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A contribution to the knowledge of the oriental Chrysomelidae: two new species of Eumolpinae with description of a new genus (Coleoptera)

Abstract - *Colaspedusa verrucosa* n. sp. is described from Thailand (Suratthani Prov., Khao Sok Nat. Park) and compared with the only other species known for the genus (*C. bicoloripes* Medvedev), of which a picture of the habitus and the description of the spermatheca are provided. *Pseudolepis* n. gen. is described for *P. squamosa* n. sp. from Malaysia (vic. of Kuala Lumpur); the new genus belongs to the tribe Adoxini and is strictly related to *Aulacolepis* Baly to which is compared.

Riassunto - Contributo alla conoscenza dei Chrysomelidae orientali: due nuove specie di Eumolpinae con descrizione di un nuovo genere (Coleoptera).

Colaspedusa verrucosa n. sp. della Tailandia (Suratthani Prov., Khao Sok Nat. Park) è descritta e comparata con l'unica altra specie finora nota per il genere (C. bicoloripes Medvedev); di quest'ultima è data la raffigurazione in toto e la descrizione della spermateca. È inoltre descritto Pseudolepis n. gen. con la specie P. squamosa n. sp. della Malaysia (vic. Kuala Lumpur); il nuovo genere è attribuito alla tribù Adoxini e comparato con l'affine Aulacolepis Baly.

Key words: Eumolpinae, *Colaspedusa*, *Pseudolepis* new genus, new species, Thailand, Malaysia.

INTRODUCTION

The description of a new species of *Colaspedusa* gives us the occasion to supply some more informations on the morphology of *C. bicoloripes* Medvedev, 1998 too. Moreover, a new genus of Eumolpinae from Malaysia is here described.

Colaspedus a verrucosa n. sp.

TYPE MATERIAL. Holotype $\ \$: Thailand, Suratthani Prov., Khao Sok Nat. Park, 12.XI.1995, leg. M. Mostovski (coll. L. Medvedev, Moscow) (damaged antennae)

Paratype: 1 Q, same locality and date of the holotype (coll. S. Zoia, Milan) (partially damaged)

DESCRIPTION. Body length 6.1 mm (holotype), 6.5 mm (paratype). Body elongate ovate (Figs 1, 2), subparallel at sides, fulvous with elevated longitudinal pale tubercles on the elytra. Not pubescent at all.

Head sparsely punctate, the surface shiny. Anterior clypeal margin concave, labrum yellow, mandibles reddish, darkened at the apex. Eyes emarginate at the inner side; distance between eyes, view from the dorsum, a little less than three times the width of a single eye. Antennae (Fig. 5) thin and long, reaching almost the middle of the elytra (antennomere 11 is lost in both studied specimens); antennomera yellowish, elongate; antennomere 3 a little less than twice the 2 in length, segment 4 and 5 subequal, a little longer than 3, next segments subequal, slightly widened to apex.

Pronotum transverse (length 1.60 mm, width 2.67 mm, in the holotype), sides regularly arcuate and bordered, the base distinctly larger than the apical border. Surface shining, sparcely and stronlgy punctate, the punctures a little confluent on the lateral sides. Anterior angle acute, a little protruding forwards and with a bristle inserted above it, hind angle obtuse and with a bristle. Anterior edge of the proepisternum straight, then convex in its ventral half. Proepisterna densely punctate, meso- and metasternum impunctate. Prosternum subquadrate, flat, distal and proximal edge feebly concave; posterior edge of the mesoternum a little extended behind, "V" shaped. The coxae of each pair well divided each other. Legs slender, yellowish with golden hairs on the tibiae; femora not toothed, a little widened in the middle; tibiae almost straight, simple, feebly widened at apex. Claws appendiculate.

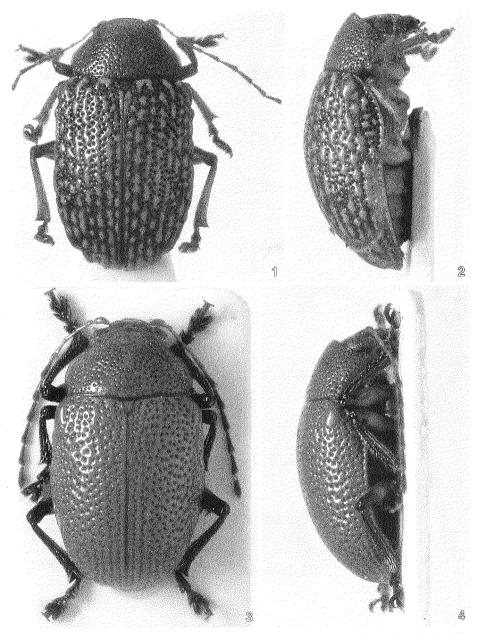
Scutellum subquadrate with rounded apex, shiny with few fine punctures.

Elytra convex, longer than wide (length 4.71 mm, width 3.35 mm, in the holotype), strongly and densely punctate; longitudinal yellow and shiny tubercles, arranged in ten longitudinal lines in the interspaces, more high near sides and at apex, are present on each elytron; humeral tubercle distinct.

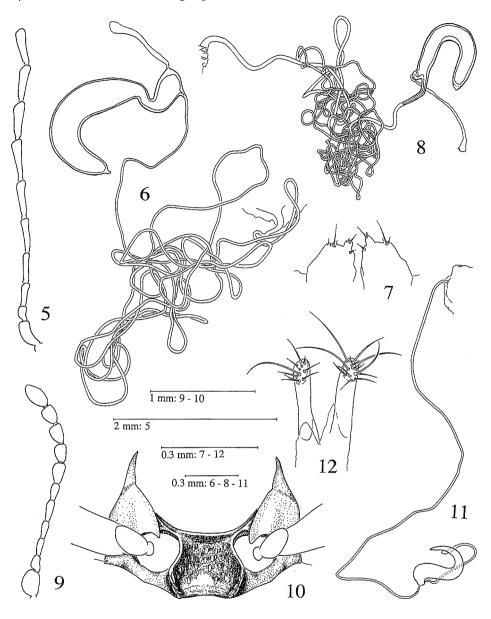
Gonapophysis of little size, not well sclerotized (Fig. 7). Spermatheca of big size (0.82 mm), "C" shaped and with a basal distinct part (Fig. 6); spermathecal duct and accessory gland inserted at the opposite sides of the spemathecal base; the former very long and fine, enlarged only near the insertion at the vagina, the latter as long as half the spermathecal length and ending with a short enlargement.

DERIVATIO NOMINIS. The specific epithet, from the latin, remembers the warty look of the elytral surface.

DISCUSSION. The genus *Colaspedusa* was recently described by Medvedev (1998) for *C. bicoloripes* Medvedev, 1998 from Malaysia (Cameron Highlands). On the base of examination of new specimes from the neighbourhood of the type locality (Malaysia W, Pahang, 30 km E of Ipoh, 1500 m, Cameron Highlands, Tanah Rata), we here



Figs 1-2 - Colaspedusa verrucosa n.sp. (holotype $\mathfrak P$): dorsal view (1); idem, lateral view (2). Figs 3-4 - Colaspedusa bicoloripes Medvedev (Malaysia W, Pahang, 30 km E of Ipoh): dorsal view (3); lateral view (4).



Figs 5-7 - Colaspedusa verrucosa n. sp. (holotype $\mathfrak P$): antenna (5); spermatheca (6); gonapophysis (7). Fig. 8 - Colaspedusa bicoloripes Medvedev (Malaysia W, Pahang, 30 km E of Ipoh): spermatheca. Figs 9-12 - Pseudolepis squamosa n. sp. (holotype $\mathfrak P$): antenna (9); prosternum (10); spermatheca (11); gonapophysis (12).

complete the description of *C. bicoloripes* giving the pictures of the habitus and of the spermathecal morphology in this species (Figs 3, 4, 8).

In comparison to *C. bicoloripes*, beside the unusual sculpture of the elytra, *C. verrucosa* shows entirely yellowish legs, more thin and entirely yellowish antennae and a more protruded humeral tubercle. The spermathecal morphology shows differences both in the shape and size of the spermatheca and in the length of the ductus spermathecae (Figs 6, 8). In *C. bicoloripes* the spermatheca is littler and strongly bended, without a separate proximal portion, the ductus is larger both in the proximal and in the distal portion, while in *C. verrucosa* it has more or less the same diameter all over its length.

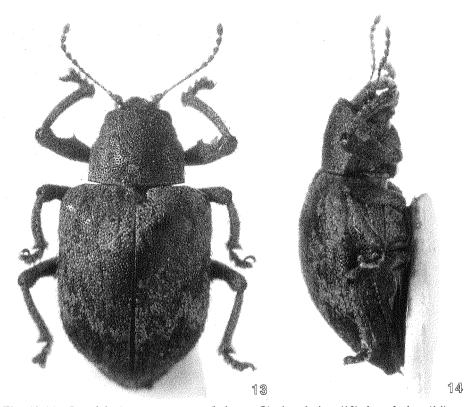
Pseudolepis n. gen.

Type species: Pseudolepis squamosa n.sp.

Description. Body elongate ovate, with prothorax distinctly narrower at base than elytra. Dorsum densely clothed by scales. Head subquadrate, without supraocular grooves; frons not divided from clypeus, about twice as broad as diameter of eyes. Eyes ovate, briefly impressed near the antennal insertion, not emarginate. Antennal insertion delimited inside by a carina, sopraocular grooves absent. Antennae filiform, short, with five apical segments moderately thickened. Prothorax margins vanished anteriorly; posterior angles of pronotum right, not protruding forwards, bearing a single bristle inserted on the ventral side. Anterior margins of proepisterna strongly convex. Prosternum subquadrate, bordered at sides by elevated carinae and with deep grooves for the reception of the antennae. All femora toothed; tibiae simple, not emarginate at the apex. Claws bifid. Elytral sides subparallel; apical angles of elytra a little protruding backwards. Pygidium without longitudinal groove.

DERIVATIO NOMINIS. The genus epithet refers to the relation with the genus Aulacolepis.

Discussion. *Pseudolepis* n. gen. belong to the tribe Adoxini Jacoby, 1908 and to the Section Myochroites Chapuis, 1874. For the convex anterior margin of proepisternum and the dorsum covered with scales it must be compared with the genera *Pachnephorus* Chevrolat, 1837 and *Aulacolepis* Baly, 1863; genera *Lophea* Baly, 1865 and *Heterotrichus* Chapuis, 1874 from same tribe have pubescent dorsum. The character combination of mid and hind tibiae not notched and the tarsal claws bifid permit to relate *Pseudolepis* n. gen. with *Aulacolepis*; the morphology of prosternum is similar in the two genera with deep grooves for reception of antenna at the anterior border and the central zone feebly convex, bordered at sides by two carinae, but these carinae are only a little elevated in *Aulacolepis* while are well developed in *Pseudolepis* n. gen. giving to the prosternum the particular morphology shown in Fig. 10. Beside this, the species of these two genera show different habitus (compare Figs 13, 14 and Fig. 29a in Kimoto & Gressitt, 1982): in *Aulacolepis* the sides of pronotum are regularly



Figs 13-14 - *Pseudolepis squamosa* n.sp. (holotype \mathcal{P}): dorsal view (13); lateral view (14).

arcuate, the elytral sides are more regularly rounded from the middle till the apex, the legs are stronger and the median teeth of femora are smaller and partially hidden by the scales of the femora; the scales on the dorsum are bigger, suberected and some tufts of rigid and erect scales are present both on elytra and on pronotum (the two tufts on pronotum are made by scales leaned each other and were mistaken for "elevated large tubercles" by Kimoto & Gressitt, 1982); in *Pseudolepis* sides of pronotum are subparallel in a large part, legs are finer, with evident teeth at middle of femora, scales of dorsum are small, not erect except for some sparse single elongated scales.

Pseudolepis squamosa n. sp.

Type material. Holotype \mathfrak{P} : Malaysia, vic. of Cuala Lumpur (= Kuala Lumpur), leg. A. Popov (coll. L. Medvedev, Moscow).

DESCRIPTION. Body length 5.8 mm, width (elytra) 2.9 mm. Body elongate (Figs 13,

14), broun; palpi and basal segments of antennae fulvous; the dorsum and the lateral part of the ventral side covered by fine, yellowish scales.

Head densely covered by scales over the antennal insertion; the latter delimited inside by a protruding arcuated carina. Anterior clypeal margin feebly arcuate, labrum red, mandibles black. The three segments of the maxillary palps subequals in length, the third subequal in the maximum width to the second one. Eyes with the inferior edge feebly convex; inner side of eyes impressed by the flat circular area of antennal insertion. Distance between eyes, view from the dorsum, three times the width of a single eye. Antennae (Fig. 9) relatively short, reaching the base of the elytra in length; antennomera red, the club opaque and darkened.

Pronotum a little transverse (length 1.50 mm, width 1.89 mm), sides subparallel from the base to the apical fourth, feebly restricted apically. Lateral edges of pronotum vanished near the anterior angles; posterior angles right. Surface shiny, with fine and impressed punctures, each puncture bearing a single adpressed scale; some longer, finer and more raised scales are scattered on the surface. A bristle is inserted below the posterior angles of the pronotum. Anterior edge of the proepisternum convex. Prosternum (Fig. 10) subquadrate, concave, finely punctate and with adpressed scales, the lateral sides elevated in two carinae bearing some yellow hairs. The coxae of each pairs well divided each other; posterior edge of the mesosternum concave, of the metasternum nearly right. Legs relatively slender but not long, broun, covered by adpressed scales and whitish hairs; all femora toothed medially and lightly widened in the middle; protibiae and mesotibiae bented, metatibiae right, all moderately widened apically. Tarsi as large as the apical end of the relative tibia; claws bifid.

Scutellum subquadrangular, slightly rounded on hind margin, the sides parallel, covered by fine pubescence.

Elytra convex, parallel till the apical third (length 4.07 mm, width 2.96 mm); the sides not visible in dorsal view for the presence of a obtuse carina going from the rather high humeral tubercle to apical slope, which is well developed; elytral apex a little protruded. Elytral surface with scattered punctures, a little finer than the one of the pronotum, and covered by yellowish and broun adpressed scales and by scattered, yellowish raised fine scales.

Gonapophysis well sclerotized, in shape of fine and short cylindrical pieces, transversely cut apically (Fig. 12). Spermatheca "C" shaped, gradually narrowing from the base to the apex (Fig. 11); spermathecal duct and accessory gland inserted at the opposite sides of the spemathecal base, the former being rather long and with a regular diameter along its length.

DERIVATIO NOMINIS. The specific epithet refers to the scales covering the dorsum of the body in this species.

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