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## Contribution to the knowledge of the Cicindelidae of Benin with collecting notes (Coleoptera Cicindelidae)

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### ABSTRACT

A checklist of Coleoptera Cicindelidae presently known from Benin is given. Nine taxa are recorded for the first time from this country. Collecting data, habitat and behaviour observations of adults made by the first author during two expeditions are given along with collecting data provided by the second author.

### KEY WORDS

Cicindelidae; new records; collecting notes; West Africa; Benin.

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### INTRODUCTION

Benin is a small country (about 700 km long and from 120 to 200 km wide) bordering Togo in the west, Nigeria in the east and Niger and Burkina Faso in the north. Benin has several rivers, in particular two of them that are restricted to the country: the Ouémé River going throughout a large part of the territory from the north to the south and the Mono. Semi-deciduous forests probably covered the southern part of Benin in the past, however long presence of humans in these areas resulted in extensive deforestation. Nevertheless, still remain few small patches of forests, such as Niaouli and Pobé which are of particular interest. At present the central part of Benin is largely covered by Guinean savannas, as result of deforestation. The north part of Benin is composed of Guineo-sudanian and sudanian savannas.

The country is situated in a very special ecological area known as the Dahomey-gap (Dahomey was the former name of Benin). Dahomey gap is

generally considered as an area where the savannas descend to the Atlantic coast and where forests are completely absent. This area displays a high biodiversity of insects. The high biodiversity and the relatively a few published data treating Cicindelidae from Benin motivated our research and this paper.

### MATERIAL AND METHODS

Taxonomic classification used here follows the last complex work on Cicindelidae of Africa (Werner, 2000a; 2000b) and the only work exclusively studying Cicindelidae of Benin (Cassola, 2007). Most of the data and observations resulted from the first author's two collecting expeditions and the additional valuable informations came from long-term residence of the second author.

All specimens considered in this study are in the first author's collection except for specimens with abbreviation PLC belonging to the collection of the second author.

## RESULTS

*List of species presently known from Benin*

Family Cicindelidae Latreille, 1806

Subfamily Cicindelinae Csiki, 1906

Tribus Megacephalini Csiki, 1906

Subtribus Megacephalina W. Horn, 1910

Genus *Megacephala* Latreille, 1802

*M. (M.) quadrisignata quadrisignata* Dejean, 1829

*M. (M.) quadrisignata rivalieri* Basilewsky, 1966

*M. (M.) bocandei bocandei* Guérin, 1848

*M. (M.) denticollis schultzeorum* W. Horn, 1904

*M. (M.) megacephala* (Olivier, 1790) new country record

Tribus Cicindelini Sloane, 1906

Subtribus Prothymina W. Horn, 1910

Genus *Prothyma* Hope, 1838

*P. (P.) concinna concinna* (Dejean, 1831) new country record

*P. (P.) concinna anosignata* Bates, 1878

*P. (P.) leprieuri leprieuri* (Dejean, 1831) new country record

Genus *Euryarthron* Guérin, 1849

*E. dromicarium* (Kolbe, 1894) new country record

*E. walterhorni* Cassola, 1983 new country record

*E. sabinatum* (W. Horn, 1912)

*E. gibbosum* (W. Horn, 1894)

*E. planatoflavum* (W. Horn, 1922) new country record

Subtribus Cicindelina W. Horn, 1908

Genus *Elliptica* Fairmaire, 1884

*E. lugubris* (Dejean, 1825)

*E. longestriata longestriata* (W. Horn, 1912)

Genus *Ropaloteres* Guérin, 1849

*R. vittatus* (Fabricius, 1801)

*R. congoensis congoensis* (Fleutiaux, 1893)

*R. feisthamelii* (Guérin, 1849) new country record

*R. nysa nysa* (Guérin, 1849)

*R. cinctus* (Olivier, 1790)

Genus *Hipparidium* Jeannel, 1946

*H. interruptum* (Fabricius, 1775)

Genus *Calochroa* Hope, 1838

*C. flavomaculata sexsignata* (Mandl, 1954) new country record

Genus *Calomera* Motschulsky, 1862

*C. fimbriata fimbriata* (Dejean, 1831)

Genus *Lophyra* Motschulsky, 1859

Subgenus *Lophyra* Motschulsky, 1859

*L. neglecta neglecta* (Dejean, 1825)

*L. senegalensis* (Dejean, 1825)

Subgenus *Stenolophyra* Rivalier, 1958

*L. (S.) luxerii* (Dejean, 1831)

*L. (S.) saraliensis saraliesis* (Guérin, 1849)

Genus *Habrodera* Motschulsky, 1862

*H. nilotica nilotica* (Dejean, 1825)

*H. nitidula nitidula* (Dejean, 1825)

Genus *Chaetodera* Jeannel, 1946

*Ch. regalis regalis* (Dejean, 1831)

Genus *Cylindera* Westwood, 1831

Subgenus *Ifasina* Jeannel, 1946

*C. (I.) lutaria* (Guérin, 1849) new country record

*C. (I.) decellei* Basilewsky, 1968

*C. (I.) octoguttata octoguttata* (Fabricius, 1787)

Genus *Myriochila* Motschulsky, 1862

Subgenus *Myriochila* Motschulsky, 1862

*M. peringueyi peringueyi* (W. Horn, 1895)

*M. plurinotata* (Audoin et Brullé, 1839)

*M. melancholica melancholica* (Fabricius, 1798)

Subgenus *Monelica* Rivalier, 1950

*M. (M.) flavidens flavidens* (Guérin, 1849)

*M. (M.) vicina vicina* (Dejean, 1831)

*M. (M.) dumolinii* (Dejean, 1831)

*M. (M.) legalli* Kudrna, 2008

Genus *Cratohaerea* Chaudoir, 1850

*C. chrysopyga* (W. Horn, 1892)

**Species with listed examined material collected by both authors supplemented with remarks (if available)**

Genus *Megacephala* Latreille, 1802

***Megacephala quadrisignata quadrisignata* Dejean, 1829**

EXAMINED MATERIAL. N. Benin, Kosso, V.1996, several specimens in PLC; Tanguiéta V-VI.1998, several specimens in PLC; Nanébou, VII.2001, several specimens in PLC; C. Benin, Ekpa V.1996, 5 males, 4 females in PLC.

***Megacephala quadrisignata rivalieri* Basilewsky, 1966**

EXAMINED MATERIAL. N. Benin, Kosso, 1 male in PLC; Benin, Nanébou, 1 male in PLC; Benin, Sérrou (Djougou), 1 female in PLC.

***Megacephala bocandei* Guérin, 1848 (Fig. 1)**

EXAMINED MATERIAL. NE Benin, E of Kandi, 4 km W of Bensekou, 24-25.VI.2001, A. Kudrna jr. legit, 1 male; NW Benin, 15 km N of Kouarfa, Bouyagnindi village, 27-28.VI.2001, A. Kudrna jr. legit, 1 female.

REMARKS. The cited pair are the only specimens of *M. bocandei* captured during both first author's trips. The male run quickly in night on black soil path, just where the path left grassy area reach in trees and entered in the field. The female was observed in the late morning of a sunny day in wooded area with high grass and neighbouring field, moving quickly, probably searching for a prey.

***Megacephala denticollis schultzeorum* W. Horn, 1904 (Fig. 2)**

EXAMINED MATERIAL. Benin, village Akongbere, near Save, 19-26.IV.2000, A. Kudrna jr. legit, 2 males, 2 females; Kosso : V-VI.1997-1999, numerous specimens in PLC; Sérrou, V-VI.1997-1999, numerous specimens in PLC; Guinlérrou, 15 km west of Parakou, IV-VII.1996-1998, numerous specimens in PLC.

REMARKS. Specimens were found in night standing on dark paths through dense woodland area with high grass. One female came to light. A torso of a

dead adult was found at the same locality in June 2001.

***Megacephala megacephala* (Olivier, 1790)**

EXAMINED MATERIAL. NE Benin, E of Kandi, around Saa, 21-23.VI.2001, A. Kudrna jr. legit, 1 male, 4 female.

REMARKS. According to Basilewsky (1966), this species is widespread from Senegal and Mauritania to Chad and occurs in sahelian zone or neighbouring areas only. The cited population here reported was discovered in northern area of Benin, where the countryside seems to be more dry and hotter. Specimens were captured during night on sandy roads and occasionally came to light. One specimen was found quickly running through grasses in the end of about two hours lasting hard storm accompanied with intensive rain. New country record.

Genus *Prothyma* Hope, 1838

***Prothyma concinna concinna* (Dejean, 1831)**

EXAMINED MATERIAL. NE Benin, E of Kandi, 7 km E of Bensekou, 23-24.VI.2001, A. Kudrna jr. legit, 2 males.

REMARKS. The first author observed four adults, but managed to catch only two of them due to their very rapid movement from small bare places where discovered, into grass or other hiding-places. These adults didn't fly. New country record.

***Prothyma concinna anosignata* Bates, 1878**

EXAMINED MATERIAL. S Benin, Niaouli, 20.X.1996, 1 female in PLC; S Benin, Niaouli, 10.VII.2002, 1 male in PLC; 1 female; S Benin, Niaouli, 20.XI.2003, 1 female in PLC; Benin, Attogon, V.2001, 1 female in PLC; N Benin, Tanguiéta, 20.VII.1998, 1 female in PLC; Benin, Pénessoulou, VI.1997, 1 male in PLC.

***Prothyma leprieuri leprieuri* (Dejean, 1831)**

EXAMINED MATERIAL. Pénessoulou, 55 km S Djougou, Atakora Benin, Loko/P.Le Gall

REMARKS. A single female specimen without date record, collected by the second author most probably at the light. The discovery of this species

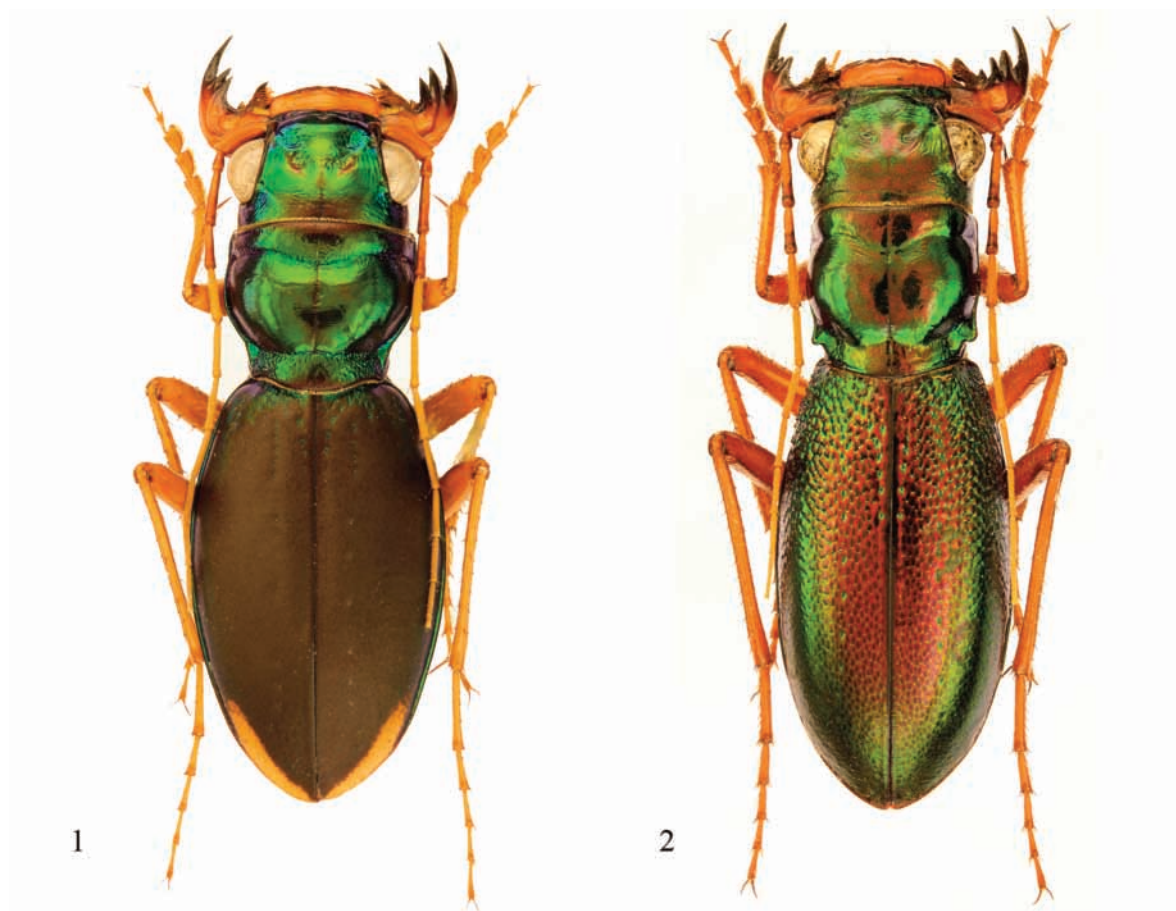


Figure 1. *Megacephala (Megacephala) bocandei*, E of Kandi, 21.3 mm  
 Figure 2. *Megacephala (Megacephala) denticollis schultzeorum*, near Save, 31.5 mm

in Benin is not surprising due to its wide distribution from Senegal to Ethiopia. New country record.

Genus *Euryarthron* Guérin, 1849

*Euryarthron dromicarium* (Kolbe, 1894) (Fig. 3)

EXAMINED MATERIAL. Benin, Bembereke, 2 km W of Gando, 02-03.VII.2001, A. Kudrna jr. legit, 1 female; NW Benin, 5 km N of Tanguieta, direction Tanougou, 28-29.VI.2001, A. Kudrna jr. legit, 3 males.

REMARKS. A very beautiful wingless species of *Euryarthron* which is extremely difficult to find in Benin. It seems, that this species prefers meadows or grassy places at the edges of forested areas. Adults were discovered on bare places, trying to escape into the grass, when disturbed. One male specimen came to light. New country record.

*Euryarthron waltherhorni* Cassola, 1983

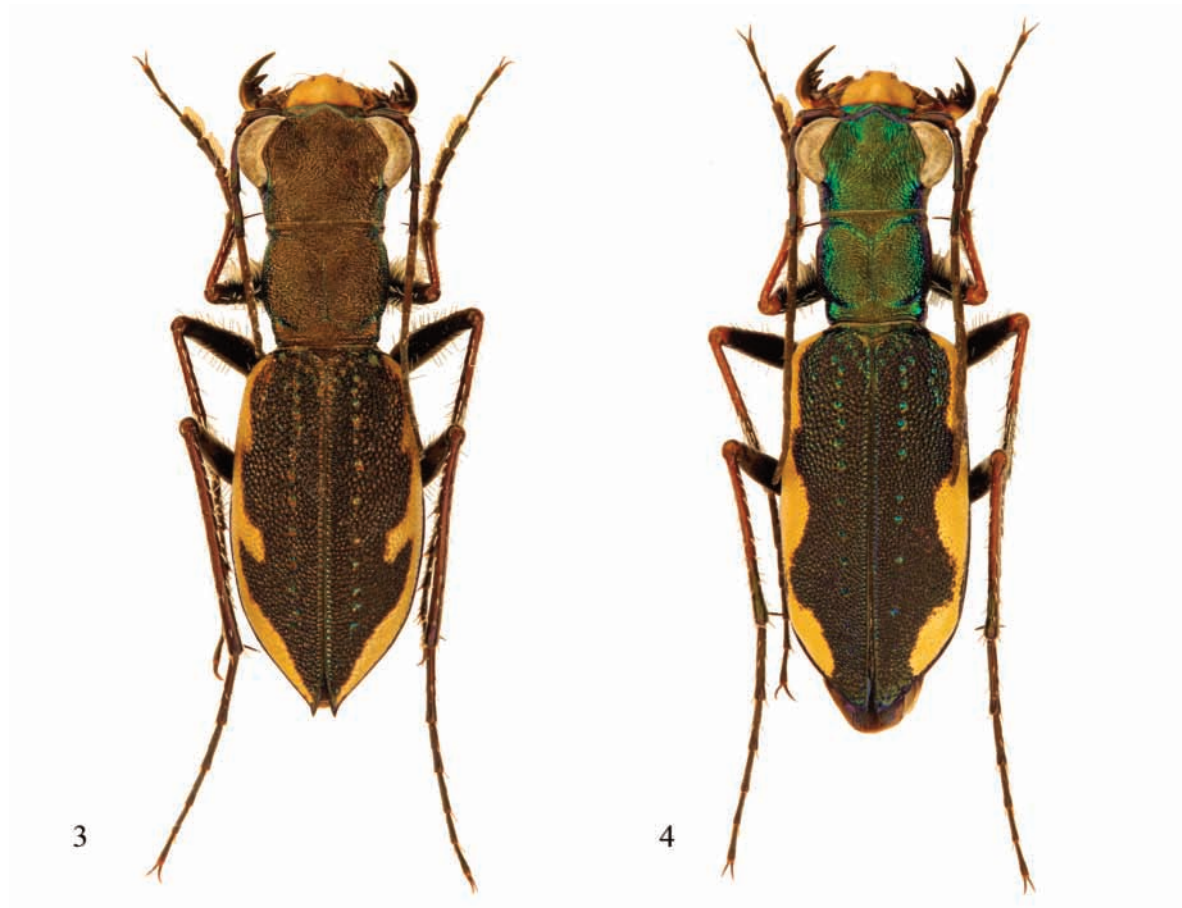
EXAMINED MATERIAL. Benin, Tanguiéta, 10.V.1997, 1 female; Kosso, VI.1998, 2 males, 2 females; Benin, Sérrou VI.2000, 1 male, 1 female; Benin, Sérrou, VII.1998, 1 female. All specimens in PLC.

REMARKS. New country record.

*Euryarthron saginatum* (W. Horn, 1912) (Fig. 4)

EXAMINED MATERIAL. NE Benin, E of Kandi, 4 km W of Bensekou, 24-25.VI.2001, A. Kudrna jr. legit, 2 females; NE Benin, E of Kandi, around Saa, 21-23.VI.2001, A. Kudrna jr. legit, numerous specimens.

REMARKS. This species was found on white-grey soil road through dry woodland with lot of acacia trees. When discovered, it tried to escape flying

Figure 3. *Euryarthron dromicarium*, S of Kerou, 13 mmFigure 4. *Euryarthron saginatum*, E of Kandi, 13.3 mm

away and sit down into the nearby grass. On this road it lived together with *Myriochila plurinotata* and *M. (Monelica) vicina vicina*. In another occasion it was also found in sparse acacia wood.

***Euryarthron gibbosum*** (W. Horn, 1894)

EXAMINED MATERIAL. Benin, village Akongbere, near Save, 19.IV-26.IV.2000, A. Kudrna jr. legit, 6 males, 3 females; NE Benin, E of Kandi, 4 km W of Bensekou, 24-25.VI.2001, A. Kudrna jr. legit, 2 males; NE Benin, E of Kandi, 7 km E of Bensekou, 23-24.VI.2001, A. Kudrna jr. legit, 1 male; NW Benin, 5 km N of Tanguieta, direction Tanougou, 28-29.VI.2001, A. Kudrna jr. legit, 1 female.

REMARKS. In May 2000 this species appeared suddenly in the dense woodland area around Akongbere village, near Save. Whilst first week of intensive collecting there was unproductive, during

four next days about 15 adults, at the same, formerly empty places, were caught. Few more specimens were found in northern parts of country. This species prefers shaded places with sparse grass, paths or roads inside woods.

***Euryarthron planatoflavum*** (W. Horn, 1922)

EXAMINED MATERIAL. Pénessoulou IV.1998, 1 male in PLC.

REMARKS. New country record.

Genus ***Elliptica*** Fairmaire, 1884

***Elliptica lugubris*** (Dejean, 1825)

EXAMINED MATERIAL. NE Benin, E of Kandi, 4 km W of Bensekou, 24-25.VI.2001, A. Kudrna jr. legit, 1 male; N Benin, S of Kerou, 7 km W Yakrigourou, 25-26.VI.2001, A. Kudrna jr. legit, 2

females; NW Benin, 5 km N of Tanguieta, direction Tanougou, 28-29.VI.2001, A. Kudrna jr. legit 3 females, 1 male; NW Benin, 15 km N of Kouarfa, Bouyagnindi village, 27-28.VI.2001, A. Kudrna jr. legit, 4 males, 3 females; NE Benin, E of Kandi, 7 km E of Bensekou, 23-24.VI.2001, A. Kudrna jr. legit, 1 male; Benin, Bembereke, 7 km W of Gando, 03-04.VII.2001, A. Kudrna jr. legit, 2 males; Benin, Bembereke, 2 km W of Gando, 02-03.VII.2001, A. Kudrna jr. legit, 1 male; Pénesoulou, VI.1998-VI.1999, numerous specimens in PLC; Sérrou.

REMARKS. This very beautiful large species was present at most of the localities, but usually in few specimens only. Horn (1915) described subspecies *E. lugubris anthrax*, based on the black colouration. However, the black specimens represent merely a variation without any taxonomic value. Interesting is the proportion between this black form and the common black-yellow specimens: first author observed only one anthrax variation along tens of individuals on all of the collecting spots except locality 5 km N of Tanguieta, where six from eight caught specimens were black. This locality, near Atacora Mountains with very sparse wood with dominance of acacia trees was very hot and dry place. *Elliptica lugubris* is generally silvicolous dwelling species preferring shaded grassy places.

***Elliptica longestriata longestriata*** (W. Horn, 1912)

EXAMINED MATERIAL. NW Benin, N of Natitingou, 5 km NE of Kouarfa, 26-27.VI.2001, A. Kudrna jr. legit, 1 female, 1 male; NE Benin, E of Kandi, 4 km W of Bensekou, 24-25.VI.2001, A. Kudrna jr. legit, 1 male, 1 female; NW Benin, 30 km SE of Natitingou, 5 km E of Sina Issire, 30.VI-01.VII.2001, A. Kudrna jr. legit, 2 females; NW Benin, 15 km N of Kouarfa, Bouyagnindi village, 27-28.VI.2001, A. Kudrna jr. legit, 1 male.

REMARKS. A very surprising discovery of the species in Benin, as it was in the time of collecting known from north of former Zaire and Central African Republic only. This indicates a much wider distribution than supposed. Adults were found always on dark soil with sparse grass, usually on the edges of fields or directly inside when uncultivated.

Genus *Ropaloteres* Guérin, 1849

***Ropaloteres vittatus*** (Fabricius, 1801)

EXAMINED MATERIAL. NW Benin, 30 km SE Natitingou, 5 km E of Sina Issire, 30.VI-01.VII.2001, A. Kudrna jr. legit, 1 female; Benin, village Akongbere, near Save, 19-26.IV.2000, A. Kudrna jr. legit, 6 males, 3 females.

REMARKS. *R. vittatus* was very rare to find in Benin during both expeditions. Only few specimens on very few localities were discovered. It prefers dark soil paths and clearings in shaded woodland areas.

***Ropaloteres congoensis congoensis*** (Fleutiaux, 1893)

EXAMINED MATERIAL. NW Benin, N of Natitingou, 5 km NE of Kouarfa, 26-27.VI.2001, A. Kudrna jr. legit, 7 females, 4 males; NW Benin, 30 km SE Natitingou, 5 km E of Sina Issire, 30.VI-01.VII.2001, A. Kudrna jr. legit, 2 males, 2 females; N. Benin, Ekpa, VI.1996, 2 males, 1 female in PLC.

REMARKS. This beautiful species was found on the three cited localities only. On one occasion four specimens were collected on the edge of a sandy road and nearby meadow, another time it was discovered on red soil with turfs of high grass. Adults were usually a little bit lazy to fly and preferred rapid run into the shadow of the turfs. Only when disturbed repeatedly, they flew a few meters and sat down again near to turfs. After settling they often disappeared by running through grasses somewhere on the reverse side, and therefore they were hardly found again. This beetle seems to be generally very rare, however, when a spot with its occurrence is found, it is usually possible to collect numerous specimens.

***Ropaloteres feisthamelii*** (Guérin, 1849)

EXAMINED MATERIAL. NW Benin, 30 km SE Natitingou, 5 km E of Sina Issire, 30.VI-01.VII.2001, A. Kudrna jr. legit, 1 female; NW Benin, N of Natitingou, 5 km NE of Kouarfa, 26-27.VI.2001, A. Kudrna jr. legit, 1 female; N Benin, S of Kerou, 7 km W Yakrigourou, 25-26.VI.2001, A. Kudrna jr. legit, 1 female, 2 males; NW Benin, 15 km N of Kouarfa, Bouyagnindi village, 27-

28.VI.2001, A. Kudrna jr. legit, 1 male; NW Benin, 5 km N of Tanguieta, direction Tanougou, 28-29.VI.2001, A. Kudrna jr. legit, 1 male; Benin, Bembereke, 7 km W of Gando, 03-04.VII.2001, A. Kudrna jr. legit, 1 male, 1 female; Sérrou, V. 2000, 1 female in PLC.

REMARKS. Relatively common species occurring in grassy places in woodland areas, regularly attracted to light. New country record.

***Ropaloteres nysa nysa*** (Guérin, 1849)

EXAMINED MATERIAL. Benin, village Akongbere, near Save, 19.IV-26.IV.2000, A. Kudrna jr. legit, numerous specimens; NW Benin, 15 km N of Kouarfa, Bouyagnindi village, 27-28.VI.2001, A. Kudrna jr. legit, 1 male, 2 females; NE Benin, E of Kandi, 7 km E of Bensekou, 23-24.VI.2001, A. Kudrna jr. legit, 1 male; NW Benin, 5 km N of Tanguieta, direction Tanougou, 28-29.VI.2001, A. Kudrna jr. legit, 3 males, 1 female; Benin, Bembereke, 2 km W of Gando, 02-03.VII.2001, A. Kudrna jr. legit, 1 male, 1 female; Pénessoulou, V-VI.1999-2000, numerous specimens in PLC.

REMARKS. Very common species with the same habitat and behaviour as the previous *R. feisthamelii*, often coming to light.

***Ropaloteres cinctus*** (Olivier, 1790)

EXAMINED MATERIAL. Benin, village Akongbere, near Save, 19.IV-26.IV.2000, A. Kudrna jr. legit numerous specimens; NE Benin, E of Kandi, 4 km W of Bensekou, 14-25.VI.2001, A. Kudrna jr. legit, 2 males, 2 females; N Benin, S of Kerou, 7 km W Yakrigourou, 25-26.VI.2001, A. Kudrna jr. legit, numerous specimens; NW Benin, 15 km N of Kouarfa, Bouyagnindi village, 27-28.VI.2001, A. Kudrna jr. legit, 2 males, 1 female; NE Benin, E of Kandi, 7 km E of Bensekou, 23-24.VI.2001, A. Kudrna jr. legit, 2 males, 1 female; Benin, Bembereke, 2 km W of Gando, 02-03.VII.2001, A. Kudrna jr. legit, numerous specimens.

REMARKS. Probably the commonest species of those, which prefer grassy, shadowed places in woodlands. This species, in contrast to *Elliptica lugubris*, occurred only on a few of the visited localities, but there it was abundant.

Genus ***Hipparidium*** Jeannel, 1946

***Hipparidium interruptum*** (Fabricius, 1775)

EXAMINED MATERIAL. Benin, near Cove, E of Abomey, 16.IV.2000, A. Kudrna jr. legit, 1 female; Pobé, Aguigadji, V.1998, 1 female in PLC.

REMARKS. Female from E of Abomey was found on shaded dark soil path inside palm plantation.

Genus ***Calochroa*** Hope, 1838

***Calochroa flavomaculata sexsignata*** (Mandl, 1954)

EXAMINED MATERIAL. Africa/Benin, W-Nat. Park, X.2002, Mekrou river, Triple Point, 1 male; Benin, Pénessoulou, 12.XI.2000, at light, 1 male, 1 female in PLC.

REMARKS. New country record.

Genus ***Calomera*** Motschulsky, 1862

***Calomera fimbriata fimbriata*** (Dejean, 1831)

EXAMINED MATERIAL. Benin, Banks of river Oueme, E of Zangnanado, 14.IV-15.IV.2000, A. Kudrna jr. legit, numerous specimens; Benin, Cové: 20.VI.2000, numerous specimens in PLC; Benin, Cové: 27.VI.2000, numerous specimens in PLC; Benin, Cové: 5.VI.2001, numerous specimens in PLC.

REMARKS. Adults of this species were present in huge masses on yellowish sand around river Oueme, where also *Lophyra neglecta neglecta*, *L. senegalensis*, *Cylindera (Ifasina) octoguttata octoguttata* and *Habrodera nilotica nilotica* occurred. Occasionally, beautiful blueish specimens (in proportion about 1:100) were caught.

Genus ***Lophyra*** Motschulsky, 1859

Subgenus ***Lophyra*** s.str.

***Lophyra (Lophyra) neglecta neglecta*** (Dejean, 1825)

EXAMINED MATERIAL. Benin, Banks of river Oueme, E of Zangnanado, 14.IV-15.IV.2000, A. Kudrna jr. legit, numerous specimens; Benin, Cové, VI.2000, numerous specimens in PLC; Toffo, IIII.2001, numerous specimens in PLC.

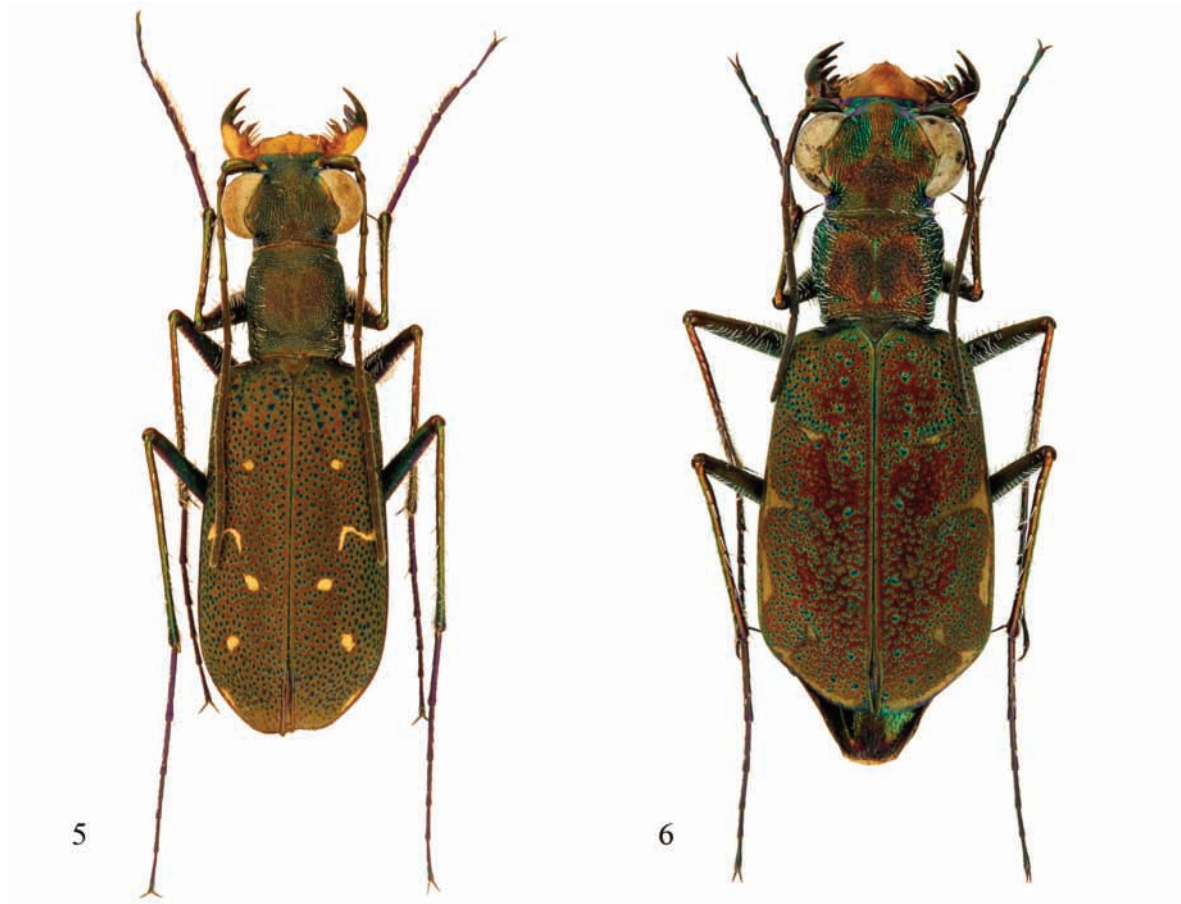


Figure 5. *Cylindera (Ifasina) lutaria*, W of Gando, 7.8 mm  
 Figure 6. *Myriochila (Myriochila) peringueyi*, Ndali, 10.1 mm

REMARKS. Very common species found on sand or sandy road near water.

***Lophyra (Lophyra) senegalensis*** (Dejean, 1825)

EXAMINED MATERIAL. Benin, banks of river Oueme, E of Zangnanado, 14.IV-15.IV.2000, A. Kudrna jr. legit, numerous specimens; Benin, village Akongbere, near Save, 19-26.IV.2000, A. Kudrna jr. legit, numerous specimens; NE Benin, E of Kandi, 7 km E of Bensekou, 23-24.VI.2001, A. Kudrna jr. legit, 1 male, 1 female.

REMARKS. This species does obviously not prefer places near water, but was found on many localities on sandy roads. Even on the river banks it lives further to water. A common species in Benin.

Subgenus *Stenolophyra* Rivalier, 1958

***Lophyra (Stenolophyra) luxerii*** (Dejean, 1831)

EXAMINED MATERIAL. Benin, village Akongbere, near Save, 19.IV-26.IV.2000, A. Kudrna jr. legit, numerous specimens; NW Benin, 15 km N of Kouarfa, Bouyagnindi village, 27-28.VI.2001, A. Kudrna jr. legit, 1 male, 1 female; NE Benin, E of Kandi, 7 km E of Bensekou, 23-24.VI.2001, A. Kudrna jr. legit, numerous specimens; Benin, Niaouli, VI.1997-2002, numerous specimens in PLC; Sérrou, VI.1999, 11 males, 12 females in PLC.

REMARKS. Occurs in woodland areas and prefers dark soil roads and paths. A relatively common species.

Genus *Habrodera* Motschulsky, 1862

***Habrodera nilotica nilotica*** (Dejean, 1825)

EXAMINED MATERIAL. Benin, banks of river



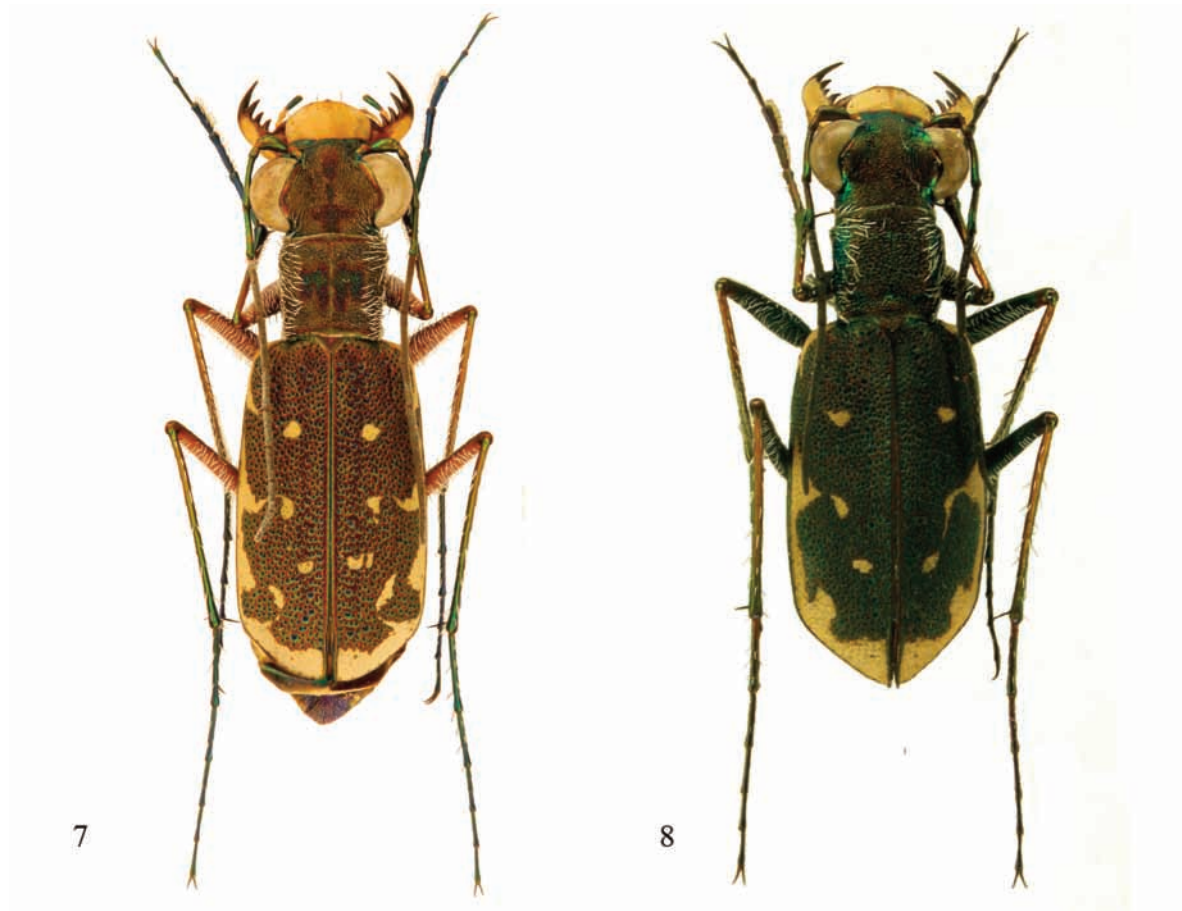


Figure 7. *Myriochila (Monelica) vicina*, N of Natitingou, 9.2 mm  
 Figure 8. *Myriochila (Monelica) legalli*, N of Natitingou, 9.75 mm

Oueme, E of Zangnanado, 14.IV-15.IV.2000, A. Kudrna jr. legit, numerous specimens.

REMARKS. This species was found on yellowish sand of river banks.

***Habrodera nitidula nitidula*** (Dejean, 1825)

EXAMINED MATERIAL. Benin south, Grand-Popo, ocean coast, 17.04.2000, A. Kudrna jr. legit, 14 males, 2 females.

REMARKS. A seashore species. The specimens were caught on a huge long sandy beach under windy conditions, always in a large distance from a water line. Uncommon on this beach.

Genus *Cylindera* westwood, 1831  
 Subgenus *Ifasina* Jeannel, 1946

***Cylindera (Ifasina) lutaria*** (Guérin, 1849) (Fig. 5)

EXAMINED MATERIAL. NE Benin, E of Kandi, 4 km W of Bensekou, 24-25.VI.2001, A. Kudrna jr. legit, 1 female; NE Benin, E of Kandi, 7 km E of Bensekou, 23-24.VI.2001, A. Kudrna jr. legit, 7 males, 1 female; Benin, Bembereke, 7 km W of Gando, 03-04.VII.2001, A. Kudrna jr. legit, 1 male, 1 female; Benin, Bembereke, 2 km W of Gando, 02 -03.VII.2001, A. Kudrna jr. legit, 2 males.

REMARKS. *C. (I.) lutaria* was found on various localities, but always near puddles or in muddy or moist places, usually in few specimens only. A rare species in Benin. New record for this country.

***Cylindera (Ifasina) octoguttata octoguttata*** (Fabricius, 1787)

EXAMINED MATERIAL. Benin, banks of river Oueme, E of Zangnanado, 14.IV-15.IV.2000, A.

Kudrna jr. legit, numerous specimens; NE Benin, E of Kandi, 7 km E of Bensekou, 23-24.VI.2001, A. Kudrna jr. legit, 1 male.

REMARKS. This very common species was present in swarms around puddles just next to river. On several occasions it was captured near brooks and small rivers.

Genus *Myriochila* Motschulsky, 1862  
Subgenus *Myriochila* Motschulsky, 1862

*Myriochila (M.) peringueyi peringueyi* (W. Horn, 1895) (Fig. 6)

EXAMINED MATERIAL. Benin, village Akongbere, near Save, 19.IV.-26.IV.2000, A. Kudrna jr. legit, 1 female; Benin, Ndali, 3 km W of Sontou, 04-05.VII.2001, A. Kudrna jr. legit, numerous specimens.

REMARKS. The species was abundant west of Sontou inside a forest area on a flat volcanic rock, partly covered with a thin layer of dark soil. No water was present in the vicinity. This species with unusual red-green body reflexions seems to prefer rocks or stony places, as also the only female collected near village Akongbere was discovered in slightly muddy situation on dark soil road, just where the road cross a big flat rock.

*Myriochila (M.) plurinotata* (Audoin et Brullé, 1839)

EXAMINED MATERIAL. NE Benin, E of Kandi, 7 km E of Bensekou, 23-24.VI.2001, A. Kudrna jr. legit, numerous specimens; NW Benin, 5 km N of Tanguieta, direction Tanougou, 28-29.VI.2001, A. Kudrna jr. legit, numerous specimens; NW Benin, N of Natitingou, 5 km NE of Kouarfa, 26-27.VI.2001, A. Kudrna jr. legit, numerous specimens; NW Benin, 15 km N of Kouarfa, Bouyagnindi village, 27-28.VI.2001, A. Kudrna jr. legit, 2 males, 3 females.

REMARKS. This species was present on several localities, usually sitting on soil roads or other bare places in sunny situation. On the locality situated 5 km NE of Kouarfa it occurred together with another nine species: *Elliptica lugubris*, *E. longestriata longestriata*, *Myriochila (Monelica) dumolinii*, *M. (M.) vicina*, *M. (M.) legalli*, *Lophyra (Stenolophyra) luxerii*, *Ropaloteres cintus*, *R. congoensis*,

*congoensis*, *R. feisthamelii*. Regularly came to light. Not rare in Benin.

*Myriochila (M.) melancholica melancholica* (Fabricius, 1798)

EXAMINED MATERIAL. Benin, banks of river Oueme, E of Zangnanado, 14.IV-15.IV.2000, A. Kudrna jr. legit, numerous specimens; Benin, village Akongbere, near Save, 19.IV-26.IV.2000, A. Kudrna jr. legit, numerous specimens; Toffo, 12.II.2001, several specimens in PLC; Sérrou, VI.1998, several specimens in PLC.

REMARKS. This very common species was present at most of the collecting places always near water.

Subgenus *Monelica* Rivalier, 1950

*Myriochila (Monelica) flavidens flavidens* (Guérin, 1849)

EXAMINED MATERIAL. NE Benin, E of Kandi, around Saa, 21-23.VI.2001, A. Kudrna jr. legit, numerous specimens; NE Benin, E of Kandi, 7 km E of Bensekou, 23-24.VI.2001, A. Kudrna jr. legit, numerous specimens; Benin, Bembereke, 7 km W of Gando, 03-04.VII.2001, A. Kudrna jr. legit, 2 males, 3 females.

REMARKS. Although considered to be a very rare species (Werner, 2000), it was observed on many localities in northern parts of Benin. Adults were present in masses on laterite soils, always in muddy or moist places or near puddles, and surely represented one of the commonest species during the second collecting trip of the first author.

*Myriochila (Monelica) vicina vicina* (Dejean, 1831) (Fig. 7)

EXAMINED MATERIAL. NW Benin, 5 km N of Tanguieta, direction Tanougou, 28-29.VI.2001, A. Kudrna jr. legit, numerous specimens; N Benin, S of Kerou, 7 km W Yakrigourou, 25-26.VI.2001, A. Kudrna jr. legit, numerous specimens; NE Benin, E of Kandi, 7 km E of Bensekou, 23-24.VI.2001, A. Kudrna jr. legit, numerous specimens; NW Benin, 15 km N of Kouarfa, Bouyagnindi village, 27-28.VI.2001, A. Kudrna jr. legit, 1 male, 2 females; Pénessoulou, V.1998 numerous specimens in PLC; Pénessoulou, V.1999 numerous specimens in PLC.

REMARKS. During second collecting trip of the first author, this species was abundantly found in the northern parts of the country. Specimens were collected on bare places, paths or roads through grass or fields.

***Myriochila (Monelica) dumolinii*** (Dejean, 1831)

EXAMINED MATERIAL. Benin, Bembereke, 7 km W of Gando, 03-04.VII.2001, A. Kudrna jr. legit, 2 males; N Benin, S of Kerou, 7 km W Yakrigourou, A. Kudrna jr. legit, 2 females; NW Benin, N of Natitingou, 5 km NE of Kouarfa, 26-27.VI.2001, A. Kudrna jr. legit, 1 male; NW Benin, 30 km SE Natitingou, 5 km E of Sina Issire, 30.VI-01.VII.2001, A. Kudrna jr. legit, 1 female; Sérou, VI.1997, several specimens in PLC; Sérou, VII.1998, several specimens in PLC.

REMARKS. Adults came regularly to light. Two specimens were found on laterite soil road in a sunny day. Uncommon.

***Myriochila (Monelica) legalli*** Kudrna, 2008 (Fig. 8)

EXAMINED MATERIAL. NW Benin, N of Natitingou, 5 km NE of Kouarfa, 26-27.VI.2001, A. Kudrna jr. legit, 5 males, 2 females; NE Benin, E of Kandi, 7 km E Bensekou, 23-24.VI.2001, A. Kudrna jr. legit, 1 male, 1 female; NW Benin, 15 km N of Kouarfa, Bouyagnindi village, 27-28.VI.2001, A. Kudrna jr. legit, 1 female; S Benin, vill. Akongbere, near Save, 16-20.VI.2001, A. Kudrna jr. legit, 1 female.

REMARKS. Specimens of this recently described species (Kudrna, 2008) were found during sunny day on dark soil road through dense wood in forested area and also on laterite soil of a wide field road in the agricultural area.

Genus *Cratohaerea* Chaudoir, 1850

***Cratohaerea chrysopyga*** (W. Horn, 1892)

EXAMINED MATERIAL. Benin, village Akongbere, near Save, 19.IV-26.IV.2000, A. Kudrna jr. legit, 15 males, 5 females; NE Benin, E of Kandi, around Saa, 21-23.VI.2001, A. Kudrna jr. legit, 3 males, 3 females; Benin, Bembereke, 7 km W of Gando, 03-04.VII.2001, A. Kudrna jr. legit, 2 males, 1 female; Ouidah, 20.V.1996, 1 female in PLC; Benin, Pobé,

X.2001, 1 male in PLC; Niaouli IV-VI.1996 several specimens in PLC; Niaouli VI.1998 several specimens in PLC; Niaouli V-VI.1999 several specimens in PLC; Benin, Parakou, V.1996, several specimens in PLC; Benin, Kossou, V-VII.1998-2000, several specimens in PLC.

REMARKS. All specimens of *C. chrysopyga* were found on termitaries. They prefer bigger ones, situated entirely or at least partly in shaded places and with more or less preserved structure. When disturbed, they tried to hide themselves by running constantly on the reverse side of the termitaries and with care it was even possible to catch them by hand. When adult successfully escaped from behind the net, then settled on the opposite side of the termitaries, in the nearby grass or flew away and disappeared somewhere in the forest. But after some time, the beetle was back. It was usually necessary to visit several termitaries to find one inhabited. Generally one or two specimens together were found on one termitarium, but in one occasion even four were present. Relatively rare in Benin.

## DISCUSSION

Werner (2000a, b), in his monographic review of African tiger beetle fauna listed 17 species and subspecies from Benin. Recently Cassola (2007), in the only so far existing publication devoted solely to Cicindelidae of Benin reported 31 taxa (30 species and one subspecies) from this country. In this contribution we add another nine species as new for Benin thus the total number is 41. Most of the species added in this contribution were expectable to occur in Benin. We suppose that new records will follow and the number of tiger beetles taxa known from this beautiful country can exceed 50 or even 55.

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