A Review of the African *Adinopsis* Species with Description of Two New Species from Northern Namibia

(Coleoptera, Staphylinidae, Aleocharinae)

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With 50 figures and 1 map in the text

**Abstract.** Two new *Adinopsis* species from the banks of the Kavango River and connected temporary lakes in the Caprivi strip in Northern Namibia are described and illustrated: *A. maraisi* spec. nov. and *A. deckerti* spec. nov. (type localities: Namibia, Kavango, Mahango Game Reserve, 18°17'S/21°43' E, respectively 18°14'S/21°43'E).

The African *Adinopsis* species are reviewed, catalogued and keyed.

**Key words:** Insecta, Coleoptera, Staphylinidae, Aleocharinae, Deinopsini, *Adinopsis*; Arctogaea, Africa, Afrotropical (Ethiopian) region, Namibia; new species, key to the African species, catalogue, zoogeography.

**Introduction**

The Staphylinid fauna of Africa is very poorly known and poorly studied in general. Only a few groups have been revised, keyed and catalogued, using modern techniques and methods, amongst them the Aleocharinae tribe Deinopsini by KLIMASZEWSKI (1979, 1980, 1982, 1985b, 1991) and by KLIMASZEWSKI & JANSEN (1994). The tribe, however, is represented in Africa only by the genus *Adinopsis*.

The first two African *Adinopsis* species (*A. devroeyi* and *A. schoutedeni*) were described by BERNAUER (1933) in the genus *Deinopsis* on the basis of material from Zaire. CAMERON (1950) added another species (*A. africana*), also from Zaire. In 1979, in his revision of the Gymnusini and Deinopsini of the world, KLIMASZEWSKI described *A. flavicornis* from Zaire and keyed the Afrotropical species for the first time. *Adinopsis* species outside of Zaire were first described by KLIMASZEWSKI (1980, 1991) and by KLIMASZEWSKI & JANSEN (1994) from South Angola (*A. hammondii*) and South Africa: Natal (*A. ndumu*) and Transvaal (*A. mmabolela*).

The capture of three additional new species in Namibia during the 1st and the 6th Africa Expedition of the Museum für Naturkunde Berlin prompted us to give the description of two species. The third is being described as *A. klimeszewskii* UHLIG (1995) in the same volume of the journal. We also give a new key to, and a new catalogue of, the African *Adinopsis* species, and discuss zoogeographical and phylogenetic aspects of them.

1 Ergebnisse der entomologischen Afrika-Expeditionen des Museums für Naturkunde Berlin. 12. Beitrag.

Results of the entomological expeditions of the Museum of Natural History Berlin to Africa. 12th contribution.

2 A revision of the Gymnusini and Deinopsini of the world (Coleoptera, Staphylinidae, Aleocharinae). Supplement 6.
Material and Methods

The terminology and methods used here are as in Klimeszewski's revision of the tribe and its supplements 1 to 5 (KLIMASZEWSKI 1979, 1980, 1982, 1985a, b, 1991; KLIMASZEWSKI & JANSEN 1994) and in Uhlig's paper on Erichsonius (Uhlig 1988, 1989, 1992; Uhlig & Watanabe 1992).

The abbreviations of institutions and private collections used in the text are as follows:

BMNH British Museum (Natural History), London (= The Natural History Museum)
FMNH The Field Museum of Natural History, Chicago
MNHUB Museum für Naturkunde der Humboldt-Universität, Berlin
TMP Transvaal Museum, Pretoria
SMWN State Museum of Namibia, Windhoek

We would like to thank Mr. Colin Johnson, Manchester (United Kingdom), and Dr. Ales Smetana, Canadian National Collection, Ottawa (Canada), for their criticism of the paper and for the help with English.

Results

Genus Adinopsis Cameron 1919

Type species: Adinopsis rufobrunnea Cameron 1919. For details see KLIMASZEWSKI (1979).

Diagnosis. Body tear-shaped, length 1.6—4.1 mm; tarsal formula 2, 2, 2; mandible with 2 large subapical teeth; maxillary palpus 4-segmented with segment I and III vestigial; antenna 11-segmented, with two basal segments enlarged and with last apical segment bearing apical papilla; tergum X narrowly elongate apically; paramere with two long and two short setae.

Habitat. Hydrophilous species associated with shores of ponds and streams.

Phylogenetic relationships. The genus Adinopsis Cameron is considered as a sister group of Deinopsis Matthews (KLIMASZEWSKI & JANSEN 1994). The genera share the following apomorphic character states:

- tear-shaped body with short, dense and adherent pubescence;
- broad head nearly equal to pronotal width at apex;
- elytra without epipleural ridge;
- first four visible abdominal terga with combs of apical teeth;
- mandible with two large subapical dents;
- glossae wide, flat and moderately elongate;
- median lobe of aedeagus with long ventral projection at the base of bulbus (except for the subgenus Condylopennis);
- paramere with elongate, narrow apical lobe (half the length of the paramere), bearing 4 setae more or less evenly spaced.

The autapomorphic character states of the genus Adinopsis are the following features:

- antennomere 11 bearing apical papilla;
- apical part of tergum X elongate to form a long and narrow projection, or short and split apically.

Systematics. Two subgenera are established: Condylopennis KLIMASZEWSKI & JANSEN (2 Nearctic species) and Adinopsis s. str. (9 species groups with 19 species). The Hammondii group (6 species), Africana group (1 species), Schoutedeni group (1 species), and two species with uncertain group affiliation occur in Africa.

Catalogue of the African Adinopsis species

A. (s. str. (Africana group)) africana Cameron, 1950, Rev. zool. bot. africaines 43, 98. [Adinopsis].

Literature: Hammond 1975, 171. Klimeszewski, 1979, 61, 64—65, figs. 164, 167, 168, 172, map 15. Klimeszewski, 1991, 205, 206. Klimeszewski & JanSEN, 1994, 328.
Type deposition: HT BMNH, PT BMNH.
Type locality: Zaire, Flandria (= Boteka), Prov. Ingende, 00°20'S/19°06'.
Distribution: Zaire (type locality only).

A. (s. str. (Hammondi group)) deckerti UHLIG & KLIMASZEWSKI, 1995, Mitt. Zool. Mus. Berlin 71, 300, 306—307, figs. 4, 18—20, 25, 29, 34, 37—39, map 1. [Adinopsis (s. str. (Hammondi group))].
Type deposition: HT in SMWN, temporally in MNHUB, PT in MNHUB.
Type locality: Namibia, Kavango, Mahango Game Reserve, piknik site, Kavango river banks, 18°14'S/21°43'E.
Distribution: Namibia: Mahango Game Reserve (piknik site, The Giant Baobab Tree). Buffalo Camp.

A. (s. str. (?? group)) devroeyi (BERNHUAER, 1933), Rev. zool. bot. africaines 23, 296 [Deinopsis].
Literature: HAMMOND 1975, 171. KLIMASZEWSKI, 1979, 61, 64, figs. 173, 175, 177, 179, 180, map 15. KLIMASZEWSKI, 1991, 206. KLIMASZEWSKI & JANSSEN, 1994, 328.
Type deposition: HT BMNH.
Type locality: Zaire, Leopoldville (= Kinshasa).
Distribution: Zaire (type locality only).

A. (s. str. (Hammondi group)) flavicornis KLIMASZEWSKI, 1979, Agriculture Canada Monogr. 25, 61, 62—63, figs. 162, 165, 166, 170, 171, map 15. [Adinopsis].
Literature: KLIMASZEWSKI, 1980, 115, 119. KLIMASZEWSKI & JANSSEN, 1994, 328.
Type deposition: HT BMNH.
Type locality: Zaire, Tshiobo n'Goy (= Ngoi, = Ngoy).
Distribution: Zaire (type locality only).

A. (s. str. (Hammondi group)) hammondi KLIMASZEWSKI, 1980, Polskie Pismo entomol. 50, 114—119, figs. 8—16, map 2. [Adinopsis].
Literature: KLIMASZEWSKI & JANSSEN, 1994, 328.
Type deposition: HT BMNH, PT BMNH.
Type locality: Africa, Angola, Roqadas, R. Cunene.
Distribution: Angola (type locality only).

A. (s. str. (?? group)) klimaszewskii UHLIG 1995, Mitt. Zool. Mus. Berlin 71, 293—295, figs. 1—5. [Adinopsis [s. str.]].
Type deposition: HT in SMWN, temporally in MNHUB.
Type locality: Namibia, Kavango, Popa Falls, Kavango river banks, 18°07'S/21°35'E.
Distribution: Namibia (type locality only).

A. (s. str. (Hammondi group)) maraisi UHLIG & KLIMASZEWSKI, 1995, Mitt. Zool. Mus. Berlin 71, 300, 304—306, figs. 3, 21, 24, 28, 33, map 1. [Adinopsis (s. str. (Hammondi group))].
Type deposition: HT in SMWN, temporally in MNHUB.
Type locality: Namibia, Kavango, Mahango Game Reserve, banks of a temporary lake connected with Kavango river, 18°16'S/21°43'E.
Distribution: Namibia (type locality only).

A. (s. str. (Hammondi group)) mmabolela KLIMASZEWSKI & JANSSEN, 1994, Tropical Zool. 7, 328, 329—330, figs. 1—3. [Adinopsis (s. str.) Hammondi group].
Type deposition: HT TMP.
Type locality: South Africa, Transvaal, Mmabolela Estate, Limpopo river banks, 22°40'S/28°15'E.
Distribution: South Africa, Transvaal (type locality only).

A. (s. str. (Hammondi group)) ndumu KLIMASZEWSKI, 1991, Annals of the Transvaal Museum 35 (13), 205—207, figs. 1—5. [Adinopsis].
Literature: KLIMASZEWSKI & JANSSEN, 1994, 328.
Type deposition: HT and PT TMP.
Type locality: South Africa, Natal, Zululand, Ndumu Game Reserve, 26°53'S/32°16'E.
Distribution: South Africa, Natal (type locality only).
A. (s. str. (Schoutedeni group)) schoutedeni (BERNHAUER, 1933), Rev. zool. bot. africaines 23, 297. [Deinopsis].

Literature: Hammond 1975, 171. KLIMASZEWSKI, 1979, 61, 65-66, figs. 163, 169, 174, 176, 178, map 15. KLIMASZEWSKI, 1991, 206. KLIMASZEWSKI & JANSEN, 1994, 328.

Type deposition: LT FMNH.

Type locality: Zaire, Leopoldville (= Kinshasa).

Distribution: Zaire (type locality only).

Key to the Adinopsis species of Africa

1  Body length 1.6-2.5 mm. Pronotum narrower than 0.70 mm. ........................................ 2
1* Body length 2.4-4.1 mm. Pronotum broader than 0.70 mm. .......................................... 5
2(1) Body length 1.6-1.7 mm. Pronotum narrower than 0.59 mm. ....................................... 3
2* Body length 2.0-2.5 mm. Pronotum broader than 0.59 mm. .......................................... 4
3(2) Pronotum with ratio of length to width 0.35:0.57 mm. Anterior body (fig. 9). Aedeagus (fig. 16). @ genital segment dorsal and @ sternite IX (fig. 35). @ tergite VIII (fig. 27). ? unknown.
Distribution: Zaire. .................................................. A. africana CAMERON
3* Pronotum with ratio of length to width 0.32:0.52 mm. Anterior body (fig. 8). Aedeagus (fig. 17). @ genital segment dorsal and @ tergite VIII (fig. 36). ? unknown.
Distribution: Zaire. .................................................. A. schoutedeni (BERNHAUER)
4(2*) Pronotum with ratio length to width 0.39:0.72 mm (average). Body (fig. 11). Aedeagus (figs. 23). ? unknown.
Distribution: South Africa: Northern Transvaal: Limpopo River. .................................. A. mbabolela KLIMASZEWSKI & JANSEN
4* Pronotum with ratio length to width 0.41:0.62 mm. Anterior body (fig. 7). @ genital segment, tergite VIII, sternite VIII and furcate spines at posterior margin of sternite VIII (fig. 40-43).
Distribution: Namibia: Caprivi strip: Popa Falls, Kavango River. ................................ A. klimaszewskii UHLIG
5(1*) Body length 2.4 mm. Pronotum with ratio of length to width 0.47:0.75 mm. Anterior body (fig. 6). Male unknown. ? terminalia (fig. 46). ? tergite VIII (fig. 47).
Distribution: Zaire. .................................................. A. devroeyi (BERNHAUER)
5* Body length 3.0-4.0 mm. Pronotum ratio, anterior body, and terminalia not as above. ........ 6
6(5*) Body length 3.9 mm. Apex of median lobe reaching base of terminal piece of parameres. Pronotum with ratio of length to width 0.57:0.99 mm. Anterior body (fig. 3). Aedeagus (fig. 21). @ genital segment dorsal and @ sternite IX (fig. 33). @ tergite VII (fig. 24). @ sternite VIII (fig. 28). ? unknown.
Distribution: Namibia, Mahango Game Reserve: Kavango River. ................................... A. maraisi spec. nov.
6* Body length 3.0-4.0 mm. Apex of median lobe not reaching base of terminal piece of parameres. Pronotum ratio, anterior body, and terminalia not as above. ........................................ 7
7(6*) Terminal piece of paramere shorter than basal piece of paramere, ratio 0.9. Pronotum with ratio of length to width 0.6:1.0 mm. Body length 3.0-3.5 mm. Anterior body (fig. 5). Aedeagus (figs. 13, 14). @ genital segment dorsal and @ sternite IX (fig. 31). ? tergite VIII (fig. 50); ? terminalia (fig. 48). ? tergite X more slender than that of A. ndumu. Spermatheca (fig. 49).
Distribution: Angola, Cunene. ........................................ A. hammondii KLIMASZEWSKI
7* Terminal piece of paramere as long as, or longer than, basal piece of paramere. ? terminalia (fig. 44) and spermatheca (fig. 45) or ? unknown. ........................................ 8
8(7*) Terminal piece of paramere as long as basal piece of paramere, ratio 1.0. Pronotum with ratio of length to width 0.60:0.99 mm. Body length 3.9. Anterior body (fig. 4). Aedeagus (fig. 18-20). @ genital segment dorsal (fig. 34). @ sternite IX (fig. 37, 38). @ tergite VIII (fig. 25). @ sternite VIII (fig. 29). ? unknown.
Distribution: Namibia, Kavango River. .................................................. A. deckerti spec. nov.
8* Terminal piece of paramere longer than basal piece of paramere, ratios length of terminal piece to length of basal piece 1.2-1.3. Pronotum ratio not as above or similar. Body length 3.0-3.7. ? terminalia (fig. 44) and spermatheca (fig. 45) or ? unknown. .............................. 9
9(8*) Antenna yellow. Pronotum with ratio of length to width 0.6:1.0 mm, base slightly sinuate. Anterior body (fig. 1). Aedeagus (fig. 15). ♂ genital segment dorsal and ♂ sternite IX (fig. 32). ♀ tergite VIII (fig. 26). ♂ sternite VIII (fig. 30). ♀ unknown.

Distribution: Zaire.

9* Antenna light brown with rusty tinge. Pronotum with ratio of length to width 0.46:0.72 mm, base strongly sinuate. Body (fig. 10), anterior body (fig. 2). Aedeagus (fig. 12). ♀ terminalia (fig. 44), ♀ tergite X more robust than that of A. hammondi. Spermatheca (fig. 45).

Distribution: Republic of South Africa, Natal, Zululand.

A. flavicornis KLIMASZEWSKI

Figs. 1–11. Habitus and anterior bodies of the ten African Adinopsis species. 1 A. flavicornis KLIMASZEWSKI 1979: fig. 165; 2, 10 A. ndumu KLIMASZEWSKI 1991: fig. 2, 1; 3 A. maraisi sp. n., ZNoUHL 636 (Zeichnungsnummer UHLIG); 4 A. deckerti sp. n., ZNoUHL 642; 5 A. hammondii KLIMASZEWSKI 1980: fig. 12; 6 A. devroeyi, KLIMASZEWSKI 1979: fig. 173; 7 A. klimaszewskii UHLIG, ZNoUHL 651; 8 A. schoutedeni, KLIMASZEWSKI 1979: fig. 174; 9 A. africana, KLIMASZEWSKI 1994: fig. 168; 11 A. mmbolela KLIMASZEWSKI & JANSEN 1994: fig. 1.
Figs. 24—30. Tergites VIII (24—27) and sternites VIII (28—30) of ♂ Adinopsis. 24, 28 A. maraisi sp. n., HT, ZNoUHL 633, 634; 25, 29 A. deckerti sp. n., HT ZNoUHL 638, 639; 26, 30 A. flavicornis Klimaszewski 1979: figs. 170, 171; 27 A. africana, Klimaszewski 1979: fig. 172.

Figs. 12—23. Aedeagi of African Adinopsis species. 14, 22 lateral. 12 A. ndumu Klimaszewski 1991: fig. 3; 13, 14 A. hammondi Klimaszewski 1980: figs. 8, 9; 15 A. flavicornis Klimaszewski 1979: fig. 162; 16 A. africana, Klimaszewski 1979: fig. 164; 17 A. schoutedeni, Klimaszewski 1979: fig. 163; 18—20 A. deckerti sp. n., ZNoUHL 643, 646, 637, PTs from Buffalo Camp and from Mahango Game Reserve at Giant Baobab tree and HT from Mahango Game Reserve at piknik site; 21 A. maraisi sp. n., HT, ZNoUHL 632; 22, 23 A. mnabolela Klimaszewski & Jansen 1994: figs. 3, 2.
Figs. 31—39. Tergites IX/X and sternite IX of ♂ Adinopsis species. 31 A. hammondii KLIMASZEWSKI 1980: fig. 11; 32 A. flavicornis KLIMASZEWSKI 1979: fig. 166; 33 A. maraisi sp. n., ZNoUHL 635; 34, 37, 38, 39 A. deckeri sp. n., HT (34, 37) from Mahango Game Reserve and PT (38, 39) from Buffalo Camp (38, 39), ZNoUHL 640, 641, 645, 644; 35 A. africana, KLIMASZEWSKI 1979: fig. 167; 36 A. schoutedeni, genital segment and tergite VIII, KLIMASZEWSKI 1979: fig. 178.

Descriptions of the species

*Adinopsis* (s. str. (*Hammondii* group)) *maraisi* UHLIG & KLIMASZEWSKI sp. n.

Figs. 3, 21, 24, 28, 33; Map 1

**Diagnosis**

*Adinopsis maraisi* spec. nov. is very similar to *A. flavicornis*, *A. hammondii*, and *A. ndumuu*. It can be differentiated from them with certainty only by the genital characters, mainly by the longer median lobe, reaching the base of the terminal piece of the parameres, and by the
sclerites of the internal sac. It differs from *A. hammondi* in addition to these features by the longer terminal pieces of the parameres.

*A. maraisi* spec. nov. may be distinguished from the remaining five African species by larger size (3.9 mm) and by the differently shaped aedeagus including the sclerites of the internal sac.

**Description**

Dark brown; antenna, maxillary palpus and legs yellowish brown; antennomeres 1 to 8 strongly, tibiae slightly infuscate; posterior margin of tergite VII narrowly ferrugineous; pubescence appearing yellowish to brownish reflecting in artificial light.

Length about 3.9 mm, length of anterior body 1.5 mm. Head width of HT 0.60 mm; pronotum transverse, widest near base, with ratio of length to width 0.57:0.99 mm; elytra transverse with ratio length at shoulder [and at suture] to width 0.75[0.49]:1.02 mm (fig. 3).
Male. Tergite VIII (fig. 24), sternite VIII (fig. 28), tergite IX/X (fig. 33), sternite IX (fig. 33). Aedeagus (fig. 21). Terminal piece of paramere longer than basal piece. Apex of median lobe reaching base of terminal piece of parameres. Internal sac with two pairs of symmetrical structures, and U-shaped structure, situated centrally in the bulbus.

Female. Unknown.

Material examined

Holotype ♂: HT specimen mounted on rectangular label, ♂, left antennomere 11 missing / plastic slide: aedeagus mounted in Neutralbalsam / plastic slide: tergites and sternites VIII, IX, X mounted in Neutralbalsam / NAMIBIA-Exped. ZMB 1992, Kavango, Mahango Game Reserve, Seeufer, 18°17'S/21°43'E, 28. II. 92, leg. M. Uhlig [blue] / Zeichnung-No. 632—636 des. M. Uhlig 1995 / Holotypus ♂, Adinopsis maraisi spec. nov. det. M. Uhlig & J. Klimaszewski 1995 [red] /. Deposited in SMWN, temporarily in MNHUB.

Distribution

This species is known only from the banks of a lake, connected to the Kavango river, in the Caprivi strip of Namibia (map 1).

Bionomics

The specimen from the Mahango Game Reserve was captured by shore washing (putting mud, grass roots and shore litter into water and skimming the swimming specimens and litter with a water catcher) near the Giant Baobab Tree. The beetle was found at the end of February.

Relationship

Five closely related species form a cluster within the Hammondi group: A. ndumu, A. hammondi, A. maraisi, A. deckerti, and A. flavicornis. All have similarly shaped aedeagi and structures of the internal sac that can be derived from the same ancestral form, which probably consisted of two pairs of symmetrical structures, in addition to the U-shaped structure situated centrally between them (all in internal sac of bulbus when inverted).

Adinopsis maraisi may be considered as the sister species of A. deckerti, with which it forms the sister taxon to A. ndumu and A. hammondi combined. The latter species group has both posterior sclerites of the internal sac separate, while they are joined in the former species. [(A. ndumu + A. hammondi) + (A. maraisi + A. deckerti)] + remaining Afrotropical species.

Etymology

This species is dedicated to our famous colleague Mr. EUGÈNE MARAIS of the State Museum of Namibia, the organizer of the 1st Joint German-Namibian Expedition of the Museum für Naturkunde Berlin and the State Museum of Namibia, Windhoek, to Namibia, in gratitude for his great support to this and the following expeditions and for his kind assistance in providing specimens from SMWN for study.

Adinopsis (s. str. (Hammondi group)) deckerti UHLIG & KLIMASZEWSKI sp. n.

Figs. 4, 18—20, 25, 29, 34, 37—39; Map 1

Diagnosis

Adinopsis deckerti is very similar to A. flavicornis, A. hammondi, A. ndumu, and A. maraisi; it can be distinguished from them with certainty only by the genital characters, mainly by having the terminal piece of the parameres as long as the basal piece and by the internal sac characters. The terminal piece of the paramere is either distinctly shorter than the basal piece in A. hammondi or distinctly longer in A. flavicornis, A. ndumu, and A. maraisi.

A. deckerti may be distinguished from the remaining five African species by its larger size (3.9 mm) and by the differently shaped aedeagus, including the structures of the internal sac.
Description
Dark brown; antenna, maxillary palpus and legs yellowish brown; antennomeres 1 to 8 strongly, tibiae slightly infuscate; posterior margin of tergite VII narrowly ferrugineous; pubescence appearing yellowish to brownish reflecting in artificial light.
Length about 3.9 mm, length of anterior body 1.5 mm. Head width of HT 0.62 mm; pronotum transverse, widest near base, with ratio of length to width 0.60:0.99 mm; elytra transverse with ratio of length at shoulder [and at suture] to width 0.75[0.51]:1.06 mm (fig. 4).
Male. Tergite VIII (fig. 25), sternite VIII (fig. 29), tergite IX/X (fig. 34, 39), sternite IX (fig. 37, 38). Aedeagus (fig. 18-20). Terminal piece of paramere as long as basal piece. Apex of median lobe not reaching base of terminal piece of parameres. Internal sac with two pairs of symmetrical structures and U-shaped structure, situated centrally in the bulbus.
Female. Unknown.

Material examined
Holotype ♂: / HT specimen mounted on rectangular label, ♀, left antennomeres 2 to 11 missing / plastic slide: aedeagus mounted in Neutralbalsam / plastic slide: tergites and sternites VIII, IX, X mounted in Neutralbalsam / NAMIBIA 1. iii. 1994 18°14’S/21°43’E Kavango: Mahango Game Reserve, piknik site, Okavango banks: sievings: flood refuse, reed leaf litter, grass, leg. M. Uhlig [blue] / Zeichnung-No. 637–642 des. M. Uhlig 1995 / Holotypus ♂, Adinopsis deckerti spec. nov. det. M. Uhlig & J. Klimaszewski 1995 [red] / Deposited in SMWN, temporarily in MNHUB.
Paratypes ♂♂: / NAMIBIA 1. + 4. iii. 1994 18°14’S/21°43’E Kavango: Mahango Game Res.: Baobab, Okavango banks: sievings: flood refuse, leg. M. Uhlig [blue] / PARATYPUS ♂, Adinopsis deckerti Uhlig & Klimaszewski 1995 [red] / Zeichnung-No. 646 des. M. Uhlig 1995 / NAMIBIA-Exped. ZMB 1992, Kavango: Buffalo Camp, Kavango-Ufervegetation gesiebt. 18°09’S/21°42’E, 28. 11. 92, leg. M. Uhlig [blue] / Zeichnung-No. 643–645 des. M. Uhlig 1995 / PARATYPUS ♂, Adinopsis deckerti spec. nov. det. M. Uhlig & Klimaszewski 1995 [red].

Distribution
This species is known only from the type locality on the banks of the Kavango river in the Mahango Game Reserve and near the Buffalo Camp in the Caprivi strip of Namibia (map 1).

Bionomics
The type specimens have been collected at the end of February and at the beginning of March by sifting of Kavango river bank flood refuse, reed, leaf litter, grass at muddy places.

Relationship
Adinopsis deckerti is considered here as the sister species of A. maraisi. Both species have extremely similar aedeagi and structures of the internal sac, however, in A. maraisi the tubus of median lobe of the aedeagus is more elongate, the anterior paired structures of the internal sac are larger and slightly broader, and the posterior paired structures are shorter and slightly broader (figs. 18–21).
For relationship with the remaining species see the discussion under A. maraisi.

Etymology
This species is dedicated to our colleague Dr. JÜRGEN DECKERT, curator of Heteroptera in MNHUB. My friend JÜRGEN (M. U) participated in the collecting trip to Mahango Game Reserve that day and facilitated the catching of the holotype by watching for crocodiles and other animals when I was taking the sieving samples from the Kavango banks.

Discussion
All then Afrotropical Adinopsis species are known only from the type localities (Map 1). There are several reasons for this situation. Firstly, the Afrotropical staphylinids are very poorly collected and studied in general. This is especially true for all edaphic and terrestrial species, including
Adinopsis, which have to be collected by sieving or shore-washing methods. Secondly, the Afrotropical Adinopsis species are obviously rare, even in their specific microhabitat, since their abundance is extremely low. Thirdly, the strongly adapted terrestrial species which live at freshwater shores and do not fly regularly are under extremely strong selection pressure, which led locally to many speciation processes. Therefore, many additional new species will certainly be found in the Afrotropical region in the future.

Map 1. Distribution of the African Adinopsis species.


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