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A new species of *Conchyloctenia* SPAETH from South Africa and redescription of *Aspidimorpha kilimana* WEISE, bona species (Coleoptera: Chrysomelidae: Cassidinae: Aspidimorphini)

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ABSTRACT. *Conchyloctenia capensis* n. sp. from South Africa is described. *Aspidimorpha kilimana* WEISE, 1903 is removed from synonymy of *A. mrogorensis* WEISE, 1899 and redescribed.

Key words: entomology, taxonomy, new species, redescription, Coleoptera, Chrysomelidae, Cassidinae, Africa.

African members of the tribe Aspidimorhini have been revised recently by BOROWIEC (1994, 1997). In new materials we found a specimen of a new species of *Conchyloctenia* from South Africa. Having re-examined numerous specimens of *Aspidimorpha palleago* group we concluded that synonymization of *Aspidimorpha kilimana* WEISE, 1903 with *A. mrogorensis* WEISE, 1899 by BOROWIEC (1997) was not justified. The taxon was described based on a single specimen (preserved at the Zoologisches Museum, Humboldt Universität, Berlin), not fully sclerotized, with partly deformed elytra. We have examined two additional mature specimens conspecific with the holotype of *A. kilimana* and, in our opinion, they represent a distinct species of *A. palleago* group, of a position intermediate between *A. mrogorensis* WEISE and *A. strigosa* GORHAM. A description of the new species of *Conchyloctenia* and a redescription of *A. kilimana* are given below.

Conchyloctenia capensis n. sp

ETYMOLOGY

Named after its terra typica, Cape Province of South Africa.

DIAGNOSIS

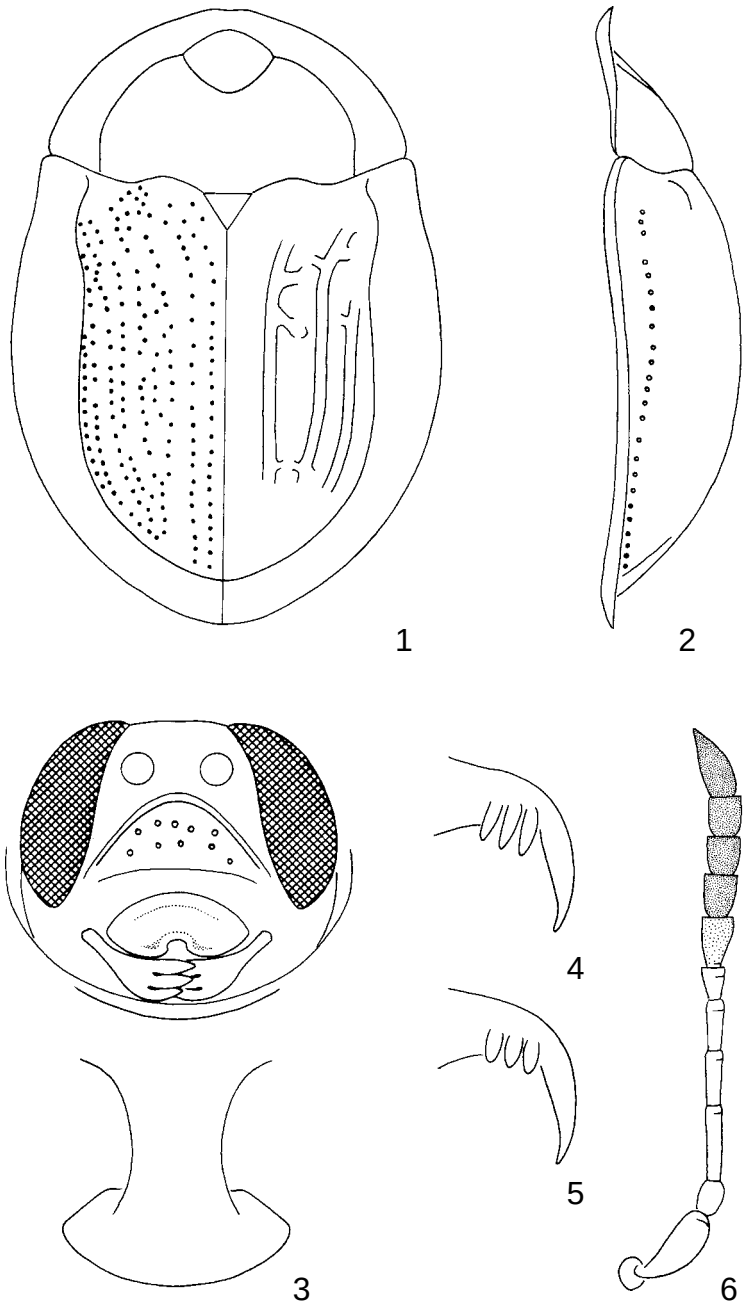
A member of the group of elongate species from Africa with strongly punctate elytra. This group comprises also *C. aspidiformis* BOR., *C. bipuncticollis* (BOH.), *C. hybrida* (BOH.), *C. illota* (BOH.), and *C. tripuncticollis* (BOH.). *C. bipuncticollis* and *C. tripuncticollis* differ in maculate pronotum and/or maculate elytra. Both have more parallelsided body than in *C. capensis* and elytral disc without costae, while in *C. capensis* disc is costate. *C. hybrida* is similarly coloured as *C. capensis*, but differs in more parallelsided body, elytral disc without costae, elytral marginalia more deflexed, elytral punctures with dark brown or black centre, and long pecten of claws with first teeth extending to half length of claw (in *C. capensis* at most to 1/3 length of claw). *C. aspidiformis* and *C. illota* are the most similar, especially on its coarse and dense elytral puncturation, elevated intervals of elytral disc, and uniformly yellow dorsum. Both are slightly more parallelsided and their elytral intervals never appear as costate as in *C. capensis*. Elytral ground colour in *C. aspidiformis* and *C. illota* is pale yellow, while in *C. capensis* it is rusty yellow (like in fully sclerotized specimens of *C. hybrida*). Elytral puncturation of sutural half of disc in *C. aspidiformis* and *C. illota* is very regular, with no or only few additional punctures on intervals, while in *C. capensis* the puncturation is less regular, especially area between elevated third and fifth intervals appears completely irregularly punctate. *C. aspidiformis* differs also in long pecten of claws with first teeth extending to half length of claw, while in *C. capensis* the pecten on claws is very short, with first teeth extending at most to 1/3 length of claw. Only *C. illota* has as short pecten of claws as in *C. capensis*, but except distinguishing characters listed above, *C. illota* differs also in small body, of length always below 8.8 mm.

DESCRIPTION

Length: 9.3 mm, width: 6.3 mm, pronotum length: 3.0 mm, pronotum width: 5.35 mm, length/width ratio: 1.48, width/length ratio of pronotum: 1.78. Body oval, sides slightly rounded (fig. 1).

Pronotum yellow, immaculate. Elytra uniformly rusty yellow, punctures without dark markings. Head dark brown, clypeus in middle with yellowish-brown spot, labrum black. Ventrites mostly yellow, only prosternal process, mesosternal plate and central part of metasternum black. Legs uniformly yellow, including coxae and trochanters. Antennal segments 1- 6 yellow, remainder gradually infuscate.

Pronotum semicircular, 1.78 times as wide as 1ong, posterior corners obtuse. Disc regularly convex, microreticulate, glabrous and shiny, with scarce, fine pricks. Explanate margin indistinctly bordered from disc, moderately broad, forms a shallow gutter, with honeycomb structure, impunctate, glabrous and shiny.



1-6. *Conchyloctenia capensis*: 1 - dorsal, 2 - lateral, 3 - head and prosternum, 4 - inner margin of claw, 5 - outer margin of claw, 6 - antenna

Scutellum triangular. Base of elytra as wide as base of pronotum, anterior margin only slightly sinuate, strongly crenulate. Disc moderately convex (fig. 2), puncturation very coarse, arranged in more or less regular, slightly impressed rows. Puncturation between elevated third and fifth intervals appears mostly irregular, also intervals in posterolateral part of disc with few irregular punctures as coarse as in rows. Punctures in rows disposed regularly with distance between punctures from slightly larger to slightly smaller than puncture diameter, but some elevated transverse interspaces disturb the regularity. Intervals 3, 5, 7 elevated on whole length, appear costate, interval 1 slightly elevated, remainder intervals partly flat partly slightly elvated. Surface of intervals smooth and shiny. Marginal row distinct, its punctures slightly larger than those on sides of disc. Explanate margin in the widest part slightly wider than 1/6 width of disc, with honeycomb structure, horizontal, forming a distinct gutter. Lateral margination narrow but distinct. Surface of explanate margin slightly irregular, with indistinct transverse folds, shiny.

Clypeus moderately broad (fig. 3), 1.6 times as wide as long, margins moderately elevated, anterior margin rounded. Surface flat, with few punctures, microreticulate, dull. Labrum emarginate to 1/3 length. Antennae moderately long, extending to apex of mesosternum. Length ratio of antennal segments: 100:40:96:53:50:40:66: 50:50:53:100. Segment 3 about 2.4 times as long as 2 (fig. 6).

Prosternal collar large, with transverse sulci, prosternal process moderately broad, strongly expanded apically, deeply impressed in middle, explanate part with longitudinal grooves. Head cavity margin on sides forms a sharp carina, thus venter of pronotum along upper sides of head with short antennal grooves.

Legs slim, tarsi slim, last segment distinctly longer than third but not extending behind marginal setae. Inner margin of claws on fore legs with short pecten of three, on mid and hind legs of four teeth, first the largest, remainder gradually smaller. The largest tooth extending at most to 1/3 length of claw (fig. 4). Outer margin of claw with three teeth approximately twice shorter than teeth of inner pecten (fig. 5).

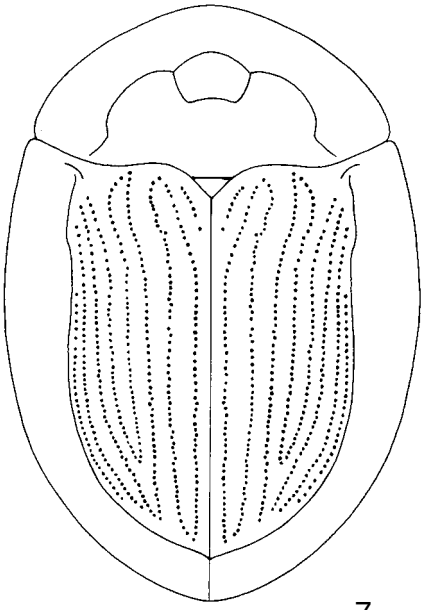
Host plant: unknown.

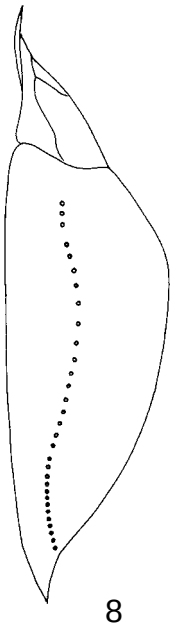
TYPE MATERIAL

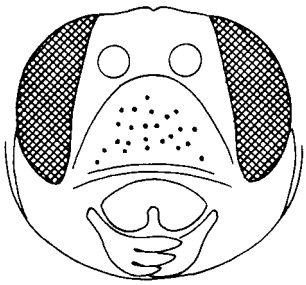
SOUTH AFRICA: holotype: "SOUTH AFRICA, W Cape, 20 km N Citrusdal, 27.X.1999, leg. M. HALADA" (preserved at the Department of Systematic Zoology and Zoogeography, Wrocław University, Wrocław, Poland).

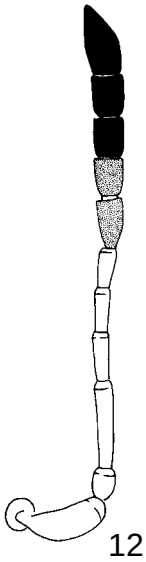
Aspidimorpha (s. str.) *kilimana* WEISE, 1903 bona sp.

Aspidomorpha kilimana WEISE, 1903: 220; SPAETH, 1917: 423, 1932: 4; BOROWIEC, 1997: 402 (as syn. of *A. mrogorensis* WEISE, 1899: 254).
Aspidomorpha (Aspidomorpha) kilimana: SPAETH, 1914: 75.









7-12. *Aspidimorpha kilimana*: 7 - dorsal, 8 - lateral, 9 - head and prosternum, 10 - inner margin of claw, 11 - outer margin of claw, 12 - antenna

DIAGNOSIS

A member of *A. palleago* group, intermediate between *A. strigosa* GORHAM and *A. mrogorensis* WEISE. Body shape very similar to *A. strigosa*, slim, elongate-oval, with length/width ratio 1.47-1.48 (in *A. mrogorensis* body is usually stouter, length/width ratio 1.34-1.46), and elytral marginalia distinctly deflexed with only extreme margin horizontal (in *A. mrogorensis* marginalia are softly deflexed, with horizontal margin slightly wider than in *A. kilimana*, in *A. strigosa* marginalia are very strongly deflexed with no horizontal margin). Colouration of ventral part of body more similar to that of *A. strigosa* than to *A. mrogorensis*, with ventrites mostly black, femora at least in basal third infuscate to black, and four to five distal antennal segments infuscate to black (in *A. mrogorensis* at least abdomen is broadly yellow on sides, femora uniformly yellow or only with extreme base infuscate, and only two antennal segments infuscate). Puncturation of elytral disc in *A. kilimana* is as coarse and dense as in *A. mrogorensis*, punctures have no red centre (red in *A. strigosa*).

DESCRIPTION

Length: 10.7-11.0 mm, width: 7.2-7.5 mm, pronotum length: 3.45-3.65 mm, pronotum width: 6.20-6.25 mm, length/width ratio: male: 1.47-1.49, width/length of pronotum ratio: 1.70-1.81. Body elongate-oval (fig. 7).

Dorsum uniformly yellow, including punctures. Clypeus black. Ventrites mostly black, only lateral plates of mesosternum, posterior half of lateral plate of metasternum, and sides of abdomen yellow. Coxae and trochanters brown to black, basal third to half of femora brown to black, apical parts of femora, tibiae and tarsi yellow. Basal six or seven antennal segments yellow, segments 7 or 8 brown, remainder black.

Pronotum semicircular, with maximum width at base, hind angles subangulate, forming blunt angle of about 90-100°. Disc moderately convex, smooth, shiny, with very small microreticulation and extremely fine pricks. Explanate margin indistinctly bordered from disc, flat, smooth, shiny.

Scutellum triangular, without sulci, microreticulate with 6-9 very small punctures. Base of elytra serrulate, only slightly wider than base of pronotum, elytral margins narrowly marginate. Disc regularly convex, with no postscutellar gibbosity or tubercle (fig. 8), without principal and lateral impressions, row 4 at 1/4 length, and row 6 in middle with shallow, narrow impression. Puncturation of disc regular, punctures in sutural half of disc smaller than in lateral part. Scutellar row with 5-8 punctures. Punctures in rows dense, distance between punctures 0.8-1.5 times larger than puncture diameter. Punctures in marginal row two to three times coarser than punctures in central rows. Intervals feebly convex, five to six times wider than rows, their surface smooth, shiny, with very small microreticulation. Explanate margin strongly declivous, with extreme margin narrowly, horizontally marginate. Surface of marginalia impunctate, shiny, but its surface slightly irregular, with several short, transverse folds, especially in hind part. Apex of elytral epipleura in female with few erect hair (in male probably bare, like in other species of the group).

Head broad, clypeus c. 1.6-1.7 times wider than long (fig. 9), in middle with shallow median impression, anterior margin slightly elevated. Surface of clypeus

microreticulate, dull. Antennae moderately elongate (fig. 12), extending to mid coxa, length ratio of antennal segments: 100:36:100:54:52:43:50:38: 43:41:84. Segment 3 about 3.3 times as long as 2 (fig. 12).

Claws pectinate on both sides, inner pecten with four to five long teeth extending to half length of claw; three outer teeth equal in length, inner slightly shorter (fig. 10). Outer pecten with two or three teeth 1.5 times shorter than inner pecten, inner tooth distinctly shorter than two outer teeth (fig. 11).

Host plant unknown.

DISTRIBUTION

Burundi, N Tanzania, and Zimbabwe.

TYPE MATERIAL EXAMINED

TANZANIA: holotype ♀: "Arusha, Kilimandj." (preserved at the Zoologisches Museum, Humboldt Universität, Berlin).

OTHER MATERIAL EXAMINED

BURUNDI: Ruwuwu Valley, 1700 m, 24 IX 1911, 1 ♀ (preserved at the Department of Systematic Zoology and Zoogeography, Wrocław University, Wrocław, Poland).

ZIMBABWE: Salisbury, 6 VII 1917, 1 ♀ (preserved at the Department of Systematic Zoology and Zoogeography, Wrocław University, Wrocław, Poland).

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