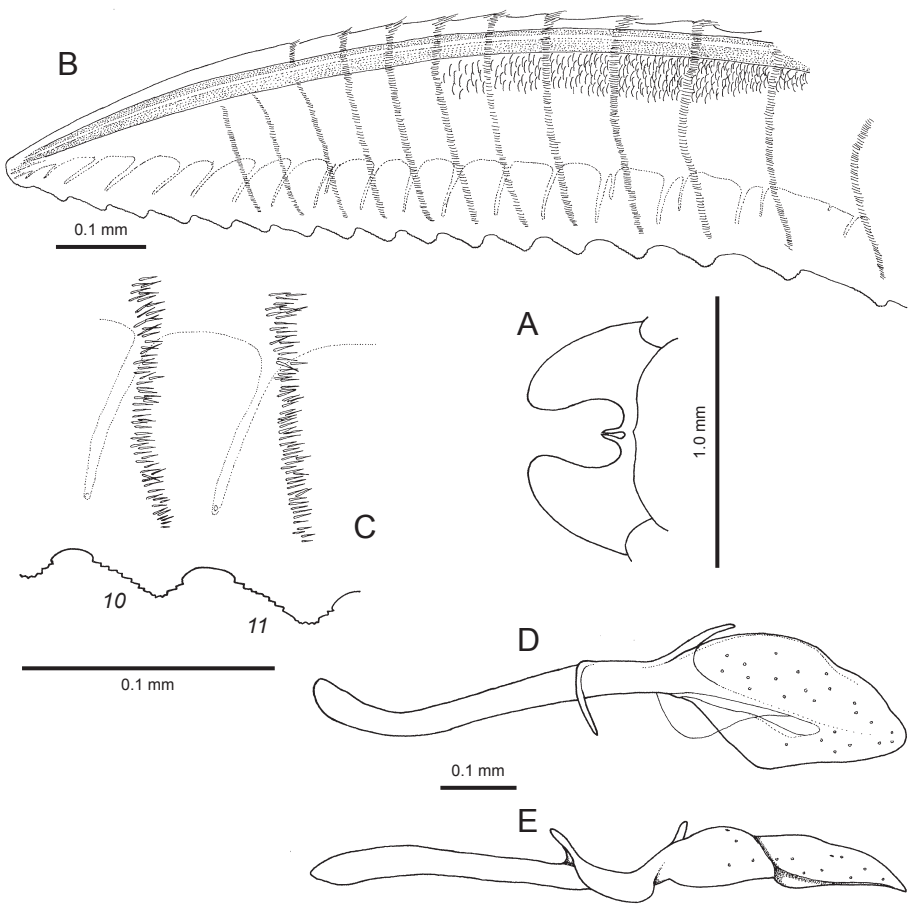

Fig. 94. A-E. *Arge stuhlmanni*: **A**. Sawsheath (dorsal aspect). **B**. Lancet. **C**. Serrulae 10-11. **D**. Penis valve (left, lateral aspect). **E**. Penis valve (left, dorsal aspect).

Ecology and habitat

Arge stuhlmanni often lives in the same habitat as *A. deckerti* (see the latter species). The Namibian habitats are located in the Woodland Savanna Biome and the Thornbush Savanna Biome (Fig. 95). The flight season in Namibia is from December to April.

Remarks

The holotype of *A. stuhlmanni* was deposited in the ZMUH and was destroyed in World War II.

Arge stuhlmanni is very similarly coloured to *A. deckerti*, but *A. deckerti* differs usually by the entirely yellow costa and subcosta of fore wing (Fig. 60).

As in *A. deckerti*, the colour pattern varies. The colouration of the costa and subcosta varies from a black apical half to blackish at extreme apex adjacent to the stigma (Figs 93A, B). Some females have a narrow black posterior margin of mesopleuron. In very few females the mesopleura may be almost entirely black. The black colouration on the upper surface of the abdomen may be reduced or sometimes entirely absent, or is extended similarly to that of *A. deckerti*. The hind femora of males may be entirely yellow.

Fig. 95. The habitat of *Arge stuhlmanni* on the farm “Wilsonfontein” in the Nama Karoo Biome between Windhoek and Swakopmund (Namibia). (Photo by J. Deckert)

Arge taeniata (Klug, 1834). Pelargonium sawfly

Hylotoma taeniata Klug, 1834: 233. ♀. Type locality: Capland, Pr. b. sp. [Promontorium bonae spei] [Cape of Good Hope] (Western Cape Province, South Africa) (MFN).

Athalia pelargonii Skaife, 1954: 312. ♀. Type locality: Houtbay, Cape Province (Western Cape Province, South Africa) (BMNH).

Pelargonium sawfly is the approved common name.

Female (Figs 96A, B)

Head and antenna black; apical half of mandible dark reddish to blackish apically. Thorax orange with the following black: a broad longitudinal stripe on mesoscutum and mesoscutellum, metascutellum, ventral half of mesopleuron, mesosternum, katepimeron, metapleuron. Legs black with very slight blue metallic lustre. Wings slightly infuscate throughout; substigmal spot of fore wing negligible; intercostal area flavescent-hyaline; costa and subcosta yellow, blackish at extreme apex adjacent to dark brown stigma; rest of venation yellow to light brown in apical half.

Abdomen yellow, tergum 1,2 with two blackish medial spots, terga 6,7 with small black medial spot, following terga with medial spots in various widths, sawsheath with black apex.

Head very slightly enlarged behind eyes. Antenna 1.2× as long as maximum head width; flagellum conspicuously enlarged towards apex and looks truncate apically, quadrangular in cross section, ventral surface with moderately compressed longitudinal carina, other longitudinal carinae weakly compressed. Eyes converging below. Anterior margin of clypeus conspicuously triangularly emarginate medially, supraclypeal flatly rounded up to base of interantennal carinae, interantennal

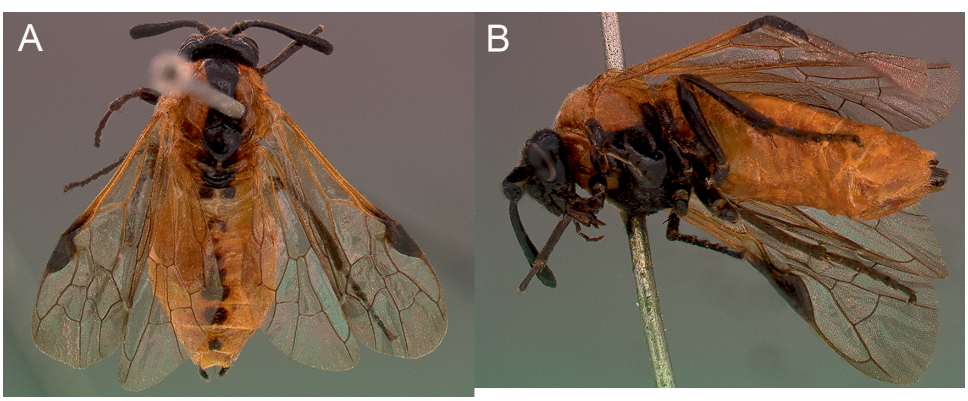

Fig. 96. A-B. *Arge taeniata*, habitus, female. **A**. Dorsal aspect. **B**. Lateral aspect. (Photos by A.D. Liston)

carinae moderately sharply ridged between antennae, obscurely converging downward, extending about a quarter of way to clypeus.

Vertex and gena nearly impunctate, shiny; frons sparsely micropunctate, shiny, supraclypeal area moderately densely punctate, shiny, clypeus rugosely sculptured, subshiny; pubescence light yellow. Mesoscutum very shallowly punctate, shiny; pubescence similar to that on head. Abdomen obscurely microsculptured, shiny. Sawsheath: Figs 97A, B. Lancet with about 15 serrulae (Figs 97C, D)

Length: 7.2-8.3 mm.

Male

Unknown.

Etymology

The Latin adjective *taeniata* means “banded”, and probably refers to the colour pattern of the thorax.

Distribution

South Africa (KwaZulu-Natal Province, Western Cape Province) (Fig. 170).

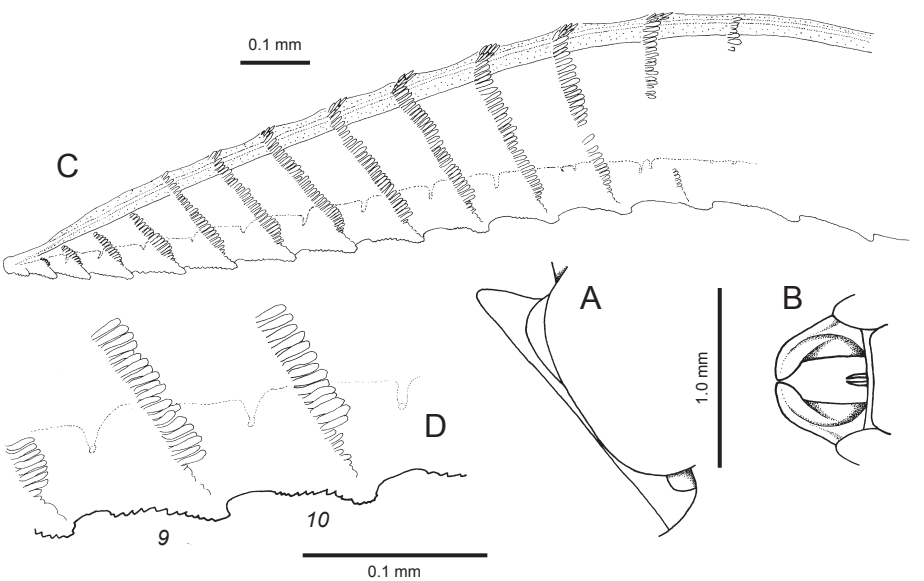

Fig. 97. A-D. *Arge taeniata*. **A**. Sawsheath (lateral aspect). **B**. Sawsheath (dorsal aspect). **C**. Lancet. **D**. Serrulae 9-10.