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Notes on *Caryotrypes* DECELLE, with the description of a new
species
(Coleoptera: Bruchidae: Pachymerinae)

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ABSTRACT. *Caryotrypes minor* n. sp. is described from Thailand, and supplementary notes on the genus *Caryotrypes* DECELLE and its type species - *C. pandanus* (BLANCHARD) are given.

Key words: entomology, taxonomy, zoogeography, new species, *Caryotrypes*, *Pachymerinae*, *Bruchidae*, Palaeotropics.

Hitherto, the genus *Caryotrypes* DECELLE (1968) only was known from only three specimens of its type species, *C. pandani*. They were imported to France in the seeds of an unknown *Pandanus* species (*Pandanaceae*, *Monocotyledoneae*). These seeds were sent from Madagascar to Paris, with an intermediate stop of several months on the Réunion Island (BLANCHARD 1845). Thus the origin of *C. pandani* specimens has been somewhat uncertain.

Abbreviations used in the text:

CKWA: Collection of author (Emmendingen, Germany);
MHNG: Muséum d'Histoire naturelle (Genève, Switzerland);
MNHN: Muséum Nationale d'Histoire naturelle (Paris, France);
MRAC: Musée Royale de l'Afrique Centrale (Tervuren, Belgium).

***Caryotrypes* DECELLE, 1968**

Caryotrypes DECELLE, 1968: 422 (type species: *Bruchus (Pachymerus) pandani* BLANCHARD, 1845; by monotypy).

Caryotrypes has the following combination of characters, including some additions to its original description (see also figs. 4 a-c in DECELLE 1968): Body elongate. Head of moderate length, constricted behind eyes; at least frons with median carina; eyes strongly bulging, ocular sinus and postocular lobe short. Antenna long, indistinctly sexually dimorphic; antennal segments 1-3 cylindrical and slender, 4 subserrate and slender, 5-10 serrate and broader than 1-4, segment 11 oblonge-oval. Pronotum campaniform, trapezial, square, greatest width at apical half to third, with complete lateral carinae; disc from convex at apex to flat at base; front edge depressed. Elytra elongate; elytral disc flattened, becoming steadily convex towards apex; humeral calli distinct, smooth; sides feebly convex; striae setous, sometimes elytral striae 2 and 3 as well as 4 and 5 coalescent at base. Abdomen simple; pygidium vertical. Hind femora strongly incrassate, with pecten at mesoventral margin, with denticles and tubercles on prepectenal ridge; pecten with one larger and 9-15 gradually smaller denticles. Hind tibiae arcuate, without ventral, subbasal tubercle, with lateral, lateroventral, mesoventral and dorsomesal carinae, with strong mucro. Median lobe short; ventral valve triangular, oblonge, flat, apex acute; internal sac with pair of chain-like sclerites in mesoapical third and several pairs of denticle-like sclerites in mid third (figs. 2 and 4). Tegmen with lateral lobes simple, short, separated less than their half length; apex with several long setae; tegminal strut with large, keel-like median carina (figs. 3 and 5).

***Caryotrypes pandani* (BLANCHARD, 1845)**

(figs. 4-5)

Pachymerus pandani BLANCHARD, 1845: 114.

Bruchus (Pachymerus) pandani BLANCHARD, 1845: IV.

Pseudopachymerus pandani: PIC, 1913: 11.

Caryotrypes pandani: DECELLE, 1968: 423.

MATERIAL EXAMINED: Lectotype (male), 2 paralectotypes (female) designated by J. DECELLE (MNHN). MAURITIUS: Round Island, 5.I.1957, J. VINSON (MRAC).

DISTRIBUTION: Mascarene Region: Mauritius; uncertain: La Réunion or Madagascar.

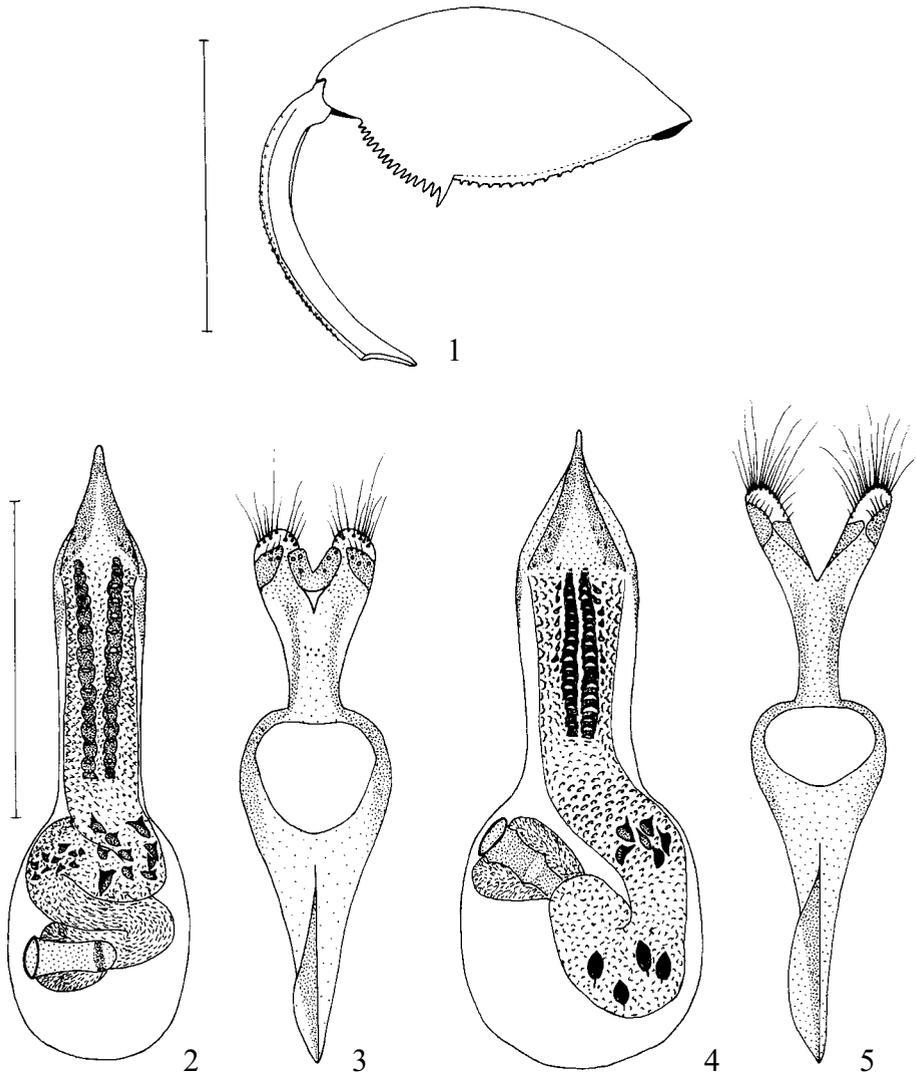
HOST PLANT: *Pandanus* sp. (BLANCHARD 1845).

NOTE: Size variability is greater than reported in the redescription by DECELLE (1968); length (pronotum - elytra): 5.2-8.8 mm, width: 2.3-3.9 mm. A figure of the hitherto unknown male genitalia is given below (figs. 4-5).

***Caryotrypes minor* n. sp.**

(figs. 1-3)

ETYMOLOGY

The name refers to the distinctly smaller size in comparison with *C. pandani*.

1-3. *Caryotrypes minor* n. sp.: 1 - hind leg (mesal view); 2 - median lobe; 3 - tegmen. 4-5. *Caryotrypes pandani*: 4 - median lobe; 5 - tegmen. 1 scale bar = 1.0 mm, 2-5 scale bar = 0.5 mm

DIAGNOSIS

It is closely related to the externally very similar *C. pandani* (BLANCHARD, 1845). However, the latter differs in having a larger size (see notes on *C. pandani*), maximum width of pronotum at its mid-length, elytral intervals flatter; femoral pecten with 10-12 denticles, median lobe stouter (fig. 4), apical third of internal sac besides chain-like sclerite with additional row of about 9-10 smaller denticle-like sclerites, mid third with only about 5 denticle-like sclerites, lateral lobes slender, separated to 0.4 times of their length, apically with about 25 setae (fig. 5).

DESCRIPTION

Length (pronotum - elytra): 2.4-3.4 mm, width: 1.0-1.5 mm.

Color red-brown; usually antennal segments 1-4 and legs paler, antennal segments 5-11 and hind legs darkened.

Vestiture moderately dense, recumbent, not covering integument completely, uniformly greyish.

Head with moderate and dense serrulation. Frons with sharp, elongate, sometimes shiny interocular carina, tapering off on vertex. Minimum distance between eyes about combined width of 4 eye-facets; ocular sinus of about quarter of eye length.

Pronotum about 1.3 times wider than long, greatest width at apical third. Sides convex in apical two third and linear in basal third. Base about 1.3 times wider than apex. Disc double punctured, distances of punctures more or less than their diameter, without shiny welts. Scutellum small, triangular.

Elytra about 1.7 times longer than combined width, with maximum width at basal third. Striae strongly impressed, punctures indistinct, distance of punctures more or less than their diameters. Intervals from weakly convex at base to strongly convex towards apex, with microreticulation.

Hind femora about twice as long as wide; mesoventral margin with preapical femoral pecten; pecten with larger denticle followed by about 13-15 smaller denticles; prepecten ridge with several small denticles and granulations (fig. 1). Mucro about 1.6 times longer than tibial width at apex. Hind tarsal segments 1 about as long as remaining segments.

Pygidium about 1.2 times wider than long, subbasally with oblonge lateral depression, with less dense, fine punctation.

Male: Antenna extending to elytral mid; antennal segment 1 about 1.6 times longer than 2 and 4, and about 1.3 times longer than 3, segment 5 about 1.2 times longer than wide, 8-10 about 1.6 times longer than wide, 11 about 2.3 times longer than wide. Sternite V emarginate towards base to about 0.6 distance of length. Pygidium convex at apical half. Armature of internal sac: pairy chain-like sclerite with about 13-14 circular segments, at mid third with 8-10 pairs of larger denticle-like sclerites (fig. 2). Lateral lobes separated to quarter of their length, apex with about 20 setae (fig. 3).

Female: Antenna extending to elytral third; antennal segments somewhat shorter and more square than in male, 8-10 about 1.2 times wider than long, 11

about 1.5 times longer than wide. Sternite V not emarginate. Pygidium weakly convex. Ovipositor short; bursa copulatrix with about 20 circular arranged oblonge spine-like sclerites.

HOST PLANT

Unknown.

TYPES

Holotype (male), allotype (female), 16 male and 14 female paratypes: THAILAND, Thap Sake distr., Huay Yang N.P., Huay Yang Waterfall, 50 m, 12.II.1991, P. SCHWENDINGER (MHNG; part of paratypes: CKWA, MRAC); holotype with genitalia slide no. 090593 II.

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