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# HALIPLIDAE: II. Additional notes on Chinese Haliplidae, with description of a new species

(Coleoptera)

B.J. van VONDEL

#### Abstract

Additional faunistic data on the Haliplidae (Coleoptera) of China are given. A new species, *Haliplus aliae*, is described. *Haliplus abbreviatus* WEHNCKE and *Peltodytes caesus* (DUFTSCHMID) are recorded from China for the first time. *Haliplus diruptus* BALFOUR-BROWNE is recorded from Shandong for the first time, *H. eximius* CLARK and *H. simplex* CLARK from Guangdong, *H. regimbarti* ZAITZEV from Guizhou and *H. sharpi* WEHNCKE from Chongqing and Yünnan.

Key words: Coleoptera, Haliplidae, China, eastern Palearctic Region, Oriental Region, faunistics.

#### Introduction

Since the publication of VONDEL (1998) new material has become available, which is listed in this paper. In the material a new species was discovered which is described herein.

#### Material and methods

The methods are according to VONDEL (1991).

Specimens collected by the China Water Beetle Survey and not mentioned earlier (VONDEL 1995, 1998) are included. They are deposited in the NMW and CASS.

#### Acronyms, CWBS localities & CB vial numbers:

- CASS Chinese Academy of Sciences, Institute of Applied Ecology, Shenyang, China
- CB collection Bergsten, Umeå University, Umeå, Sweden
- CWBS China Water Beetle Survey
- CV collection Vondel, Hendrik-Ido-Ambacht, The Netherlands
- DEI Deutsches Entomologisches Institut, Eberswalde, Germany
- NMW Naturhistorisches Museum Wien, Vienna, Austria
- CWBS loc. 348: Yünnan Province, Kunming City Region, plain near River Panlong, northern part of Kunming City, ca. 1800 m a.s.l.; rice fields (partly abandoned), irrigation canals and mud pools; 2.XI.1999; leg. M.A. Jäch, H. Schönmann, M. Wang & Y. Wei (see JÄCH & JI 2003: Fig. 4).
- CWBS loc. 349: Yünnan Province, Qüjing Prefecture, Liangwang Shan (= King Liang Mountains), ca. 100 km NNE Kunming, few km E Banqiao, ca. 2300 m a.s.l., 25°33'14"N 103°05'52"E; river (tributary of Xiao Jiang (= tributary of Jang Jiang)), ca. 4 - 6 m wide, unshaded, shrubs; 3.X1.1999; leg. M.A. Jäch, H. Schönmann, M. Wang & Y. Wei.

- CWBS loc. 350: Yünnan Province, Qüjing Prefecture, Liangwang Shan (= King Liang Mountains), ca. 2300 m a.s.l., 25°33'14"N 103°05'52"E; stream, ca. 1 2 m wide (right hand side tributary of CWBS loc. 349); 3.XI.1999; leg. M.A. Jäch & H. Schönmann (see JÄCH & JI 2003: Fig. 2).
- CWBS loc. 351: Yünnan Province, Qüjing Prefecture, near road Songming Yangjie, ca. 60 km NNE Kunming, altitude not recorded, 25°23'16"N 103°05'24"E; pond, size: ca. 50 x 100 m; 3.XI.1999; leg. M.A. Jäch, H. Schönmann, M. Wang & Y. Wei.
- CWBS loc. 352: Yünnan Province, Kunming City Region, northern part of Kunming City, Botanical Gardens at South China Institute of Botany, ca. 1800 m a.s.l.; artificial ponds; 4.XI.1999; leg. M.A. Jäch, M. Wang & Y. Wei.
- CWBS loc. 409: Yünnan Province, Chuxiong Prefecture, 10 km N Yipinglang, near Ban Jiu, ca. 1700 m a.s.l.; River Da Shui Go, 1 – 2 m wide, with large sandstone boulders, little organic debris; 27.XI.1999; leg. H. Schönmann & M. Wang.
- CWBS loc. 455: **Guangdong Province**, Zhaoqing Prefecture, Fengkai County, ca. 50 km E of Fengkai, ca. 5 km W of Qixing, Yulao – Mocun road, Heishiding [Black Stone Mountain Top] Nature Reserve, below Heishiding Nature Reserve head office, ca. 150 m a.s.l., 23°27'36"N 111°54'36"E; River Qixing (= Seven Stars), ca. 10 – 15 m wide, through deep valley with more or less natural forest, incl. hygropetric rock at shore and mouth of small tributary; 31.X. + 2.XI.2001; leg. M.A. Jäch & A. Komarek.
- CWBS loc. 474: Guangdong Province, Shaoguan Prefecture, Ruyuan County, Ruyuan, ca. 50 m a.s.l., 24°45'03"N 113°18'38"E; river, polluted, ca. 50 m wide, margins with muddy pools and grass; 6.XI.2001; leg. M.A. Jäch & A. Komarek.
- CWBS loc. 475: Guangdong Province, Shaoguan City Region, Shaoguan Ruyuan road, ca. 20 km W of Shaoguan, near Madu Village, ca. 30 m a.s.l., 24°44'28"N 113°25'38"E; River Shezu, ca. 5 10 m wide, margins with wide gravel banks and flat muddy pools; 6.XI.2001; leg. M.A. Jäch & A. Komarek.
- CWBS loc. 479: Guangdong Province, Shaoguan Prefecture, Shixing County, ca. 10 km SW of Chebaling Village, at Jiangciao Village, Chebaling – Siqian road, ca. 270 m a.s.l., 24°41'11"N 114°07'17"E; several small pools with mud and aquatic vegetation, in meadow, close to river (CWBS loc. 480); 7.XI.2001; leg. M.A. Jäch & A. Komarek.
- CWBS loc. 480: Guangdong Province, Shaoguan Prefecture, Shixing County, ca. 10 km SW of Chebaling Village, at Jiangciao Village, Chebaling – Siqian road, ca. 270 m a.s.l., 24°41'11"N 114°07'17"E; river, ca. 5 – 7 m wide, margins with gravel banks and grass; 7.XI.2001; leg. M.A. Jäch & A. Komarek.

All CB vial numbers refer to specimens collected by J. Bergsten in the surroundings of Shizong (Yünnan, Qujing Prefecture, Shizong County):

- CB nos. 166, 168: 2 km west of Shizong; lake; 9.1X.2000.
- CB no. 169: 2 km west of Shizong; cut off pond at lake; 9.IX.2000.
- CB nos. 135, 137, 146: 2 km east of Shizong; ditch; 10.IX.2000.
- CB no. 138, 141, 142: 2 km north of Shizong; wetland; 10.IX.2000.
- CB no. 157: 2 km north of Shizong; ditch; 10.1X.2000.
- CB nos. 167, 170: 2 km north of Shizong; stream extension; 10.IX.2000.
- CB nos. 131, 133, 139: 4 km south of Shizong; lake with much vegetation; 11.IX.2000.
- CB nos. 149, 152, 160: 2 km south of Shizong; pond at south end of lake; 11.IX.2000.
- CB no. 161: 4 km south of Shizong; cold spring just above lake; 11.IX.2000.
- CB nos. 147, 150: 2 km south of Shizong; abandoned rice field at south end of lake; 12.1X.2000.
- CB no. 165: 2 km south of Shizong; pond at south end of lake; 12.IX.2000.
- CB nos. 132, 134, 136, 140, 158, 164: 4 km south of Shizong; pond in slope towards lake; 13.IX.2000.
- CB nos. 143-145, 148, 151, 159: 4 km south of Shizong; pools in slope with terraces; 13.1X.2000.
- CB nos. 153, 155, 156: 2 km south of Shizong; in mountains shallow water on meadow; 15.1X.2000.
- CB nos. 154, 163: 1 km south of Shizong; pool with algae in agricultural land; 15.IX.2000.
- CB no. 162: south of Shizong; cut off bay of big lake; 15.IX.2000.

# Haliplus abbreviatus WEHNCKE, 1880

#### MATERIAL EXAMINED:

C II I N A: XINJIANG: "Chin. Turkestan [= Xinjiang]", "Sanpula b. Chotan [= Hotan Shi]", 13.-15.VI.1890, 1250 m a.s.l., leg. S. Conradt (DEI). First record for China.

This species can be distinguished from the other Chinese species by using the key of VONDEL (1991).

#### Haliplus chinensis FALKENSTRÖM, 1932

MATERIAL EXAMINED: C II I N A: YÜNNAN: CB nos. 148, 149, 158, 162, 164.

#### Haliplus diruptus BALFOUR-BROWNE, 1946

#### MATERIAL EXAMINED:

 C II I N A: SHANDONG: "Jentschoufu, Schant. [= Shandong]", leg. Kleyenberg, 1911-12 (DEI). First record for Shandong. TIANJIN: "Tientsin" (DEI). YÜNNAN: CWBS loc. 348; CB nos. 133, 134, 137, 150, 152, 153, 157, 170.

#### Haliplus excoffieri VONDEL, 1991

MATERIAL EXAMINED: C II I N Λ: YÜNNAN: **CB** nos. 132, 151, 165.

# Haliplus eximius CLARK, 1863

MATERIAL EXAMINED: C II I N A: GUANGDONG: CWBS loc. 479. First record for Guangdong.

# Haliplus japonicus SHARP, 1873

MATERIAL EXAMINED: CHINA:YÜNNAN: CWBS locs. 349, 350, 352, 409; CB nos. 135, 139, 140, 145, 156, 160, 161, 163, 166, 169.

# Haliplus regimbarti ZAITZEV, 1907

#### MATERIAL EXAMINED:

C II I N A: GUANGDONG: CWBS locs. 474, 475, 480. GUIZHOU: 30 km NW Jiangkou, Fanjing Shan - Kuaichang, 500 m a.s.l., 9.V.2000 (NMW). First record for Guizhou.

#### Haliplus sharpi WEHNCKE, 1880

MATERIAL EXAMINED: CIIIN A: YÜNNAN: CB nos. 138, 144, 159. First record for Yünnan.

Haliplus amrishi MAKHAN, 1999, described from Chongqing, is synonymised with *H. sharpi* in this volume (see VONDEL 2003; p. 286). First record for Chongqing.

# Haliplus simplex CLARK, 1863

#### MATERIAL EXAMINED:

C H I N A: GUANGDONG: "Kanton [= Guangzhou], Pestacho-Seebad, Tschulib. Triumwangtau", 15.-20.VIII.1916, leg. H. Weigold (DEI). First record for Guangdong.

### Peltodytes caesus (DUFTSCHMID, 1878)

#### MATERIAL EXAMINED:

C H I N A: "China bor." [= northern China] (DEI). First record for China.

This species can be distinguished from the other Chinese species by using the key of VONDEL (1992).

#### Peltodytes sinensis (HOPE, 1845)

#### MATERIAL EXAMINED:

C H I N A: GUANGDONG: CWBS locs. 455, 479. GUIZHOU: 30 km NW Jiangkou, Fanjing Shan -Kuaichang, 500 m a.s.l., 9.V.2000 (NMW). SHANDONG: "Jentschoufou, Schant. [= Shandong]", leg. Kreyenberg, 1911/1912 (DEI). TAIWAN: "Formosa, Ishigaki", 1.-15.VI.1907, leg. H. Sauter (DEI); "Formosa, Kaukau [= Koshun]", IV.1912, leg. H. Sauter (DEI). YÜNNAN: CWBS locs. 348, 351; CB nos. 131, 136, 141, 142, 143, 146, 147, 154, 155, 165, 167, 168.

#### Haliplus aliae sp.n.

#### TYPE LOCALITY: Tianjin, China.

TYPE MATERIAL: Holotype  $\sigma$ : "China, Tientsin [Tianjin], Ross commut, *Haliplus sauteri* var. oder nov. sp.? Zimm, det. A. Zimmermann" (DEI). Paratypes: 1  $\sigma$ , 1  $\varphi$ , same labels as holotype (DEI, CV).

DIAGNOSIS: Length: 2.7 - 3.0 mm, width 1.6 - 1.8 mm. Body oval, widest just before middle (Fig. 1).

Head yellow-brown to red-brown, moderately and on vertex sparsely punctate. Distance between eyes 1.4 - 1.6 times width of one eye. Antennae yellow, third segment nearly twice as long as fourth segment (Fig. 2). Palpi yellow to yellow-brown, penultimate segment of labial palpus strongly widened apically (Figs. 3, 4).

Pronotum yellow-brown to brown-red. Lateral borders almost straight to slightly convex and finely margined. Opposite fifth elytral puncture-row with short basal plicae, between plicae weakly impressed. Moderately, along base slightly more strongly punctate (Fig. 1).

Elytra yellow-brown to brown-red, no clear lines or dark marks present. Primary puncture-rows moderately strong, weakened apically, basal punctures sometimes widened or connected to other punctures, about 30 punctures on first row. Secondary punctures relatively strong, dense in sutural row, more sparse on other intervals. All punctures darkened (Figs. 1, 5).

Ventral surface of body yellow to yellow-brown, elytral epipleura yellow with uncoloured punctures. Legs yellow to yellow-brown, claws of forelegs in both sexes about equal in length. Prosternal process flat, narrowed near coxae, moderately punctate (Fig. 7), lateral plica complete (Fig. 8). Metaventral process strongly impressed on each side, sparsely punctate (Fig. 7). Metacoxal plate strongly and densely punctate, near suture more weakly punctate. No setiferous striole on dorsal side of hind tibia, longest of two tibial spurs 0.7 - 0.8 times length of first tarsal segment (Fig. 6).



Figs. 1–12: *Haliplus aliae:* 1) dorsal view; 2) antenna; 3) maxillary palpus; 4) labial palpus; 5) elytral punctation near base and suture; 6) dorsal side of metatibia; 7) pro- and metaventral process; 8) lateral view of prosternal process; 9) left paramere; 10) penis; 11) right paramere; 12) end of bristles towards top of right paramere.

Male: First three tarsal segments of fore- and midlegs widened, scaly hairs on ventral side. Penis and parameres as in Figs. 9 - 11, end of bristles towards top of right paramere trumpet-like (Fig. 12).

Female: Elytra not micropunctate.

DIFFERENTIAL DIAGNOSIS: The new species is related closely to *H. steppensis*. The latter has more or less interrupted dark lines on the elytral puncture-rows, while in the new species at most vague traces of lines can be detected. The impressions of the metaventral process of *H. steppensis* are weak, while in the new species these are strong. The males differ in the shape of the aedeagus. The female of the new species has elytra without micropunctures, while the elytra of female *H. steppensis* clearly are completely micropunctate.

DISTRIBUTION: Only known from the type locality.

ETYMOLOGY: This species is named after my second wife Ali.

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Bernhard J. van VONDEL Roestuin 78, 3343 CV Hendrik-Ido-Ambacht, The Netherlands

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