An annotated checklist of Namibian Dolichopodidae (Diptera) with the description of a new species of *Grootaertia* and a key to species of the genus

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**ABSTRACT**

This paper reviews current knowledge of the Namibian Dolichopodidae fauna, which now comprises 56 species and subspecies in 28 genera and six subfamilies: Diaphorinae, Dolichopodinae, Hydrophorinae, Medeterinae, Sciapodinae and Sympycninae—as represented in the Namibian National Insect Collection. A new species, *Grootaertia skorpionensis* Grichanov sp. n., is described and figured, based on material from the Succulent Karoo Biome in southern Namibia, and a key to all known species of the genus *Grootaertia* Grichanov is provided.


Additional records of species from Botswana, Democratic Republic of Congo, Kenya, Madagascar and Zambia, are also provided. Three additional species, namely *Asyndetus virgatus* Curran, *Chrysotus inconspicuus* Loew and *Diaphorus lawrencei* Curran are recorded from Botswana, and *A. virgatus* Curran from Zambia.

One new synonym is proposed: *Hydrophorus vaalensis* Parent, 1954, syn. n. = *Hydrophorus spinicornis* Loew, 1858. Lectotypes and paralecotypes of *Chrysotus inconspicuus* Loew, 1858, and *Hercostomus argyropus argyropus* (Loew, 1858) are here designated to fix the current taxonomic concept.

**KEY WORDS**: Dolichopodidae, Afrotropical, Namibia, new species, checklist, identification key.

**INTRODUCTION**

Species of the family Dolichopodidae are poorly known in Namibia and have only been reviewed recently (see Grichanov 2000a, b, c). Fifty-five species in 28 genera belonging to six subfamilies, Diaphorinae, Dolichopodinae, Hydrophorinae, Medeterinae, Sciapodinae and Symptycninae are now known to occur there. These probably represent approximately 25% of the total dolichopodid fauna of the country. Eight species and one subspecies are probably Namibian endemics. The named Namibian species represent less than 10% of the afrotropical fauna as a whole, which numbers 700 to 710 species in approximately 55 genera (estimation by I. Grichanov). The fauna of the Congo basin (Kinshasa) may be regarded as well known, but only partial investigations have been undertaken of the dolichopodid faunas of Cameroon, Kenya, Madagascar, Nigeria, South Africa, Tanzania and Uganda. Adjacent African islands and other afrotropical countries remain poorly studied. In reality the estimated number of...
Dolichopodidae from the Afrotropical Region may exceed 2000 species. Representatives of the subfamilies Neurigoninae and Rhaphiinae are yet to be recorded from Namibia, but have been found in Democratic Republic of Congo (Kinshasa) and South Africa. No genera endemic to Namibia are recorded to date.

Loew (1858: 341) was the first to record a dolichopodid fly from Namibia (see notes for *Hydrophorus praecox*), but there were no previous records of Dolichopodidae from Namibia (e.g. Dyte & Smith 1980) prior to Grichanov’s treatment of unsorted material collected during the British Museum (Natural History) expedition to southern Africa in 1972.

The majority of species used in this study were collected in the central arid part of the country, being xerophilous and halophilous by nature (Diaphorinae, Hydrophorinae, Medeterinae). Some of these species are widely distributed across semi-deserts or maritime territories of the Old World. The remaining species are regarded as being endemic to Namibia or to the southern part of Africa. Namibia as a whole and north-eastern parts of the country (Caprivi Strip) in particular, have a significant tropical element, with many species being common to central Africa or occurring across the continental afrotropics.

The subfamily Medeterinae is the most diverse in southern Africa, in contrast to the Sciapodinae with the greater number of species in central Africa. Currently 13 genera and 225 species of Sciapodinae are known from the region, whereas seven genera and 80 afrotropical species and subspecies of Medeterinae are known. The first author recently revised the subfamily Dolichopodinae (Grichanov 2004), describing 86 new species from the Afrotropical Region, and placing in synonymy 18 known names. Currently eight genera and 163 afrotropical species of Dolichopodinae are known. All catalogued species of the genus *Dolichopus* Latreille, 1796, are excluded here from the genus, and from the fauna of the afrotropics, although several further species of the genus are recorded for the region. Only 11 species (including some new to science) have been recorded from Namibia. The three subfamilies Hydrophorinae, Medeterinae and Dolichopodinae include more than half of the known Namibian dolichopodid species.

**MATERIALS AND METHODS**

Dolichopodid material from the Namibian National Insect Collection, National Museum of Namibia, Windhoek, was originally examined by the first author in 1999, and this resulted in three subsequent publications (Grichanov 2000a, b, c). This paper brings together records of material collected subsequently and examined by the first and third authors in 2003. Although originating from a broad geographical range, much of the material of interest originates from the Caprivi Strip in the north-east of the country.

Records published previously are provided in an abbreviated form, although spelling errors of localities in the above cited publications are corrected where necessary. Most of the material is preserved in 70% ethanol in glass vials. One paratype of the new species (Figs 1–5) was placed in glycerol following alkalisation and is mounted on a pin.

Bilaterally symmetrical structures in the new species description are described in the singular. Holotype and paratype label data are quoted as they appear; a slash (/) indicates the end of a line of print, two slashes (//) signify data on a further label. Significant
supplementary or qualifying information is presented in square parentheses when considered necessary. Curatorial label information is not provided.


ABBREVIATIONS

Institutions

BMNH – Natural History Museum, London, United Kingdom.

ISNB – Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium.


NMNW – Namibian National Insect Collection, National Museum of Namibia, Windhoek.

ZIN – Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia.

Collection methods

(BP) – blue pan/s

(BPE) – 5 brown pan traps experiment

(LT) – light trap

(MT) – Malaise trap/s

(PFT) – pitfall traps

(S) – sweeping

(WP) – white pan/s

(YP) – yellow pan/s

(YPE) – 5 yellow pan traps experiment

TAXONOMY

Genus Grootaertia Grichanov, 1999

Grootaertia: Grichanov, 1999b: 90.

Diagnosis: The genus is most similar to Paramedetera Grootaert & Meuffels, 1997, differing in apical arista; distal sectors of R_{4+5} and M_{1+2} weakly arched anteriorly; abdominal segment 7 semicircular, narrow, not forming pedicel; hypopygium sessile, asymmetrical; hypandrial lobes absent; aedeagus with large lateral lobes; female oviscapt with simple fused hemitergites 9 bearing simple setae. The morphology of male and female genitalia in Grootaertia spp. is rather probably basal and variable. The genus is, therefore, likely to be the most ancestral group of the subfamily.

Key to species of Grootaertia

1. Thorax entirely or almost entirely black, at most humeri partly and sutures narrowly yellow-brown ................................................................. 2

– Thorax mainly yellowish brown, with large yellow areas, sometimes mesonotum mostly brown or partly black ................................................................. 3

2. Coxae and femora reddish yellow; male cercus with distinct distolateral finger-like lobe; ventral surstyli setose; wing 1.9 mm (Western and Eastern Cape, South Africa) ................................................................. kuznetsovi Grichanov

– Coxae and femora blackish brown; male cercus simple; surstyli glabrous; wing 1.5 mm (Western Cape, South Africa) ................................................................. irwini Grichanov
3 Scutellum yellow, at most brownish at base; male antennal stylus fused with postpedicel, forming very long tapering lobe; female postpedicel 3× longer than high at base; scape with hairs above in both sexes; wing 2.1 mm (southern Namibia) ........................................................................................................ skorpionensis sp. n.
   – Scutellum black dorsally; postpedicel simple, as long as or slightly longer than high at base; scape bare (♀ unknown) ................................................................. 4
4 Hypopygium with one pair of surstyli; aedeagus with simple lateral lobes ......... 5
   – Hypopygium with at least two pairs of surstyli; aedeagus with one lateral lobe incised or bifurcated ................................................................. 7
5 Surstyli twice as long as epandrium, positioned symmetrically at distodorsal margin; cercus small; wing 1.6 mm (Western Cape, South Africa) .... bistylata Grichanov
   – Surstyli as long as or shorter than epandrium, asymmetrical; cercus large ....... 6
6 Hypandrium short, spade-like, slightly widened distally, with widely rounded distal margin (ventral view), apiocoventrally in position; one pair of long narrow pointed surstyli, approximately as long as epandrium: left surstylus simple, dorsolateral in position, arising at base of cercus; right surstylus ventrolateral in position, arising at base of hypandrium, with narrow basal process 1/3 as long as surstylus; wing 1.7 mm (Western Cape, South Africa) ............................................ asymetrica Grichanov
   – Hypandrium large, almost rectangularly curved, positioned on left side of epandrium; one pair of short, hook-like surstyli attached to epandrium doroapically; wing 2.0 mm (Western Cape, South Africa) ................. brevipennis Grichanov
7 Epandrium twice as long as high; three pairs of surstyli shifted to apicodorsal margin; cerci concealed; aedeagus with large medial foramen; wing 1.8 mm (Western Cape, South Africa) ...................................................... anomalipennis Grichanov
   – Epandrium 1.5× longer than high; ventral pair of surstyli glabrous, attached to epandrium apiocoventrally; right dorsal lobe arising apiocoventrally, with short hairs in middle half; left dorsal lobe arising apicodorsally, with short hairs in middle half; unpaired short glabrous surstylus positioned left apicodorsally; cerci exposed; aedeagus lacking medial foramen; wing 1.8 mm (Western Cape, South Africa) ........................................ anomalopoga Grichanov

Grootaertia skorpionensis sp. n.

Figs 1–5

Etymology: The specific epithet, skorpionensis, refers to the type locality.

Description:

Male.

Measurements (mm): body length, 2.1; antenna length, 0.8(♀)–0.9(♂); wing length/width, 1.5/0.5; hypopygium length, 0.6.

Body generally brown, with brown setae.

Head: Frons and face black. Ocellar tubercle prominent, with pair of strong setae. One strong vertical seta present laterally on frons, a weaker postvertical positioned as linear continuation of postocular setal row; posterior setae brownish above, white laterally and below. Occiput flat, perpendicular to frons surface. Ventral postcranial with several short cilia. Face widest beneath antennae, gradually narrowed towards clypeus. Clypeal
suture rather prominent. Ratio of height of face to its maximal width to its minimal width 15:7:4. Antenna 1.6× longer than head height, black-brown; scape with 2–3 distinct dorsal hairs; pedicel with ring of short apical setulae; postpedicel appears to be entirely fused with stylus, without any trace of division, thus being very long, swollen at base, gradually narrowing to apex, entirely covered with long dense hairs. Length ratio of scape to pedicel to postpedicel 3:3:33. Palpus and proboscis brown, with sparse hairs; palpus short, subtriangular, with one apical seta; proboscis stout, elongated.

Thorax: Mostly dark brown mesonotum; humeri, notopleura, scutellum and adjacent part of mesonotum yellow, sometimes scutellum brownish at base; pleura yellow-brown, more yellow in upper half, with small black spot on pteropleura; mesonotum flattened in posterior third. Five pairs of strong dorsocentral setae decreasing somewhat in length anteriorly. Acrostichal setae absent. Two fine proepisternal setae. Scutellum with pair of strong setae and pair of microscopic lateral hairs.


**Abdomen:** Brown, lighter laterally and ventrally, covered with short light setae. Tergum 7 semicircular, narrow, lying conformably with tergum 6. Tergum 8 large, covering left basolateral foramen. Epandrium shining black-brown, pear-shaped (lateral view). No epandrial seta. Hypandrium (epandrial lobe?) forming long pointed lobe positioned at left distoventral angle of epandrium. Aedeagus long, widened in middle; lateral lobes of aedeagus long, thin, pointed apically. Surnstyli brown, glabrous, two pairs, positioned apicodorsally. Cercus yellow, visible, with several long dorsal setae.

**Female.** Similar to ♂ except lacking male secondary sexual characters. Postpedicel tapering, 3× longer than high at base. Length ratio of scape to pedicel to postpedicel to stylus (1st and 2nd segments) 3:3:9:2:19.


**Paratypes:** 2♂ same data as holotype except: / ‘blue trays 1 // Paratype ♂ / Grootaertia / skorpionensis Grichanov [laser printed on red card]’ [in one vial]; 1♀ same except: / ‘yellow trays 1’; 3♂ 4♀ same except: / ‘yellow trays 4’ [in one vial]; 4♀ 2♂ same except: / ‘yellow trays 4’ [in one vial] (all preserved in alcohol, NMNW series # T 602); 1♂ same except: / ‘yellow trays 3’ (in glycerol after alkalisation, mounted on pin in a cavity of polymer film covered with adhesive tape; ZIN).

**Distribution:** Namibia. The type material originates from the Succulent Karoo Biome in south-western Namibia, as defined by Irish (1994), and the species appears to be restricted to this biome. The type material was sampled as part of an environmental impact assessment, and the type locality has subsequently been developed for a zinc mine. The area is however, fairly homogenous, and the species is expected to occur elsewhere in the same biome.

**Similar species:** Differing from other species of the genus in the morphology of the antennae. Scape bearing 2–3 distinct dorsal hairs; postpedicel appears to be entirely fused with stylus, with no trace of division, thus being very long, swollen at base, gradually narrowing to apex, entirely clothed in long dense hairs. Such male secondary
sexual character as fused postpedicel and stylus appears to be unique in the subfamily Medeterinae. Elongated postpedicel (particularly in females) is remarkable in the genus. For example, only G. kuznetsovi Grichanov and G. irwini Grichanov males have elongated postpedicel, 1.5× longer than high at base. Grootaertia Grichanov is endemic to southern Africa with G. skorpionensis sp. n. here described from Namibia and seven species described previously from Western Cape and Eastern Cape provinces of South Africa (Grichanov 1999b, 2000a). The new species may be easily identified by use of the above key.

ACKNOWLEDGEMENTS

We wish to thank Thomas Pape (formerly NHRS), who hosted I. Grichanov’s visit to the museum to examine the Namibian specimens. Bradley Sinclair (Zoologisches Forschungsinstitut und Museum Alexander Koenig, Germany) undertook the initial sort of much of the material to genera (in 1999). Part of the material cited in this paper was collected under permits issued by the Ministry of Environment & Tourism, Namibia. The Ministry of Fisheries & Marine Resources, Namibia, is thanked for assistance during the NMMNW Guano Island Survey, 2003. Namdeb kindly gave permission for research to be conducted in Diamond Area 1 (where the type material of the new species was collected). I. Grichanov acknowledges kind financial support from the Belgian Office for Scientific, Technical & Cultural Affairs (1999–2000) and the Swedish Institute (2001–2004). Two referees are thanked for improving the manuscript.

REFERENCES


APPENDIX I

Annotated checklist of Namibian Dolichopodidae (Diptera). New records for Namibia are marked with an asterisk (*). Full label data for some additional material in the collection of the National Museum of Namibia (NMNW) have been reported elsewhere (Grichanov 2000a, b, c). All material is identified by I. Grichanov in 1999–2003, unless otherwise stated. For full locality coordinates see Appendix III.

SCIAPODINAE

Grichanov (1998a, 1999a, 2000a) revised this subfamily and Grichanov (1998a: 120) provides keys to afrotropical genera and species.

**Amblypsilopus** Bigot, 1888: 24


Distribution: Democratic Republic of Congo (Kinshasa), Kenya, Madagascar, Namibia*, Nigeria, Togo.

*A. munroi* (Curran, 1924: 218).


Distribution: Democratic Republic of Congo (Kinshasa), Kenya, Madagascar, Namibia, Nigeria, Togo.

**Bickeliolus** Grichanov, 1996c: 224

*B. trochanteralis* (Curran, 1924: 219).

Material examined: 3♂ [Namibia:] Damara, De Vulder [19th century] (pinned NHRS); 2♂ 1♀ Ruacana area, 14.iii.1997, Koch (MT); 2♂ 1♀ Sesfontein Fort, 1–3.i.2000, Marais, Mann & Newman, MMN38 (S).

Distribution: Namibia*, South Africa.

**Chrysosoma** Guérin-Méneville, 1831: pl. 20, fig. 6

*C. tricrinitum* Parent, 1933: 33.


Distribution: Burundi, Democratic Republic of Congo (Kinshasa), Malawi, Mozambique, Namibia, Nigeria, Sierra Leone, South Africa, Tanzania.

**Condylostylus** Bigot, 1859: 215

*C. imitator* Curran, 1924: 221.


Distribution: Botswana, Namibia, Zimbabwe.

*C. Sinclairi* Grichanov, 2000a: 401.

Previous records: 8♂ 3♀ (holotype & paratypes), Katara, Okavango River, 20–23.i.1998, Kirk-Spriggs & Marais (MT); 20♂ 3♀ (paratypes), Simanya, Okavango River, 23–24.i.1998, Kirk-Spriggs & Marais (MT); 4♂ 1♀ (paratypes), Katara, 1 km S, Okavango River, 23–24.i.1998, Kirk-Spriggs & Marais (MT) primary forest; 1♂ 1♀ (paratypes), Matende River, 20–21.i.1998, Marais & Kirk-Spriggs (MT) primary woodland; 2♂ 1♀ (paratypes), Mangetti Quarantine Camp, 11.i.1993, Marais; 1♂ (paratype), Leeupan, 12–14.i.1991, Marais (all NMNW type series # T 609) (all Grichanov 2000a: 401).

Material examined: 6♂ 4♀ Simataa, Salamabala [sic Salambala] B6, 24–27.ii.2001, Marais & Kirk-Spriggs (MT); 5♂ 4♀ Salambala, 4 km NE of, 25.ii–1.i.2001, Kirk-Spriggs & Marais (MT); 12♂ 5♀ Salambala
Distribution: Namibia.

Mesorhaga Schiner, 1868: 217

M. kirkspriggsi Grichanov, 2000a: 400.
Previous records: 2♂ (holotype & paratype), Simanya, Okavango River, 23–24.i.1998, Kirk-Spriggs & Marais (MT) riverine forest (both NMNW type series # T 611) (both Grichanov 2000a: 400).
Distribution: Namibia.

Parentia Hardy, 1935: 245

P. asymmetrica Grichanov, 2000a: 404.
Previous records: 6♂ 6♀ (holotype & paratypes), Susuwe (1), Kwando River, 28.ix–2.x.1998, Kirk-Spriggs (MT) dry woodland (all NMNW type series # T 612) (all Grichanov 2000a: 404).
Distribution: Namibia.

DOLICHOPODINAЕ

This subfamily was recently revised by Grichanov (2004) who includes keys to afrotropical genera and species.

Dolichopus Latreille, 1796: 159

Distribution: Democratic Republic of Congo (Kinshasa), Ethiopia, Namibia*, South Africa.

Hercostomus Loew, 1857: 9

H. argyropus argyropus (Loew, 1858: 372).
Material examined: 1♂ 1♀ Salambala, 4 km NE, 25.ii–1.iii.2001, Kirk-Spriggs & Marais (MT); 1♂ 1♀ Salambala pan, 1–4.iii.2001, Kirk-Spriggs (MT).

= H. par Parent, 1934: 129.
Material examined: 5♂ 7♀ Susuwe (2), Kwando River, 20–21.x.1999, Kirk-Spriggs, Pape, Hauwanga (MT), river’s edge.
Distribution: Angola, Botswana, Burundi, Democratic Republic of Congo (Kinshasa), Kenya, Namibia, Tanzania, Uganda.
Notes: The Caprivi Strip appears to be a region in which the two subspecies of H. argyropus may occur sympatrically. The colouration of the tarsi is more variable in H. argyropus par (Parent, 1934) than in H. a. argyropus (Loew, 1858).

Previous records: 5♂ 13♀ (holotype & paratypes), Susuwe (1), Kwando River, 28.ix–2.x.1998, Kirk-Spriggs (MT) dry woodland; 1♀ (paratype), same except: multicolour pan traps, riverine edge (all NMNW type # T 622) (all Grichanov, 2004: 31).
Material examined: 10♂ 10♀ Susuwe (2), Kwando River, 20–21.x.1999, Kirk-Spriggs, Pape, Hauwanga (MT), river’s edge.
Distribution: Namibia.
Lichtwardtia Enderlein, 1912: 406

*L. angularis* (Macquart, 1842: 185).


Notes: The material examined represents two phenotypes of the species that may represent two different species.

*L. fractinervis* (Parent, 1929b: 175).


Material examined: 1♂ 1♀ Trekkersboom, 28.xii.1998, Kirk-Spriggs (S) grasses in wet area; 3♂ 4♀ Salambala, 4 km NE, 25.ii–1.iii.2001, Kirk-Spriggs & Marais (MT); 1♀ Salambala pan, 1–4.iii.2001, Kirk-Spriggs (MT).

Distribution: Angola, Benin, Botswana, Côte d’Ivoire, Democratic Republic of Congo (Kinshasa), Gabon, Ghana, Malawi, Namibia, Nigeria, Uganda.


Previous record: Ameib Farm, 19 mls NW Karibib [21°44’S:15°38’E], i–ii (BMNH) (Grichanov 1998b: 234).

Distribution: Democratic Republic of Congo (Kinshasa), Namibia.


Material examined: 1♀ Okavango River, 18–19.x.1999, Kirk-Spriggs, Pape, Hauwanga (MT).

Distribution: Botswana, Madagascar, Namibia, Senegal, South Africa.

Pelastoneurus Loew, 1861: 36


Distribution: Democratic Republic of Congo (Kinshasa), Ghana, Namibia.

*P. micrurus* Parent, 1933: 7.


Distribution: Cameroon, Democratic Republic of Congo (Kinshasa), Ethiopia, Madagascar, Malawi, Namibia*, Uganda.

Tachytrechus Haliday in Walker, 1851: 137

*T. tessellatus* (Macquart, 1842: 185).


MEDETERINAE

Grichanov (1999b, 2000a) revised this subfamily and Grichanov (1999b) provided keys to afrotropical genera and species.
**Corindia** Bickel, 1986: 137

Distribution: Democratic Republic of Congo (Kinshasa), Gabon, Namibia.

**Grootaertia** Grichanov, 1999b: 90

**Medetera** Fischer von Waldheim, 1819: 7

*A. africana africana* Grichanov, 2000a: 410.
Distribution: Namibia*, South Africa.

**M. capensis** Curran, 1926a: 13.
Distribution: Namibia, South Africa.

**M. chamakovi** Grichanov, 1997a: 183.
Previous record: Okahanga [=Okahandja], Camping place [21°58’S:16°54’E], ii (BMNH) (Grichanov 1997a: 183).
Distribution: Namibia.

**M. cimbebasia** Grichanov, 2000a: 416.
Distribution: Namibia.

**M. ivovskii** Grichanov, 1999b: 98.
Previous records: 1♂ Dikweya, NE 5 km, 14–27.i.1993; 1♀ Ohamwaala, 21.i.1993; 1♂ 2♀ Etudilondjaba, 14–27.i.1993; 2♂ 1♀ Edimba, 14–26.i.1993; 3♂ 1♀ Susuwe (1), Kwando River, 26–30.ix.1998 (all Grichanov 2000a: 427).
Distribution: Democratic Republic of Congo (Kinshasa), Namibia.

**M. norlingi** Grichanov, 1997a: 176.
Distribution: Democratic Republic of Congo (Kinshasa), Namibia.
M. normalis Curran, 1924: 226.
Distribution: Botswana, Burundi, Congo (Brazzaville), Democratic Republic of Congo (Kinshasa), Ghana, Namibia, South Africa, Tanzania.

Distribution: Namibia*, South Africa.

M. polleti Grichanov, 1997a: 179.
Previous records: Kahn River, 5 mls N Usakos [21°56'S:15°33'E]; Aar Farm, 25 mls ESE Aus [26°50'S:16°36'E]; Babry Farm, 25 mls W Helmeringhausen [26°52'S:16°24'E]; Okahana [=Okahandja], Camping place [21°58'S:16°54'E], i–ii (all BMNH) (all Grichanov 1997a: 179).
Distribution: Botswana, Namibia.

Distribution: Democratic Republic of Congo (Kinshasa), Namibia.

Previous records: Aar Farm, 25 mls ESE Aus [26°50'S:16°36'E] (BMNH) (Grichanov 1997a: 180); 1° Okazewana, 31.iii.1996 (Grichanov 2000a: 427).
Distribution: Namibia.

M. simplicis Curran, 1924: 227.
Previous record: Otjimibi Fm., 27 mls ESE Kamanjab [19°49'S:15°11'E], ii (BMNH) (Grichanov 1997a: 187).
Distribution: Democratic Republic of Congo (Kinshasa), Namibia, South Africa.

M. subchevi Grichanov, 1997a: 177.
Distribution: Botswana, Namibia, South Africa.

Thrypticus Gerstaecker, 1864: 43

Previous record: 1° 1° Messum Valley, 700 m, 3.iv.1999 (Grichanov 2000a: 428).
Distribution: Cameroon, Democratic Republic of Congo (Kinshasa), Kenya, Namibia, Swaziland.
HYDROPHORINAE

See brief review of the afrotropical fauna of the subfamily by Grichanov (1997b) with key to afrotropical genera provided.

_Cemocars_ Meuffels & Grootaert, 1984: 152

Two or three additional undescribed species are found in Namibian material. See re-description of _C. griseatus_ by Meuffels and Grootaert (1984: 153).

_C. griseatus_ (Curran, 1926b: 403).


Distribution: Namibia, South Africa.

_Hydrophorus_ Fallén, 1823: 2

See notes on the afrotropical _Hydrophorus_ in Grichanov (1997b: 150).

_H. praecox_ (Lehmann, 1822: 42).

= _H. inaequalipes_ (Macquart, 1834: 453).


Notes: Loew (1858: 341) recorded the first dolichopodid species from Namibia. One ♀ was traced in the so-called ‘Loew collection’ (NHRS) with the following labels: ‘Svakop. [sic =Svakop], Africe / J. Wahlb. // 19// 164 // Hydrophorus inaequalipes’. This specimen was cited by H. Loew in 1858 and represents a true example of _Hydrophorus inaequalipes_ (Lehmann, 1822), although labelled and published as _H. inaequalipes_ (Macquart, 1834) (see below). The first author has also studied material deposited in the MZLU and cited for Namibia by Vanschuytbroeck (1960) under the names _H. hydrophylax_ Parent, 1939, and _H. jeanneli_ Parent, 1938; all the males and most females are referred here to _H. praecox_ and a few females may be referred to _H. spinicornis_ Loew, 1858.
H. spinicornis Loew, 1858: 373 [1860: 280].


Previous records: Doubtful (Grichanov 1997b: 153, as Hydrophorus vaalensis).
Distribution: Lesotho, Namibia, South Africa, Zimbabwe.

Notes: Type material has been examined: Holotype ♀ '179 // 163 // Hydrophorus spinicornis' (NHRS; Loew’s collection). Description of a female H. vaalensis by Parent (1954: 226) and diagnosis of the species provided by Grichanov (1997b: 153) correspond to holotype of H. spinicornis.

Thinophilus Wahlberg, 1844: 37

T. bipunctatus Curran, 1926a: 27.


Distribution: Democratic Republic of Congo (Kinshasa), Namibia, South Africa.

T. imperialis (Curran, 1924: 228).

Material examined: 3♂ 4♀ Okavango River, 18–19.x.1999, Kirk-Spriggs, Pape, Hauwanga (MT).

Distribution: Botswana, Democratic Republic of Congo (Kinshasa), Ghana, Namibia*, Nigeria, South Africa.


Previous records: Nr Onseepkans, Orange R. banks [23°38'S:15°10'E]; Swakop R., 3 mls S Okahandja [22°01'S:16°54'E], i, iv (all BMNH) (all Grichanov 1997c: 137).

Distribution: Afrotropical: Angola, Benin, Cape Verde Is., Democratic Republic of Congo (Kinshasa), Ethiopia, Ghana, Madagascar, Namibia, Nigeria, South Africa, South Yemen, Swaziland, Tanzania; Palaearctic: Algeria, Egypt, Iran, Mongolia, Turkey; Oriental: India, Malaysia (Borneo, ‘Malaya’), Nepal, Philippines, Taiwan.

T. maculatus Parent, 1929a: 50.

Material examined: 1 ♀ Nhoma River, E 1 km, 28.xii.1998, Marais, Kirk-Spriggs & Mann (LT); 1♂ Xawasha pan, 27.xii.1998, Kirk-Spriggs (MT); 1♂ Ekuju village, Kunene River, 11–12.x.1999, Kirk-Spriggs, Pape, Hauwanga (WP) river’s edge; 1♂ 1♀ Katarara, Okavango River, 22.i.1998, Marais & Kirk-Spriggs (LT); 1♂ Palm 708, pools, 4.i.2000, Marais, Mann & Newman, MMN40 (S); 1♀ Mahango Game Reserve, 1.i.1999, Kirk-Spriggs (S) grasses.

Distribution: Namibia*, Sudan.

T. munroi setiscutellatus Grichanov, 1997c: 141.

Previous records: Swakopmund [22°40'S:14°32'E], i (BMNH) (Grichanov 1997c: 141); 2♀ Bogenfels area, 11–12.iv.1986 (Grichanov 2000a: 429).

Distribution: Namibia.


Previous records: Nr Onseeckans Orange R. banks [23°38'S:15°10'E]; Otjitambi Fin., 27 mls ESE Kamanjab [19°49'S:15°11'E]; Ameib Farm [21°44'S:15°38'E], i–ii (all BMNH) (all Grichanov 1997c: 144).

Distribution: Angola, Botswana, Ethiopia, Namibia, Nigeria.

T. prudens Curran, 1926a: 30.


Material examined: 1♀ Nhoma River, 1 km E, 28.xii.1998, Marais, Kirk-Spriggs & Mann (MT); 2♂ 5♂ Hoanib River, 7–14.ii.1999, Marais (YP); 1♀ Ugab River fountain, 5 km downstream from Goantagab Mine Cross, 3.xii.1988, Griffin, in and on mud.

Distribution: Angola, Democratic Republic of Congo (Kinshasa), Ghana, Namibia, Senegal, South Africa.

DIAPHORINAE

The afrotropical genera of this subfamily are still not fully revised. See key to Namibian dolichopodid genera provided by Grichanov (2000a: 431).

Acropsilus Mik, 1878: 6

A key to afrotropical species is provided by Grichanov (1998c: 189).

A. brevitalus (Parent, 1937a: 10).

Previous record: Namibia (Grichanov 2000a: 431, as Acropsilus sp.).


Distribution: Democratic Republic of Congo (Kinshasa), Israel, Namibia*, Tanzania.

Notes: This is a small-sized species with an apparently wider distribution than was previously thought.
Asyndetus Loew, 1869: 34

One further, as yet undescribed, species occurs in Namibia.

A. virgatus Curran, 1926a: 34.


Distribution: Namibia, South Africa.

Chrysotus Meigen, 1824: 40

Two further undescribed species are known from Namibian material.

C. inconspicuus Loew, 1858: 372.


Distribution: Kenya, Namibia, South Africa.

Notes: Type material has been examined in NHRS and lectotype and paralectotype are here designated to fix the current taxonomic concept and ensure consistent future interpretation: Lectotype ♂ ‘193 // 155 // Chrysotus inconspicuus ♂ // Lectotype, des. Grichanov 2003’. Paralectotype ♀ ‘194 / 155 / Chrysotus inconspicuus ♀ // Paralectotype, des. Grichanov 2003’.

Cryptophleps Lichtwardt, 1898: 491


Distribution: Côte d’Ivoire, Namibia.

Diaphorus Meigen, 1824: 32

D. lawrencei Curran, 1926b: 414.

Previous record: 1♀ Susuwe (1), Kwanedo River, 28.ix–2.x.1998 (Grichanov 2000a: 430).


Distribution: Chad, Democratic Republic of Congo (Kinshasa), Ghana, Malawi, Mozambique, Namibia, South Africa.
Trigonocera Becker, 1902: 57

*T. africana* Naglis, 1999: 333.
Distribution: Namibia, Zambia.

**SYMPYCNINAE**

The afrotropical genera of this subfamily are still not fully revised. See key to Namibian dolichopodid genera provided by Grichanov (2000a: 431).

**Campsicnemus** Haliday in Walker, 1851: 187

A key to afrotropical species is provided by Grichanov (1998d: 113).

*C. caffer* Curran, 1926a: 15.
Distribution: Namibia, South Africa.

**Micromorphus** Mik, 1878: 6


**Sympycus** Loew, 1857: 42

Two further as yet undescribed species are known from Namibia.

*S. discrepans* Parent, 1934: 112.

*S. munroi* Curran, 1925: 177.
Distribution: Burundi, Côte d’Ivoire, Democratic Republic of Congo (Kinshasa), Gabon, Gambia, Kenya, Namibia, Rwanda, Sierra Leone, South Africa, Zimbabwe.

**Teuchophorus** Loew, 1857: 44

Previous record: 3♂ 3♀ (holotype & paratypes), Susuwe (1), Kwando River, 28.ix–2.x.1998, Kirk-Spriggs (MT) (all NMNW type series # T 613) (all Grichanov 2000b: 88).
Distribution: Namibia.
APPENDIX II

Records from Botswana, Democratic Republic of Congo, Kenya, Madagascar and Zambia, based on material in the collections of the National Museum of Namibia. New country records are indicated with an asterisk. All material is identified by I. Grichanov in 1999–2003. Unless otherwise stated all material preserved in alcohol.

BOTSWANA

*Asyndetus virgatus* Curran, 1926a: 34*.
8♂ 5♀ Third Bridge, 19°14′S:23°21′E, 10.iii.1993, Marais.

*Bickeliolus maslovae* (Grichanov, 1996c: 224).
3♂ Third Bridge, 19°14′S:23°21′E, 10.iii.1993, Marais (Grichanov 1999a: 122).

*Chrysotus inconspicuus* Loew, 1858: 372*.
4♂ 1♀ Third Bridge, 19°14′S:23°21′E, 10.iii.1993, Marais.

*Condylostylus imitator* Curran, 1924: 221.
1♂ Third Bridge, 19°14′S:23°21′E, 10.iii.1993, Marais (Grichanov 1999a: 116).

*Diaphorus lawrencei* Curran, 1926: 414*.
4♂ 2♀ Third Bridge, 19°14′S:23°21′E, 10.iii.1993, Marais.

*Hercostomus argyropus* par (Parent, 1934: 129).
1♂ Third Bridge, 19°14′S:23°21′E, 10.iii.1993, Marais (Grichanov 2000a: 425).

*Lichtwardtia angularis* (Macquart, 1842: 185).
1♂ Third Bridge, 19°14′S:23°21′E, 10.iii.1993, Marais (Grichanov 2000a: 425).

*Medetera normalis* Curran, 1924: 226.
1♀ Third Bridge, 19°14′S:23°21′E, 10.iii.1993, Marais (Grichanov 2000a: 427).

*Medetera subchevi* Grichanov, 1997a: 177.
10♂ 14♀ Third Bridge, 19°14′S:23°21′E, 10.iii.1993, Marais (Grichanov 2000a: 428).

DEMOCRATIC REPUBLIC OF CONGO

*Corindia demoulini* Grichanov, 2000a: 406.

KENYA


MADAGASCAR

4♂ 2♀ TAM, Morarano-Chrome, 25 km W, forêt [date struck through], Pauly Col. (Grichanov 1998a: 114).

1♂ TAM, Morarano-Chrome, 25 km W, forêt [date struck through], Pauly Col. (Grichanov 1998a: 98).

*Condylostylus basovi* Grichanov 1998a: 90.
1♂ TAM, Morarano-Chrome, 25 km W, forêt [date struck through], Pauly Col. (Grichanov 1998a: 90).

*Condylostylus chaineyi* Grichanov 1998a: 91.
1♂ TAM, Morarano-Chrome, 25 km W, forêt [date struck through], Pauly Col. (Grichanov 1998a: 91).

*Ethiosciapus latipes* (Parent, 1930: 94).
3♂ TAM, Morarano-Chrome, 25 km W, forêt [date struck through], Pauly Col. (Grichanov 1998a: 97).

ZAMBIA

*Asyndetus virgatus* Curran, 1926: 34*.

APPENDIX III

Gazetteer of localities in Namibia based on label data cited in Appendix I. Localities for material deposited in institutions other than the National Museum of Namibia are provided in full in Appendix I.

Aha Hills, 19°47'36"S:20°59'51"E (Tsumkwe District)
Amkarub 269, 19°49'17"S:14°39'53"E (Khorixas District)
Aussenkjer fountain # 2, 18°26'1"S:17°32'2"E (Karasburg District)
Bergrus 414, 24°04'55"S:19°24'42"E (Mariental District)
Bogenfels area, 27°26'S:15°24'E (Diamond Area 1)
Boulder Pool 3, SE 2214 Db (Swakopmund District)
Buffalo Base, 19°08'S:21°41'E (West Caprivi Park)
CDM Camp Tsumkwe, SE 1920 Cb (Bushmanland)
Clinghardt Mountains, 27°20'04"S:15°46'00"E (Lüderitz District)
Koinachas, SE 1816 Dd (Etosha National Park)
Klinghardt Mountains, 27°20'04"S:15°46'00"E (Lüderitz District)
Klinghardt Mountains, 27°20'04"S:15°46'00"E (Lüderitz District)
Klinghardt Mountains, 27°20'04"S:15°46'00"E (Lüderitz District)
Klinghardt Mountains, 27°20'04"S:15°46'00"E (Lüderitz District)

Kupferberg 33, 22°40.65'S:16°59.18'E (Windhoek District)
Leeupan, 18°40'S:20°52'E (Khaudom Game Reserve)
Mahango Game Reserve, 18°10'26"S:21°43'12"E
Mangetti Quarantine Camp, 18°40'S:19°02'E (Kavango)

Mannheim Research Station, 19°10'10"S:17°45'33"E (Tsumeb District)
Matende River, 17°54'46"S:19°35'16"E (Rundu District)
Maunga, 17°53'53"S:24°23'19"E (Katima Mulilo District)
Messum Valley, 700 m, 21°13.29'S:14°30.98'E (Brandberg)
Namatjira, 17°47'21"S:24°38'38"E (Katima Mulilo District)
Namatjira, 17°47'21"S:24°38'38"E (Katima Mulilo District)
Namatjira, 17°47'21"S:24°38'38"E (Katima Mulilo District)
Namatjira, 17°47'21"S:24°38'38"E (Katima Mulilo District)
Namatjira, 17°47'21"S:24°38'38"E (Katima Mulilo District)

Nama, 19°54'34"S:20°44'08"E (Tsumkwe District)
Namutoni EE Centre, 18°48'S:17°02'E (Etosha National Park)
Ngala, 17°55'07"S:24°23'45"E (Katima Mulilo District)
Nhoma River, E 1 km, 19°10'00"S:20°36'09"E (Tsumkwe District)
Nonidas, 22°38'21"S:14°38'40"E (Swakopmund District)
Obib waters, 28°00'S:16°38'E (Lüderitz District)
Obob Spring, 20°25'06"S:13°49'11"E (Khorixas District)
Odila River, 17°29'S:16°51'E (Ovambo)
Ogongo Agricultural College, SE 1715 Cb (Ovamboland)
Ohamwaala, 17°25'S:16°03'E (Ovambo)
Okaukuejo, SE 1915 Bb (Outjo/Etoshapark)
Okavango River, 18°13'19"S:21°45'10"E (Mahango Game Park)
Okazewana, 18°25'S:13°47'E (Opupa District)
Omumu, 17°30'S:16°10'E (Ovambo)
Orangemund, 28°37'16"S:16°26'08"E (Lüderitz District)
Owambaco, 18°10'S:12°34'E (Kaokoland)
Palm 708, 19°52'06"S:14°01'13"E (Khorixas District)
Panner HC7, SE 2214 Db (Swakopmund District)
Plateau Valley, 21°10'46"S:14°32'52"E (Brandberg)
Popa Falls, 18°07'S:21°04'E (Kavango)
Possession Island, 27°00'32"S:15°11'33"E (Lüderitz District)
Prinzen Bucht, 27°06'32"S:15°15'04"E (Lüderitz District)
Renostervlei, 2 km E, 19°09'59"S:14°33'12"E (Etosha National Park)
Restcamp, 20°30'0'S:17°14'17"E (Waterberg Plateau Park)
Riverside 135, SE 2616 Ca (Bethanie District)
Rooiberg [mountain], 27°38'S 16°28'E (Lüderitz District)
Rosh Pinah, 8 km W, 27°59'28"S:15°39'14"E (Lüderitz District)
Rössing fish pond, SE 2214 Db (Swakopmund District)
Røssing fish pond, SE 2214 Db (Swakopmund District)
Salamala campsite, 17°50'01"S:24°36'09"E (Katima Mulilo District)
Salamala campsite, 17°50'01"S:24°36'09"E (Katima Mulilo District)
Salamala M4, 17°42'55"S:24°32'47"E (Katima Mulilo District)
Salamala pan, 17°50'00"S:24°35'58"E (Katima Mulilo District)
Salamala, 4 km NE, 17°49'21"S:24°36'07"E (Katima Mulilo District)
Sechomb R., SE 1812 Cb (Skeleton Coast Park)
Sesfontein Fort, 19°07'15"S:13°37'06"E (Opuwo District)
Simanya, 17°33'17"S:18°32'30"E (Rundu District)
Simataa, 17°48'36"S:24°32'18"E (Katima Mulilo District)
Somerkoms 521, 22°01'59"S:19°57'22"E (Gobabis District)
Susuwe (1), 17°45'54"S:23°21'10"E (West Caprivi Park)
Susuwe (2), 17°45'54"S:23°21'10"E (West Caprivi Park)
Swakop River, 22°40'47"S:14°35'09"E (Swakopmund District)
Trekkersboom, 19°18'00"S:20°39'42"E (Tsumkwe District)
Tsams Ost spring, 24°14'45"S:16°06'17"E (Namib-Naukluft Park)
Tsaboismund 85, 22°22'40"S:15°44'58"E (Karibib District)
Tugua, 17°26'S:18°27'E (Kavango)
Ugab R., 2 km W Brandberg Wes, 20°58'05"S:14°06'56"E (Omaruru District)
Ugab River fountain, SE 2114 Ba (Damaraland)
Ugab River, 457 m, 21°00.869'S:14°38.127'E (Khorixas District)
Uniai Delta area, 20°11'S:13°13'E (Skeleton Coast Park)
Valle campsite, 24°08'25"S:16°05'46"E (Namib-Naukluft Park)
Valle mountainside, 24°08'32"S:16°05'05"E (Namib-Naukluft Park)
Van Reenenbaai, 27°24'19"S:15°12'42"E (Lüderitz District)
Viljoenskroon 507, 25°10'S:19°58"E (Mariental District)
Wasserfallfläche (1), 21°13'0.5"S:14°31'0.1"E (Brandberg)
Wasserfallfläche (2), 21°10'42"S:14°32'55"E (Brandberg)
Wasserfallfläche, pools, 21°10'40"S:14°33'08"E (Brandberg)
Wasserfallfläche, 1960 m, 21°10.77'S:14°32.87'E (Brandberg)
Wasserfallfläche, 2000 m, 21°10.76'S:14°33.16'E (Brandberg)
Wasserfallfläche, below, 21°10'43"S:14°32'51"E (Brandberg)
Windhoek, 22°34'S:17°05'E (Windhoek District)
Xawasha pan, 19°09'58"S:20°54'40"E (Tsumkwe District)