



New records of Afrotropical Tersilochinae (Hymenoptera: Ichneumonidae)

Новые находки афротропических терзилохин (Hymenoptera: Ichneumonidae: Tersilochinae)

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Abstract. A new data on distribution of 19 species of Tersilochinae (Ichneumonidae) belonging to the genera *Allophrys* Förster (four species), *Aneucelis* Förster (five spp.), *Diaparsis* Förster (eight spp.) and *Tersilochus* Holmgren (two spp.) in the Afrotropical Region are provided. *Tersilochus abyssinicus* Khalaim, 2006, **syn. nov.** is synonymised with *T. moestus* Holmgren, 1868. The subfamily Tersilochinae is recorded from Benin, Côte d'Ivoire, Mozambique, Niger, Nigeria, Sierra Leone, Togo, Zambia and Yemen for the first time.

Резюме. Представлены новые данные о распространении в Афротропической области 19 видов терзилохин (Ichneumonidae: Tersilochinae), принадлежащих к родам *Allophrys* Förster (четыре вида), *Aneucelis* Förster (пять видов), *Diaparsis* Förster (восемь видов) и *Tersilochus* Holmgren (два вида). *Tersilochus abyssinicus* Khalaim, 2006, **syn. nov.** сведен в синонимы к *T. moestus* Holmgren, 1868. Подсемейство Tersilochinae впервые отмечается из Бенина, Кот-д'Ивуара, Мозамбика, Нигера, Нигерии, Сьерра-Леоне, Того, Замбии и Йемена.

Key words: parasitoids, taxonomy, Afrotropical Region, Hymenoptera, Ichneumonidae, Tersilochinae, new synonym

Ключевые слова: паразитоиды, таксономия, Афротропическая область, Hymenoptera, Ichneumonidae, Tersilochinae, новый синоним

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Introduction

Until the 21th century, the Afrotropical fauna of the subfamily Tersilochinae was virtually unknown, being represented by only three species from two genera (Townes & Townes, 1973: 167): *Diaparsis evanescens* (Morley, 1912) from the Seychelles, *D. moesta* (Holmgren, 1868) and the cosmopolitan *Sathropterus pumilus* (Holmgren, 1860), the latter two from South Africa.

In the 21th century, Afrotropical Tersilochinae were studied by the author who revised all Afrotropical tersilochine genera and described 38 new species (Khalaim, 2006, 2007, 2009, 2010, 2013a, 2013b, 2013c; Khalaim et al., 2014). One species was also described from Reunion by Rousse & Villemant (2012), and the genus *Meggoleus* Townes, 1971 was recently deleted from the Afrotropical fauna (Khalaim, 2017). Following tersilochine genera are known to occur in the Afrotropical Re-

gion at present day: *Allophrys* Förster, 1869 (ten species), *Aneucelis* Förster, 1869 (eight spp.), *Dia-parsis* Förster, 1869 (17 spp.), *Heterocola* Förster, 1869 (one spp.), *Phradis* Förster, 1869 (two spp.), *Probles* Förster, 1869 (one spp.), and *Tersilochus* Holmgren, 1859 (three spp.). Most Afrotropical species of Tersilochinae were described (or recorded) from South Africa, while very scarce records are from other countries.

The aim of this work is to provide a plenty of new distributional records of Tersilochinae from African countries, and to revise taxonomic status of three *Tersilochus* species.

Material and methods

This work is primarily based on the ichneumonid collections of the Naturalis, Leiden, The Netherlands (RMNH), and the former American Entomological Institute (AEIC), which was recently moved to the Utah State University, Logan, Utah, USA. Some specimens were also examined from the collections of the Finish Museum of Natural History, Helsinki University, Helsinki, Finland (MZH), Oberösterreichisches Landesmuseum, Linz, Austria (OLML), the Texas A&M University, College Station, Texas, USA (TAMU), and the Iziko South African Museum, Cape Town, South Africa (SAMC). From these collections, a large amount of Tersilochinae material from Benin, Cameroon, Ethiopia, Côte d'Ivoire, Kenya, Mozambique, Namibia, Niger, Nigeria, Sierra Leone, South Africa, Tanzania, Togo, Uganda, Zambia, Zimbabwe and Yemen was examined. Some specimens are deposited in the Zoological Institute of the Russian Academy of Sciences, St Petersburg, Russia (ZIN).

Taxa and countries in *Material examined* and *Distribution* sections are given in the alphabetical order. Countries in which a species is recorded for the first time are marked by an asterisk (*). Morphological terminology follows that of Townes (1969, 1971), with changes according to Khalaim (2011). Photographs were taken in ZIN, with a DFC 290 digital camera attached to a Leica MZ16 stereomicroscope (Figs 1–17) and a Canon EOS 70D digital camera attached to an Olympus SZX10 stereomicroscope (Figs 18–22), and partially focused images were stacked in Helicon Focus 6 Pro software.

Taxonomy

Order Hymenoptera

Family Ichneumonidae

Subfamily Tersilochinae

Genus *Allophrys* Förster, 1869

Almost exclusively tropical genus with 34 described and many undescribed species. The South African fauna of *Allophrys* comprises nine species (Khalaim, 2013b, 2013c); new data on the distribution of five species in Cameroon, Kenya, South Africa and Uganda are provided. The genus is recorded from Cameroon and Kenya for the first time.

Allophrys astafurovae Khalaim, 2013

Remarks. The species differs from other Afrotropical congeners by the combination of black antennal flagellum, upper mandibular tooth slightly longer than the lower tooth, smooth and shining vertex, foveate groove distinct in anterior 0.7 of mesopleuron, fore wing with brachial cell closed posteriorly (hind abscissa of postnervulus present), basal area of propodeum flat, and ovipositor sheath almost as long as first tergite.

Material examined. **Kenya**, *Western Prov.*, Mt. Elgon, Malaise trap, 2–16.I.2006, coll. R. Copeland, 1 female (TAMU).

Distribution. *Kenya, South Africa.

Allophrys broadi Khalaim, 2013

(Figs 1, 2)

Remarks. *Allophrys broadi* is readily distinguished from other Afrotropical species in this genus by white apex of flagellum (Fig. 1) (sometimes apical flagellomere is infuscate). Fore wing with second recurrent vein (2m-cu) completely absent or discernible only posteriorly (Fig. 2).

Variation. Apical (or subapical) pale band on flagellum sometimes is weak and inconspicuous.

Material examined. **Cameroon**, *South-West Prov.*: Mt. Cameroon, Buea Town, 4°10.550'N, 9°12.255'E, 1800 m, 28.II–3.III.2008, coll. M. Řiha, 1 female (OLML); same locality, 4°11'N, 9°12'E, 1800 m, 1.III.2008, coll. J. Horák, 2 females (OLML). **Kenya**, Nairobi, 4–15.X.1997, coll. R. Wharton, 1 female (TAMU). **Uganda**, Kibale Forest (border), Kanyawara, Malaise trap, 10.VIII–10.IX.1996, coll. J.J.M. van Alphen, 1 female (RMNH).



Figs 1–12. *Allophrys broadi* (1, 2), *A. excavator* (3), *Aneucelis lanternaria* (4), *A. larga* (5), *Diaparsis abstata* (6–8), *D. interstitialis* (9, 10) and *D. inusitata* (11, 12), all females. **1**, head with antennae, lateral view; **2**, **4**, **10**, apex of fore wing; **3**, mandible; **5**, metasoma with ovipositor; **6**, **9**, **11**, antenna, front (6), lateral (9) and postero-lateral (11) view; **7**, mesosoma, dorso-postero-lateral view; **8**, apex of metasoma with ovipositor; **12**, apex of ovipositor, lateral view.

Distribution. *Cameroon, *Kenya, South Africa, Uganda.

Allophrys excavator Khalaim, 2013
(Fig. 3)

Remarks. *Allophrys excavator* can be readily distinguished from other Afrotropical species by mandible with upper tooth strongly reduced, much shorter than the lower tooth (Fig. 3), and short malar space which is 0.6 times as long as basal mandibular width.

Material examined. **Kenya:** Coast Prov. [former], Mtwapa Town near Mombasa, Malaise trap, maize and sorghum, 28.V–5.VIII.1993, coll. P. Lammers, 6 females (4 females in RMNH, 2 females in ZIN); **Nyanza Prov.** [former], Ruma Nat. Park, Malaise trap, 15–29.I.2006, coll. R. Copeland, 1 female (TAMU). **South Africa,** **Western Cape Prov.,** Mt. Rochelle Nature Reserve, sweep, 10.I.2006, coll. R. Wharton, 1 female (TAMU).

Distribution. *Kenya, South Africa.

Allophrys tractor Khalaim, 2013

Remarks. *Allophrys tractor* is readily distinguished from other Afrotropical species in this genus by mandible with upper tooth subequal to, or slightly shorter than the lower tooth.

Material examined. **Kenya:** Nairobi, 27–28.II.1999, coll. R. Wharton, 1 female (TAMU); **Rift Valley Prov.** [former]: Saiwa Swamp National Park, Gwasi hill top, Malaise trap, 12–25.II.2006, coll. R. Copeland, 2 females (TAMU, ZIN); same locality, trap and collector, Sairt, 26.II–12.III.2006, 1 female (TAMU).

Distribution. *Kenya, South Africa.

Genus ***Aneucelis*** Förster, 1869

Predominantly Holarctic genus with 35 species. Eight species occur in the Afrotropical Region (Khalaim, 2009, 2010). A new data on the distribution of five species of *Aneucelis* in Benin, Ethiopia, Côte d'Ivoire, Kenya, South Africa and Yemen are provided. The genus is recorded from Benin, Ethiopia, Côte d'Ivoire, Kenya and Yemen for the first time.

Aneucelis laminosa Khalaim, 2009

Remarks. Female from Ethiopia has slender filiform flagellum with 15 flagellomeres; clypeus brownish yellow in lower half and dark brown to brownish black in upper half; short and strongly

oblique foveate groove in anterior half of mesopleuron, with short but distinct transverse wrinkles; second tergite 1.8–2.4 times as long as broad anteriorly; ovipositor apex dorsally with very shallow depression and a very fine tooth before this depression; ovipositor sheath about 2.6 times as long as first metasomal tergite; second tergite extensively yellow, with slight brownish markings laterally, or yellow anteriorly and brown posteriorly, or more or less entirely brown; and tergites 3 and subsequent ones brown laterally to dark brown dorsally.

Material examined. **Ethiopia:** **Gojjam Prov.,** Bahir Dar, Malaise trap, 1–21.XI.1995, coll. A. van den Burg, 1 female (RMNH); **Oromia Prov.,** Shewa Zone, Ambo Town, 8°057'N, 38°007'E, Malaise trap, 1–30.X.2009, coll. L. Rybakov, 2 females (ZIN).

Distribution. *Ethiopia, South Africa.

Aneucelis lanternaria Khalaim, 2009
(Fig. 4)

Remarks. *Aneucelis lanternaria* can be recognised by the combination of fore wing with interstitial second recurrent vein (2m-cu) and short metacarpus (Fig. 4), and very long ovipositor with sheath about 3.0 times as long as first tergite.

Material examined. **Côte d'Ivoire,** 3 km S of Katiola Town, forest, Malaise trap, 6.II.1981, coll. J.W. Everts, 1 female (RMNH). **Yemen,** Ta'izz [Taizz], light trap, X.2001, coll. A. v. Harten & A.R. Al Yarimi, 3 females (RMNH).

Distribution. *Côte d'Ivoire, South Africa, *Yemen.

Aneucelis larga Khalaim, 2009
(Fig. 5)

Remarks. The species can be recognised by the combination of postfurcal second recurrent vein (2m-cu) in fore wing, and short ovipositor with sheath about as long as first tergite (Fig. 5).

Material examined. **Benin,** Cotonou "I.I.T.A.", Malaise trap, 22.X–5.XI.1993, coll. L. Meijerman, 1 female (RMNH). **Ethiopia,** **Gojjam Prov.,** Bahir Dar, Malaise trap, IX–XII.1995, coll. A. van den Burg, 5 females (RMNH). **Kenya,** **Coast Prov.** [former], Mtwapa Town near Mombasa, Malaise trap, maize and sorghum, 28.V–5.VIII.1993, coll. P. Lammers, 11 females (9 females in RMNH, 2 females in ZIN).

Distribution. *Benin, *Ethiopia, *Kenya, Reunion, South Africa, Tanzania.

Aneuclis pumilus (Holmgren, 1860)
(Figs 16, 17)

Remarks. *Aneuclis pumilus* can be easily recognised by its head polished dorsally (Fig. 16) and conspicuously sinuate distal end of ovipositor (Fig. 17).

Material examined. **Kenya**, *Coast Prov.* [former], Mtwapa Town near Mombasa, Malaise trap, maize and sorghum, 9.VI–30.VII.1993, coll. P. Lammers, 1 female (RMNH).

Distribution. Cosmopolitan species, in Afrotropical Region known from *Kenya and South Africa.

Aneuclis rhodesiana Khalaim, 2010

Remarks. *Aneuclis rhodesiana* is readily distinguished from other Afrotropical species of the genus by densely granulate propodeum with transverse carina strong and raised medially, and strongly upcurved apex of ovipositor.

Material examined. **South Africa**, *Mpumalanga Prov.*, Transvaal, Pilgrim's Rest, 1400 m, 11–13.XII.1985, coll. S. & J. Peck, 2 females (AEIC).

Distribution. Cameroon, South Africa, Zimbabwe.

Genus ***Diaparsis*** Förster, 1869

Large, almost worldwide genus (unknown only from Central and South America) with 17 species in the Afrotropical Region, including 15 species in Continental Africa, one species in the Seychelles and one in Reunion (Rousse & Villemant, 2012; Khalaim, 2013a, 2013c; Khalaim et al., 2014). New data on the distribution of eight *Diaparsis* species in Ethiopia, Côte d'Ivoire, Kenya, Mozambique, Niger, Nigeria, Sierra Leone, South Africa, Tanzania, Togo, Uganda, Zambia and Zimbabwe are provided. The genus is recorded from Côte d'Ivoire, Mozambique, Namibia, Niger, Nigeria, Sierra Leone, Togo and Zambia for the first time.

Diaparsis abstata Khalaim, 2013
(Figs 6–8)

Remarks. The species can be easily recognised by the combination of propodeum with basal keel as long as apical area; apical area very broadly rounded anteriorly; antennal flagellum more or less uniformly fuscous (Fig. 6); and ovipositor very short, with conspicuous nodus at apex (Fig. 8).

Material examined. **Ethiopia**, *Oromia Prov.*, She-wa Zone, Ambo Town, 8°057'N, 38°007'E, Malaise trap, 1–30.X.2009, coll. L. Rybakov, 3 females, 35 males (ZIN). **Kenya**: Karen near Nairobi, 6000 ft. [= 1830 m], IX.1971, coll. C'ngnam-vanSomerén, 2 females (AEIC); Nairobi, Runda Estate, Malaise trap, 13.XI.1977, coll. W. Overholt, 1 female (TAMU). **South Africa**, *Mpumalanga Prov.*, Transvaal, Pilgrim's Rest, 1400 m, 11–13.XII.1985, coll. S. & J. Peck, 1 female (AEIC). **Togo**, "Toko", 25 to 50 km N of Sokodé, Bouzalo[da], river valley, Malaise trap, 26.VI.1984, coll. P.E.T. Douben, 2 males (RMNH). **Zimbabwe**, Marandellas [Marondera], III.1972, coll. P. Ginn, 1 female (AEIC).

Distribution. *Ethiopia, Gabon, *Kenya, South Africa, *Togo, Uganda, *Zimbabwe.

Diaparsis interstitialis Khalaim, 2013
(Figs 9, 10)

Remarks. *Diaparsis interstitialis* can be easily recognised by the combination of flagellum with conspicuous subapical pale band (Fig. 9), and fore wing with second recurrent vein (2m-cu) interstitial and metacarpus (R1) long (Fig. 10).

Material examined. **Côte d'Ivoire**, Mankono Town, 13.IX.1980, coll. J.W. Evers, 1 female (RMNH). **Kenya**: near Nairobi Karen, 6000 ft. [= 1830 m], 1971, coll. C'ngnam-vanSomerén (all in AEIC): 25–31.VIII (4 females), IX (3 females), X (3 females); same locality and collector, 2000 ft. [= 610 m], 1972 (all in AEIC): IX (15 females), X (3 females), XI (1 female), XII (2 females); *Eastern Prov.* [former], Kimeri Hill, 0°25.45'S, 37°32.71'E, 1745 m, 20.VI–4.VII.2005, coll. R. Copeland, 1 female (TAMU); *Nyanza Prov.* [former]: Ungoye, 0°36.91'S, 34°05.52'E, Malaise trap, 27.IV–11.V.2006, coll. R. Copeland, 1 female (TAMU); same data, but 1147 m, 21.IV–5.V.2005, 1 female (TAMU). **South Africa**: *KwaZulu-Natal Prov.*, Eshowe Town, 18.XI.1970, coll. H. & M. Townes, 1 male (AEIC); *KwaZulu-Natal Prov.*, Gillitts near Durban, 26.XI.1970, coll. H. & M. Townes, 1 female, 1 male (AEIC); *KwaZulu-Natal Prov.*, Royal Natal National Park, 29.I.1971, coll. H. & M. Townes, 1 female (AEIC); *Eastern Cape Prov.*, Port St Johns, 10–16.XII.1970, H. & M. Townes, 4 females (AEIC); *Limpopo Prov.*, Magoebaskloof [Pass ?] near Tzaneen Town, 14.I.1971, coll. H. & M. Townes, 1 female (AEIC). **Tanzania**, "Tanganyika", Amani, 1200 m, IV.1962, coll. G. Heinrich, 1 female (AEIC). **Uganda**, Kampala, coll. D.F. Owen (all in AEIC): I.1966 (1 female), II.1966 (2 females), VII.1966 (1 female). **Zambia**, Kitwe, Chati [Forest Reserve ?], 27.XII.1979, coll. K. Löyttyniemi, 1 female (MZH).

Distribution. Cameroon, *Côte d'Ivoire, *Kenya, South Africa, *Tanzania, Uganda, *Zambia, Zimbabwe.

Diaparsis inusitata Khalaim, 2013
(Figs 11, 12)

Remarks. *Diaparsis inusitata* can be readily distinguished from other Afrotropical species of this genus by the combination of flagellum uniformly fuscous, without subapical pale band (Fig. 11); fore wing with second recurrent vein (2m-cu) interstitial and metacarpus (R1) short; and ovipositor with weak dorsal subapical depression and weak but distinct rounded tooth before this depression (Fig. 12).

Material examined. **Benin**, Cotonou "I.I.T.A.", Malaise trap, 12.X–5.XI.1993, coll. L. Meijerman, 4 males (RMNH). **Ethiopia**: Jimma, 25–29.XI.1969, coll. R.H. Cobben, 1 female (RMNH); same locality and collector, "vangtent", 2–8.XI.1969, 1 female (RMNH); Bahir Dar, Malaise trap, IX.1995, coll. A. van den Burg, 1 female (RMNH). **Kenya**: Nairobi, 17.XII.1978, coll. A.M. Owiny, 1 female (AEIC); *Nyanza Prov.* [former]: Ungoye Down, Malaise trap, 27.IX–11.X.2005, coll. R. Copeland, 1 female (TAMU); same province, trap and collector, Ungoye, 0°36'S, 34°05'E, 1147 m, in woodland next to grassland, 17–31.VIII.2005, 2 females (TAMU); *Rift Valley Prov.* [former], Marich Pass Field Centre, Malaise trap, 10–24.VII.2005, coll. R. Copeland, 1 female (TAMU). **Nigeria**: Ile-Ife [Ife], VII.1973, coll. J.T. Medler, 2 females (AEIC); Aba, VI.1967, coll. Jean Townes, 1 female (AEIC). **Sierra Leone**, Freetown, coll. D.F. Owen (all in AEIC): VIII.1967 (3 females, 3 males), IX.1967 (3 females, 1 male), X.1967 (1 female, 1 male), XII.1967 (1 male), VII.1969 (1 female). **South Africa**, *KwaZulu-Natal Prov.*, Margate Town, 25–29.XI.1963, coll. E. Haeselbarth, 1 female (AEIC). **Uganda**, Kampala, coll. Denis F. Owen (all in AEIC): 1–22.III.1964 (1 female), II.1965 (1 female), X.1965 (2 females), XII.1965 (1 female).

Distribution. *Benin, Cameroon, *Ethiopia, Kenya, *Nigeria, *South Africa, *Sierra Leone, Uganda.

Diaparsis mostovskii Khalaim, 2013
(Fig. 13)

Remarks. *Diaparsis mostovskii* can be readily distinguished from other Afrotropical species of this genus in having first metasomal segment with

petiole pale and postpetiole fuscous (Fig. 13), and ovipositor short and robust, with sheath about half as long as first tergite (Fig. 13).

Variation. Two females and two males (marked by an exclamation mark, !) are considerably smaller than other specimens, with body length about 3.3 mm and fore wing 2.5 mm. However, morphologically these specimens are generally well corresponding with type material of *D. mostovskii*, except for weaker punctures on head and mesosoma, and for ovipositor somewhat more slender.

Material examined. **Kenya**: *Coast Prov.* [former]: Mtwapa Town near Mombasa, Malaise trap, maize and sorghum, 30.VII–5.VIII.1993, coll. P. Lammers, 1 female (RMNH); Karen near Nairobi, 6000 ft. [= 1830 m], 25–31.VIII.1971, coll. C'ngnam-vanSomeren, 1 female (AEIC); *Nyanza Prov.*, Ungoye, 0°36'S, 34°05'E, 1147 m, in woodland next to grassland, Malaise trap, 17–31.VIII.2005, coll. R. Copeland, 1 female (TAMU). **Mozambique**, 30 km W of Maputo, Boane, Malaise trap, 6.XII.1993, coll. E. Ebregt, !1 male (RMNH). **Namibia**, Rundu, on light, 23.I.1993, coll. J. Gusenleitner, 1 male (OLML). **Niger**: Niamey, Centre Aghrymet, Malaise trap, 2–9.IX.1988, coll. Y. Jongema, 1 female (RMNH); Niamey, Malaise trap, 30.IX–7.X.1992, coll. G. Pennards, !1 male (ZIN); Niamey, Gombo (Odra), Malaise trap, 16–30.IX.1988, coll. Y. Jongema, 3 females (RMNH); same locality, trap and collector, 16–23.IX.1988, !1 female (ZIN). **Nigeria**: "W. State", X.1973, coll. J.T. Medler, 1 female (AEIC); Aba, VI.1967, coll. J. Townes, 1 female (AEIC). **South Africa**: *KwaZulu-Natal Prov.*, St Lucia Estuary, 10.X, 7.XI.1970, coll. H. & M. Townes, 2 females (AEIC); *Eastern Cape Prov.*, Kenton-on-sea Town, X.1971, coll. R. Jubb, 1 female (AEIC); *Eastern Cape Prov.*, Grahamstown Town, coll. F. Gess (all in AEIC): 1–16.XII.1970 (1 female), 13–17.II.1971 (2 males), 5–8.III.1971 (1 female), 12–22.XI.1971 (1 female, 1 male), XII.1971 (1 female); *Limpopo Prov.*, Soutpansberg, Entabeni Forest, 4000–5000 ft. [= 1220–1525 m], 3–7.VI.1964, coll. E. Haeselbarth, 3 females (AEIC); *Mpumalanga Prov.*, Transvaal, Pilgrim's Rest, 1400 m, 11–13.XII.1985, coll. S. & J. Peck, 1 female (AEIC); *Western Cape Prov.*, Riviersonderend River, Greyton Town, 22.XI.2002, coll. M. Halada, 1 female (OLML). **Tanzania**, "Tanganyika", Mt. Meru, 1800 m, VI–VII.1962, coll. G. Heinrich, 1 female (AEIC). **Uganda**, Kampala, coll. D.F. Owen (all in AEIC): X.1965 (2 females), XI.1965 (1 female), XII.1965 (1 female). **Zambia**: Kalobolelwa, Malaise trap, 11–18.III.1988, coll. E.G.N. Dijkstra, 1 female (RMNH); near Namibian border, Sesheke Town, 950 m, III–VI.1991, coll. W. Slobbe, !1 female (RMNH).



Figs 13–17. *Diaparsis mostovskii*, female (13); *D. voluptuosa*, female (14) and male (15); *Aneucelis pumilus*, female (16, 17). **13**, metasoma with ovipositor, lateral view; **14**, **15**, antennae, front view; **16**, head and mesoscutum, dorsal view; **17**, apex of ovipositor, lateral view.

Distribution. Cameroon, Ethiopia, *Kenya, *Mozambique, *Namibia, *Niger, *Nigeria, South Africa, *Tanzania, Uganda, *Zambia.

***Diaparsis nebulosa* Khalaim, 2013**

Remarks. The species is very similar to *D. absta-ta* but distinct in having flagellum with conspicuous subapical pale band, and strongly punctate mesopleuron and dorsolateral area of propodeum.

Material examined. **Kenya**, *Rift Valley Prov.*, Saiwa Swamp National Park, Gwasi hill top, Malaise trap,

12–25.II.2006, coll. R. Copeland, 1 female (TAMU). **Zimbabwe**, Marandellas [Marondera], III.1972, coll. P. Ginn, 2 females (AEIC).

Distribution. Cameroon, *Kenya, *Zimbabwe.

***Diaparsis robusta* Khalaim, 2013**

Remarks. The species differs from other Afrotropical congeners by the combination of short and robust ovipositor, impunctate or very indistinctly punctate dorsolateral area of propodeum, and filiform flagellum with 17 or 18 flagellomeres.



Figs 18–22. *Tersilochus moestus*, female (paratype of *T. abyssinicus*). **18**, head with antennae, lateral view; **19**, habitus, lateral view; **20**, propodeum, dorsal view; **21**, fore wing; **22**, ovipositor, lateral view.

Material examined. **South Africa:** *Eastern Cape Prov.*, Kenton-on-sea Town, X.1971, coll. R. Jubb, 2 females (AEIC); *Eastern Cape Prov.*, Grahamstown

Town, 1971, coll. F. Gess (all in AEIC): 17–31.I (2 males), 1–22.II (1 female, 1 male), 26.II–3.III (1 male).

Distribution. South Africa.

***Diaparsis voluptuosa* Khalaim, 2013**
(Figs 14, 15)

Remarks. Female of *D. voluptuosa* can be easily recognised by its yellow or pale brown antenna with only a few apical flagellomeres fuscous, clearly contrasting with basal part of antenna (Fig. 14). Two males from Togo have antennae longer than in female, with flagellum distinctly tapered towards apex and with 30 flagellomeres; flagellum pale brown, with 8–10 apical flagellomeres infuscate in one male, and evenly fuscous in another male (Fig. 15).

Material examined. **Côte d'Ivoire**, 30–35 km N of Korghogo, 18.IV.1980, coll. J.W. Evers, 1 female (RMNH). **Kenya**: *Rift Valley Prov.* [former], Marich Pass Field Centre, Malaise trap, 10–24.VII.2005, coll. R. Copeland, 7 females (TAMU); *Nyanza Prov.* [former]: Kaksingri, Nyamarondi Vill., 0°30.535'S, 34°11.206'E, Malaise trap, 6–20.VI.2006, coll. R. Copeland, 1 female (TAMU); same province, trap and collector, Ungoye Down, 27.IX–11.X.2005, 1 female (TAMU). **South Africa**, *Limpopo Prov.*, Tzaneen Town, 17.I.1971, coll. H. & M. Townes, 1 female (AEIC). **Togo**: 25 to 50 km N of Sokodé, "Mô aval", river valley, Malaise trap, 26.VI.1984, coll. P.E.T. Douben, 1 female (RMNH); 25 to 50 km N of Sokodé, 2 km NW of Sagbadai, river valley, Malaise trap, 3, 31.VII.1984, coll. P.E.T. Douben, 2 males (RMNH). **Zambia**: Kitwe, Chati [Forest Reserve ?], 8.I, 31.III.1980, coll. K. Löyttyniemi, 2 females (MZH); Copperbelt, Chati, 9.II.1980, coll. K. Löyttyniemi, 2 females (MZH).

Distribution. *Côte d'Ivoire, *Kenya, South Africa, Tanzania, *Togo, *Zambia, Zimbabwe.

***Diaparsis vulgaris* Khalaim, 2013**

Remarks. *Diaparsis vulgaris* is an abundant South African species which differs from its Afro-

tropical congeners by the combination of long ovipositor, finely and sparsely punctate mesopleuron and dorsolateral area of propodeum, broad clypeus, and clavate antennal flagellum of female, comprising 20–23 flagellomeres.

Material examined. **South Africa**, *Eastern Cape Prov.*, Kenton-on-sea Town, X.1971, coll. R. Jubbs, 1 female (AEIC).

Distribution. South Africa.

Genus ***Tersilochus* Holmgren, 1859**

Large, predominantly Holarctic genus comprising over 70 species. Three species were known from the Afrotropical Region hitherto (Khalaim, 2006, 2013a); one of them is synonymised in this paper. The genus is recorded from Kenya and South Africa for the first time.

Tersilochus (Tersilochus) moestus
(Holmgren, 1868)
(Figs 18–22)

Tersilochus (Tersilochus) abyssinicus Khalaim, 2006, **syn. nov.**

Remarks. *Tersilochus abyssinicus* (Figs 18–22) is found to be conspecific with the holotype female of *T. moestus* (Khalaim, 2013a), and with another female of this species which was recently recorded from Uganda (Khalaim et al., 2014).

Material examined. **Kenya**, Karen near Nairobi, 6000 ft. [= 1830 m], IX.1971, coll. C'ngnam-van Someren, 1 female (AEIC). **South Africa**, *Mpumalanga Prov.*, Transvaal, Pilgrim's Rest, 1400 m, 11–13. XII.1985, coll. S. & J. Peck, 1 female (AEIC). **Uganda**, "Mulange Uganda", 1 female (SAMC).

Distribution. Ethiopia, *Kenya, *South Africa, Uganda.

Tersilochus (Tersilochus) rusticulus
Khalaim, 2006
(Fig. 23)

Remarks. This species was described based on a single female from Ethiopia (Khalaim, 2006). Three additional females that are recorded here from South Africa indicate that this is a distinct species. *Tersilochus rusticulus* differs from another Afrotropical species, *T. moestus*, by features given in the key below.

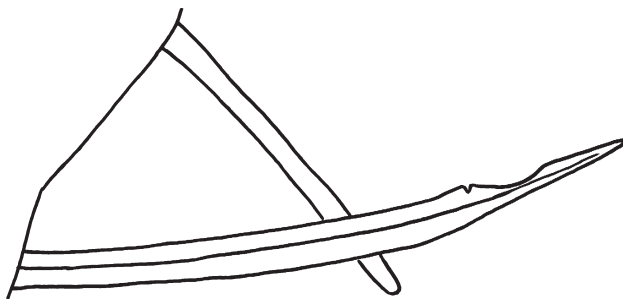


Fig. 23. *Tersilochus rusticulus*, female, holotype, ovipositor (after Khalaim, 2006).

Material examined. **South Africa, Eastern Cape Prov.:** Grahamstown Town, 22–30.XI.1971, II.1972, coll. F. Gess, 2 females (AEIC); same locality, 33°19'40''S, 26°30'00''E, 760 m, Malaise trap, 22–24.X.2004, coll. J. & A. Londt, 1 female (ZIN).

Distribution. Ethiopia, *South Africa.

Key to species of *Tersilochus* occurring in Afrotropical Region

1. Metacarpus (R1) shorter, not reaching apex of fore wing (Fig. 21). Ovipositor more or less evenly tapered apically, with neither prominence nor notch dorsally (Fig. 22) ***T. moestus***
- Metacarpus (R1) almost reaching apex of fore wing. Ovipositor with shallow dorsal subapical depression, with prominence before this depression, and with a small but distinct notch on this prominence (Fig. 23) ***T. rusticulus***

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