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The status of *Crossopalpus obscuripes* (Adams), a new junior synonym of *Crossopalpus aenescens* (Wiedemann) (Diptera: Hybotidae: Tachydromiinae)

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Adams (1905) described a new species, *Stilpon obscuripes*, from two female specimens collected near Salisbury, Rhodesia (now Harare, Zimbabwe) by Frank L. Snow. Although Smith (1969) briefly treated this species under the genus *Stilpon* Loew in his monograph on the Empididae of southern Africa, it is evident that he had not seen the type material. The species remained little known until Cumming & Cooper (1992) examined the syntypes and transferred the species to *Crossopalpus* Bigot, indicating that *C. obscuripes* (Adams) was allied to *C. aenescens* (Wiedemann). During preparation of the Hybotidae chapter for the Manual of Afrotropical Diptera (Sinclair & Cumming, accepted), *C. obscuripes* was re-examined and discovered to be identical to *C. aenescens*, which was originally described from South Africa. The *Crossopalpus aenescens*-group was previously studied by Collin (1960), who recognized four included species, and Smith (1967), who provided a key to the species and illustrations of the male terminalia (i.e., right surstylus) of this complex.

Crossopalpus aenescens (Wiedemann)

(Fig. 1)

Drapetis aenescens Wiedemann, 1830: 649. Type locality: “the Cape” [South Africa].

Drapetis crassa Loew, 1858: 341. Type locality: “the Cape” [South Africa].

Stilpon obscuripes Adams, 1905: 156, **syn. nov.** Type locality: Salisbury, Rhodesia [Zimbabwe].

Stilpon obscuripes: Smith, 1969: 51 (key); Smith, 1980: 433 (catalogue).

Crossopalpus obscuripes (Adams): Cumming & Cooper, 1992: 980.

Type material examined. *Stilpon obscuripes*: **LECTOTYPE** (here designated in order to fix identity of the species) ♀ labelled: “Salisbury [Rhodesia=Zimbabwe]/ S. Africa./ F.L.Snow”; “Oct 1900/ 5050 ft”; “COTYPE/ S./ obscuripes/ C.F. Adams [red label]”; “Stilpon/ obscuripes/ Adams [red bordered label]”; “LECTOTYPE/ of Stilpon/ obscuripes Adams/ des. Cumming & Sinclair 2014 [red label]” (SMEK). **PARALECTOTYPE**: Same data as lectotype (1 ♀, SMEK).

Additional material examined. **Botswana:** Serowe Farmer’s Brigade [22°9'56.38"S 26°43'31.37"E], viii.1991, Malaise trap (2 ♀, CMNH). **Madagascar:** Mahajanga Prov., Parc Nat. Tsingy de Bermaraha, 50 m, 19°8'31"S 44°49'41"E, 6–10.xi.2001, Malaise trap, tropical dry forest (1 ♂, 2 ♀, CAS); Mahajanga Prov., Forêt de Tsimembo, 20 m, 19°1'17"S 44°26'26"E, 21–25.xi.2001, Malaise trap, tropical dry forest (1 ♂, 1 ♀, CAS); Toliara Prov., Forêt de Mahavelo, Isantoria River, 110 m, 24°45'30"S 46°9'26"E, 28.i.–1.ii.2002, Malaise trap, spiny forest thicket (18 ♂, 22 ♀, CAS); Toliara Prov., Parc Nat. de Tsimanampetsotsa Forêt de Bemanateza, 90 m, 23°59'32"S 43°52'50"E, 22–26.iii.2002, Malaise trap, spiny forest thicket (1 ♂, CAS); Toliara Prov., Forêt de Kirindy, 100 m, 20°2'42"S 44°39'44"E, 28.xi.–3.xii.2001, at light, tropical dry forest (1 ♂, 1 ♀, CAS). **Namibia:** Caprivi Pk, 18°9'56"S 21°44'31"E, 16–18.xii.1999 (1 ♀, NMNW); Katima Mulilo District, Ndopu, Malaise trap (1 ♂, AMGS); Karibib District, 22°22'40"S 15°44'58"E, 13–15.iv.2001, Malaise trap (2 ♂, 1 ♀, NMNW); Kaudom Game Res., Leeupan, 18°40'S 20°52'E, 25.ii.1992 (1 ♀, NMNW); Kavango, Popa Falls, 18°7'S 21°33'E, 26–31.viii.1971 (1 ♀,

NMNW); Khorixas District, Huab River, 20°37'9"S 13°54'31"E, 23–26.x.1998, Malaise trap (1 ♂, 2 ♀, NMNW); Khorixas District, Crowthersquelle, 19°50'52"S 13°30'39"E, 30.xi.1999 (1 ♀, NMNW); Khorixas District, 19°52'6"S 14°1'13"E, 4.i.2000 (3 ♂, NMNW); Khorixas District, river, 19°50'12"S 14°42'16"E, 24–26.v.2001 (1 ♂, NMNW); Lüderitz, Obib waters, 28°0'S 16°38'E, 19–21.ix.1997, 22–26.viii.1998 (5 ♂, 6 ♀, NMNW); Lüderitz, Orange River, 28°6'S 16°52'E, 19.ix.1997 (1 ♂, NMNW); Omaruru District, Ugab River, 20°58'5"S 14°6'36"E, 21–24.x.1998, Malaise trap (2 ♂, 1 ♀, NMNW); Opuwo District, Seafontein Fort, 19°7'15"S 13°37'6"E, 1–3.i.2000 (1 ♀, NMNW); Ovamboland, ix.–26.x., 6.x.–7.xii.1993 (32 ♂, 18 ♀, NMNW); Rundu District, Katara Okavango River, 17°48'56"S 18°53'38"E, 20–23.i.1998 (2 ♂, 2 ♀, NMNW); Skeleton Coast Pk, Kunene River mouth, 17°16'S 11°47'E, 20–22.iv.1994 (2 ♂, 5 ♀, NMNW); Windhok District, Greylingshof, Gaub Canyon, Malaise trap, 23°29'S 16°46'E, 2–3.x.1999 (21 ♂, 10 ♀, NMNW). **South Africa:** Northern Cape Prov., 15 km N Nieuwoudtville, 27.ix.1990 (1 ♀, BMSA); Free State, Brandfort, Florisbad Res. Stat., 28°46.039'S 26°04.234'E, 4–6.iv.2009, Savanna (2 ♂, 1 ♀, BMSA); Kruger NP, Skukuza, Malaise trap, 15–18.xii.1985 (1 ♀, CNC); 15 kmE Klaserie, 19–31.xii.1985 (1 ♀, CNC); Western Cape, Gamkaskloof, 33°21.808'S 21°37.650'E, 16–18.x.2012 (1 ♂, 3 ♀, CNC); Zululand, Ingwavuma Manzengwenya, 27.15S 32.44E, 11.xi.1982, coastal bush (1 ♀, AMGS). **Uganda:** Bwamba, 16–18.vii.1975 (2 ♂, 5 ♀, CNC). **Zimbabwe:** Same data as lectotype, except in swamp (1 ♀, SMEK); except v.1901 (1 ♀, SMEK).



FIGURE 1. Lectotype female of *Crossopalpus obscuripes* (Adams). Scale bar = 1.0 mm.

Diagnosis. Moderately large mostly black species, 2.5–3.5 mm in length. Head, except ventral gena, clypeus and proboscis, covered in grey tomentum; palpus dark brown to black, densely tomentose; antenna dark brown to black. Thorax with scutum shiny black, covered in long pale hair-like setae; pleura shiny black with patches of grey tomentum on postpronotal lobe, proepisternum, proepimeron, anepisternum and anepimeron, with band of grey tomentum running from ventral katapisternum to laterotergite and metepimeron. Legs yellowish brown to brown

with femora (except apices) black, apical tarsomeres brown to black; hind femur without long anterodorsal setae; hind tibia with long ventral setae. Wing hyaline with brown veins; R_{4+5} and M_1 convergent apically. Halter pale yellow. Abdomen shiny black, covered in long pale hair-like setae; tergite 3 not thickened medially along posterior margin; tergite 4 desclerotized anteriorly with eversible paired sacs that contain long hair-like microtrichia, sacs concealed underneath tergite 3 as described by Shamshev *et al.* (2005) for other species in *Crossopalpus aenescens*-group. Male genitalia large, longer than tergites 6–7 combined; right surstylus divided into two projected lobes, lower lobe (positionally) expanded apically and truncate (see Smith 1967, fig. 3), upper lobe (positionally) elongate and rounded apically (see Smith 1967, fig. 4). Female terminalia with cercus black.

Remarks. *Crossopalpus aenescens* has been recorded from Chad, Democratic Republic of Congo, Namibia, Sierra Leone, South Africa, Sudan, Tanzania and Uganda (Smith 1967, 1969, 1980; Grootaert & Shamshev 2013). The species is now also known from Botswana, Madagascar and Zimbabwe, and is often collected along shorelines. Smith (1975) indicates that records from Taiwan are probably based on misidentified specimens.

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