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Two new subgenera and six new species of *Acmaeodera ESCH.* (Coleoptera: Buprestidae) from Indian subregion

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Introduction

The **Buprestidae LEACH** of the Indian Province (the wesernmost – W of the Patkai Range – subdivision of the Indo-Pacific Region) are, somewhat surprisingly, very poorly known even in comparison with the areas to the east (Indochinese Prov.) and west (Afghano-Persian Prov. of Palaearctis) of it; as regards *Acmaeodera ESCH.*, besides world catalogues of (OBENBERGER 1926, BELLAMY 2008) and VOLKOVITSH's (ВОЛКОВИЧ 1979) classification of Palaearctic taxa (only marginally touching the fauna of S-Asia), virtually nothing beyond scattered occasional descriptions has been published since KERREMANS' (1906, 1907) *Monographie des Buprestides*. It is already for up to 42 years that some new species found in my own and other collections are waiting in my notes for formal description and publication; moreover, several aspects of the system proposed by VOLKOVITSH (ВОЛКОВИЧ 1979) do not seem acceptable, what makes it necessery to introduce some modifications allowing to arrange the studied taxa in accord with what I consider adequate; last but not least, more than a century since the last (KERREMANS 1906, 1907) review, it seems desirable to outline the actual state of the knowledge of Indian *Acmaeodera ESCH.* So, in the following I will present the descriptions of new taxa, remarks (where needed) on some old ones, list of the [sub-]species inhabiting the area and a key to their identification (including also those not known to me in nature, some of them of doubtful identity). Of course, there remains still very much to do with this fauna, as well as regards taxonomy as distribution and bionomy (to say nothing of phylogeny…).

Conventions and abbreviations

Like in my other publications (unless "corrected" by editors...), I follow the very useful conventions of applying (of course, except wordly citations, where the original form must be retained) SMALL CAPS to ***all*** [irrespective of context and full *vs.* abbreviated version: inconsistent use deprives the display of any sense!] personal family- (***not*** given-) names, *italicizing* species- and genus-group names (as well as citations and words in languages different from that of the main text), and writing the suprageneric taxon-names in **Bold** [the latter is not a generally accepted custom, but is often important, as some of such names (*e.g.* of the subtribes **Buprestina LEACH**, **Melobasina BÍLÝ** or **Coraebina BED.**) are (or may easily become) "homonymous" (but valid!) with generic or subgeneric ones (*Buprestina OBB.*, *Melobasina KERR.*, *Coraebina KERR.*)]: we must make possibly

unequivocal what we have in mind, and possibly easy for the reader to "optically" spot the "wanted" name in the (especially longer) text!

Labels of type-specimens are quoted as exactly as possible, including *italics* and *handwriting* (both represented in my text by *italics*), CAPITAL LETTERS, SMALLCAPS and framing. Determination- and type-designation labels added by me are not cited: the former are white, in the form like "*Acmaeodera mariae* HOŁ., det. R. HOŁYŃSKI" with year of determination written vertically on the left side; the latter red [for primary types, *e.g.* "*Acmaeodera mariae* HOŁYŃSKI, HOLOTYPE"] or green [for paratypes; in some museums visited long ago (*e.g.* BMNH) "my" paratypes may still bear ***red*** labels "PARATYPE" (without taxon name)].

Collection names are abbreviated as follows:

BMNH = Natural History Museum, London, GREAT BRITAIN
RBH = Roman B. HOŁYŃSKI, Milanówek, POLAND;
SB = Svatopluk BÍLÝ, Prague, CZECHIA;

Other terms and abbreviations:

Midlateral = placed between midline and lateral margin, at *ca.* equal distance from both
Convergent/divergent = towards apex or (front) downwards
L = length
W = width
MW = maximum width
BW = basal (upper in case of front) width
AW = apical (lower in case of front) width
HW = width of head with eyes
VW = width of vertex between eyes
≈ = approximately equal to
ø = sex unknown

Descriptions and remarks

Acmaeodera ESCH.

Acmaeodera ESCHSCHOLTZ *1829: 8*
Type species: *Buprestis cylindrica* FABRICIUS *1775*

Remarks: VOLKOVITSH's (ВОЛКОВИЧ 1979) subdivision of the tribe **Acmaeoderini KERR.**, of incontestably enormous value as the first (and hitherto the only) modern attempt at putting some order into the internal structure of this highly diverse group, does nevertheless not seem convincing in closer examination: not only it is based on the fauna of single (Palaearctic) region and almost entirely on single set of – functionally tightly interconnected and anyway notoriously unreliable as indication of phylogenetic/taxonomic affinity (see *e.g.* HOŁYŃSKI 1999, 2005 or 2009 for detailed argumentation!) – traits (genitalia – other characters having been irregularly, here and there applied as mere auxiliary evidence) but, most importantly, even these are not presented in the comparative-diagnostic form, descriptions of supraspecific taxa consist of few poorly defined and usually evidently non-specific characters without reference to other [sub-]genera and without indication which of those features (singly or as a polythetic set) has been considered diagnostic. I do not have sufficient material for a comprehensive re-evaluation (which anyway is out of the scope of the present paper), but the system proposed by VOLKOVITSH seems untenable at some points relevant to the Indian taxa, what compelled me to introduce some modifications. Most important of these are the separation of the *A. uvarovi* OBB. group from (in my opinion evidently heterogeneous) *Acmaeotethya* VOLK., inclusion of *Acmaeoderella* COB. ["*extreme species of this group are … well separated from Acmaeodera s.str. in North Africa …* [but] *several intermediate species ... make it virtually impossible to separate Acmaeodera s.str. from Acmaeoderella Cobos*" – HOLM (1978)] and *Microacmaeodera* COB. back into *Acmaeodera* ESCH. (thus all Old World **Acmaeoderini KERR.** belong, in my opinion, to single genus, with here relevant *Omphalothorax* VOLK. and *Squamicroacmaeodera* VOLK. as its subgenera), *&c*.

Cobosiella VOLK.

Cobosiella VOLKOVITSH 1979: 345
Type species: *Acmaeodera chotanica SEMENOV 1891*

Remarks: The combination of D-shaped (dorsal profile regularly arcuate, ventral straight) lateral aspect of the body, distinct subhumeral incision, more or less strongly bluish- or – rarely – bronzed-black background colouration with unicolorous pronotum and well defined symmetrical yellowish or orange mostly longitudinal markings on the outer half of elytra, and usually [at least part of] ventral side covered with dense squamulae or squamiform-looking clumps of setae, make *Cobosiella VOLK.* one of the best characterized subgenera of *Acmaeodera ESCH.*, similar and probably related to the formally unnamed [to be described separately in HOŁYŃSKI (2017)] American group (*A. stigmata HORN*, *A. acanthicola BARR*, *A. truncata VD. &c.*) labelled by me in some collections as sg. *Sonoridera HOŁ.*

Geographical distribution: Main area extends from Ceylon and India through Indochina to Philippines and Taiwan; besides, the type-species, *A. chotanica SEM.* has been originally described from SW-Sinkiang and reported from Turkmenia and Uzbekistan (the locality of the type-series and/or its conspecificity with Turkmeno-Uzbek populations needs confirmation), while LEVEY & VOLKOVITSH (1996) described apparently (unknown to me) somewhat aberrant species (*A. sudanica L.V.*) from as unexpected area as Sudan (S-Kordofan); *A. holynskii VOLK.*, attributed to *Cobosiella VOLK.* by its Author (BÍLÝ *& al.* 2011), does not belong here (see below: **Remarks** to *A. arya sp.n.*).

Acmaeodera (Cobosiella) maciejewskii sp.n.

Material examined:

Holotype: "S. INDIA: Nilgiri Hills; Moyar Camp, 900m. VI '54, P. S. Nathan" [ø RBH: BPizf]
Additional material: none

Characters

Holotype: 5.7×1.7 mm. Head, pronotum and ventral side black, elytra bluish-black, each with four clayey-yellow markings: one small at humeral angle, one obliquely transverse just behind humeral protuberance, one broader at midlength (both reaching inwards to 3. stria and narrowly interconnected along lateral margin), and one transverse between 1. and 9. stria at apical fourth. Dorsal side covered with moderately long – sparse on elytra, dense otherwise – semierect setae, which on front and towards sides of pronotum gradually transform into elongated scales; ventral surface and femora almost uniformly covered with small, white, ovate squamulae.

Epistome deeply and broadly emarginate, its lateral branches broad. Front parallelsided, *ca.* as long as wide, depressed along midline; puncturation moderately coarse and dense. VW:HW≈0.6. Antennae serrate seemingly from 5. joint: 4. is already triangular in shape but very small, hardly wider than 3. and contrastingly smaller than 5.

Pronotum *ca.* 1.5× wider than long, widest near basal third, anterior width definitely less than basal; apical margin shallowly sinuate to both sides of markedly produced median lobe; base regularly, almost imperceptibly emarginate; sides shortly sinuated just before base, almost straightly convergent in apical third, rather strongly rounded in between; median sulcus shallowly indicated in apical half; prescutellar fovea deep and rather broad, prehumeral ones shallow; punctures on disk fine and sparse, becoming much coarser and denser towards sides; marginal carina not prominent but sharp, entire.

Elytral base as wide as pronotum, sides almost imperceptibly convergent from behind humeri to midlength, then subcuneately tapering to rounded apices; lateroapical margins distinctly denticulate; subhumeral incision moderately deep, humeral protuberances prominent, periscutellar depression small and inconspicuous; median striae deep, lateral much

finer, all finely punctured at bottoms; interstriae somewhat wider than striae, very finely and sparsely punctulated on median parts of elytra, coarser and much denser so at sides.

Ventral surface rather finely and sparsely punctulate, sculpture (except along midline of abdomen) concealed under near-homogeneous cover of squamules.

Geographical distribution: Known only from the holotype, collected in Nilgiri Hills in southern India

Remarks: Unmistakable with its small size and – especially – pubescence transformed almost everywhere except elytra into scales; unique in *Cobosiella VOLK.* is also not widened 4. antennomere. I dedicate this species to my old friend and companion in innumerable (entomological, palaeontological, touristical *&c*.) "adventures", Andrzej MACIEJEWSKI.

Acmaeodera (Lisposcelis) mariae sp.n.

Material examined:

Holotype: "Dehra Dun, U.P; J.C.M. Gardner; *4.V.*193*1*" "ex Dry stems." "*Cage 175*" [ø (RBH: BPgxt)]

Paratype: "Lachiwala; Dehra Dun, U.P.; F.Ent.; *8.VI.*19*30*" "ex Anogeissus latifolia." "R.R.D.*892*; B.C.R.*280*; Cage *242*" [ø (Bpgxu)]

Additional material: none

Characters

Holotype: 7.6×2.6 mm. Black, lustrous, with yellow markings on dorsal side: narrow, not quite regular band along pronotal sides (extreme lateral margins remain black); and *ca.* 20 small, mostly elongated along intervals, spots on elytra. Pubescence short, erect (head and pronotum) or semierect (elytra) gray on dorsal side, recumbent white on ventral.

Anterior margin of epistome very broadly, deeply, triangularly emarginate; front slightly convex, a bit wider than long, sides somewhat convergent; sculpture consists of dense shallow ocelli, each with 2-3 fine punctures at bottom; eyes but inappreciably protruding from the head outline; vertex wide (VW:HW≈0.5); antennal joint 1. club-shaped, *ca.* 3× longer than thick; 2. more than twice shorter, somewhat elongately globular; 3. similar in shape but slenderer; 4.-10. triangular to progressively rhomboidal, *ca*. as long as wide; 11. ovate.

Pronotum much wider than long (L:W≈0.6), sides rather strongly and regularly rounded, maximum width slightly before basal third, basal margin straight, distinctly wider than shallowly bisinuate apex; marginal carina straight, sharp throughout; disk almost regularly convex except for fine, indistinct, at middle interrupted furrow along apical margin, shallow rounded prescutellar fovea and indication of median sulcus in anterior half; puncturation rather coarse, dense, regular except on midlateral parts where still somewhat coarser punctures coalesce into more or less longitudinal rugae.

Elytra *ca.* 2.3× longer that wide, shortly narrowed behind slightly accentuated humeri, then somewhat widened to midlength and arcuately cuneate (only at posterior $^1/_7$ sides near-imperceptibly sinuate), apices narrowly jointly rounded; lateroapical margin finely serrulate; subhumeral incision broad, rather shallow but distinct. Surface – apart from linear furrow along anterior margin, small deep fovea at sutural base and rather prominent humeral protuberances – regularly convex. Elytral striae regular, continuous on disk, becoming very deep groove-like towards sides and apex, disappearing in periscutellar region among – here denser and somewhat coarser – interstrial punctulation; otherwise punctures in striae moderately coarse, those on intervals very conspicuous but much finer.

Proepisterna covered with dense, moderately coarse, ocellate puncturation; prosternal process convex with indication of shallow median sulcus, surface rather finely and not very densely punctate; puncturation of metasternum rather coarse and dense, that of abdomen gradually beconimg somewhat finer and sparser backwards; surface between punctures

smooth and shining. Protibia flattened, longitudinally grooved ventrally, outer edge densely and sharply denticulate, inner with soft pad of extremely dense, fine, soft silky yellowish-brown fur; mesotibia straight, metatibia slightly S-shaped, both cylindrical, covered with moderately dense semierect yellowish-white pubescence.

Variability: Paratype differs in being slightly less elongated, pronotal sides less regularly rounded, lateral yellow pronotal bands broader and more regular, more numerous yellow spots on elytra, and some minor details.

Geographical distribution: Known only from the type-series, collected in the vicinities of Dehra Dun (India: Uttar Pradesh).

Remarks: It is not easy to imagine why VOLKOVITSH (ВОЛКОВИЧ 1979) gave the name *Lisposcelis* [gr. *λίσπος* (*lispos*) = smooth; *σκελις* (*skelis*) = leg] to the subgenus whose only apparently diagnostic character is… sharp denticulation of outer edge of protibiae, but anyway as *A. mariae sp.n.* shows this feature very clearly it must be tentatively included in that taxon. Unfortunately, I have never seen *A. jakobsoni OBB.* – the type and unique hitherto known representative of *Lisposcelis VOLK.* – in nature, so am unable to evaluate if the differences apparent from the published, not quite concordant, descriptions are of specific or supraspecific (subgeneric) value. VOLKOVITSH (ВОЛКОВИЧ 1979) characterizes the subgenus as having "*Надкрылья с* ***неправильными*** *желтоватыми полосами*", what rather poorly corresponds with OBENBERGER's (1928) description of *A. jakobsoni OBB.* ["*Flügeldecken ockergelb, eine breite, scharf seitlich abgegrenzte,* ***regelmäßige****, bis zum 5. Zwischenraume beiderseits reichende Dorsalbinde ist schwärzlich*"]; similarly, "*голова и переднеспинка в* ***прилегающих*** *волосках*" does not seem congruent with "*Oberseite ist unauffällig,* ***abstehend*** *… auf dem Köpfe weiß* [behaart]"; whereas "***ganz flach*** *ausgebuchtete Epistom*" directly contradicts the characterization ["*Наличник (рис. 25) … с* ***глубоким*** *вырезом спереди*"] of the entire genus *Acmaeodera ESCH.*… Thus, the only (rather weak…) character described by one author and not contradicted (because not mentioned at all…) by the other, that may serve to distinguish *A. jakobsoni OBB.* from *A. mariae sp.n.*, is "*Kopf und Halsschild dunkel messingfarben*". But there is yet another nominal taxon in need of a comment: VOLKOVITSH (ВОЛКОВИЧ 1979) classifies *A. eberti COB.* in the *cisti*-group of the subgenus *Acmaeotethya VOLK.*, but later he (VOLKOVITSH 2006) and – probably after him – BELLAMY (2008) cite it as a synonym of *A. jakobsoni OBB.* [neither OBENBERGER (1928) nor COBOS (1966) mention protibiae in the original descriptions] – whether *A. eberti COB.* is a representative of *Acmaeotethya VOLK.* or of *Lisposcelis VOLK.*, it anyway differs from *A.mariae sp.n.* at least in colouration: "*negro-bronceado*" [reminding of OBENBERGER's (1928) "*dunkel messingfarben*"] with different elytral pattern and no yellow lateral bands on pronotum (apparently lacking also in *A. jakobsoni OBB.).* The species is named to honour my best Friend, Colleague, Partner: my Wife, Maria, leading authority in systematics of the **Cyclopidae** (**Crustacea: Copepoda**).

Distethya sg.n.

Type species: *Acmaeodera beesoni OBENBERGER 1928*

General characteristics: Body small, slender; brownish-black with more or less pronounced aeneous lustre, yellow perimarginal band on pronotum and yellow (usually – except *A. quadristriata VOLK.* – irregular) elytral markings concentrated and almost always extensively confluent on outer half. Pubescence short, dense, more or less erect on dorsal, recumbent or semirecumbent on ventral side. Front flat, rather coarsely but not very densely, regularly punctured; antennae serrate from 4. joint. Pronotum moderately transverse, maximum width (equal to or minimally greater than that of elytra) behind midlength, sides regularly, almost uniformly arcuate; basal angles obliterated; marginal carinae sharp, entire; disk strongly convex, median sulcus inconspicuous, prescutellar fovea shallow, transverse

prebasal depression none or indistinct, basal margin not or but very indistinctly carinulate; puncturation rather fine and moderately dense, only on sides somewhat denser and often indistinctly longitudinally confluent. Elytra subparallelsided in anterior half, rather broadly (except *A. leveyi sp.n.*) tapering behind, apices jointly rounded, posterolateral margins finely serrulate; subhumeral incision shallow; dorsal profile convex all along or but slightly flattened in basal third; humeral protuberances moderately prominent, periscuellar depression distinct but small; striae continuous, finely punctulated, becoming much (often strikingly) deeper towards apices; interstriae narrow, slightly convex, finely and densely irregularly punctulate. Ventral surface finely, densely, uniformly punctulate, only on proepisterna punctures are somewhat coarser. Protibiae somewhat flattened and widened in apical half, but not appreciably denticulate.

Remarks: The closest relatives of the new subgenus seem to be some groups ("*Группа cisti*", "*Группа truquii*") of VOLKOVITSH's (ВОЛКОВИЧ 1979) widely heterogeneous sg. *Acmaeotethya VOLK.*; I have no material for a revision of extralimital representatives of these groups, and consequently do not know which (if any, beyond *A. uvarovi OBB.* and *A. quadristriata VOLK.*) of them may eventually prove to belong to *Distethya sg.n.*, but anyway neither *A. cisti WOLL.* or *A. truquii AB.* seem to be legitimate members of *Acmaeotethya VOLK.*, nor the relatives of *A. beesoni OBB.* have as much in common with *A. degener (SCOP.)* as to warrant inclusion in the taxon typified by the latter despite profound differences: *A. degener (SCOP.)* and its close relatives are much larger and strongly flattened (elytral profile flat or even slightly concave anteriorly), of entirely disparate pattern of colouration (bluish- rather than bronzed-black, pronotum unicolorous or with but small rounded spot near posterior angles, elytral markings in form of regular symmetrical spots or tansverse bands), sculpture (coarse, very dense, elytral striae not or but inconspicuously deepened apically), pubescence (predominantly dark), structure of pronotum (uneven, with distinct median sulcus, transverse prebasal and oblique lateral depression, and sharply carinate basal margin), *&c*.

Included (intralimital: Indian subcontinent + Ceylon) **species:** *A. cincticollis KERR.*, *A. leveyi sp.n.*, *A. kerremansi STEBB.*, *A. beesoni OBB.*, *A. dravida sp.n.*, *A. singhala sp.n.*, *A. uvarovi OBB.*, *A. quadristriata VOLK.* [better knowledge of distribution of, and especially possible intermediate populations between, these taxa might reveal that some or all (except the last two) of them are conspecific (subspecies or even synonyms), in which case *A. cincticollis KERR.* and *A. kerremansi STEBB.* would have priority]; on the other hand, study of Palaearctic species hitherto included in *Acmaeotethya VOLK.* may reveal some of them to belong in fact also to *Distethya sg.n.*

Geographical distribution: The currently included species (see above) occur from Afghanistan through India to Burmah and Ceylon, but (except *A. uvarovi OBB.*) are known only from widely scattered type-localities of particular taxa.

Acmaeodera (Distethya) drawida sp.n.

Material examined:

Holotype: "Sappal 1700', Palghat, Madras., J.C.M.Gardner., 9.V.1931" "*S.E's №, 63*" "R.R.D. 119, B.C.R. 146, Cage 787" "*40*" "Ex unknown wood" [ø (RBH: BPgxy)]

Additional material: none

Characters

Holotype: 6.02×2.17 mm. Head, pronotum and ventral side shining black; yellow band along sides of pronotum (leaving extreme margin very narrowly black) broad basally but abruptly narrowed at anterior third; elytra bronzed-black, with yellow longitudinal spots sparsely distributed medially and apically but much denser (in fact almost totally confluent,

leaving only humeral tubercle and few minute spots dark) along basal half; legs and antennae reddish-brown. Dorsal surface densely covered with semierect, brushy setae white on front, pronotal sides and yellow spots of elytra, brownish otherwise; pubescence of sternum and abdomen longer but sparser, recumbent, silky white.

Epistome broadly deeply emarginated; front somewhat longer than wide, sides slightly convergent; eyes not prominent, follow the outline of front; frontal punctulation shallow, rather dense. Antennae serrate from 4. joint, antennomeres 4.-10. much wider than long.

Pronotum transverse, L:W≈0.55, widest at posterior third; lateral margins arcuately convergent towards base and apex; marginal carinae sharp, entire; anterior margin distinctly bisinuate, basal straight. Disk regularly convex, with but inconspicuous rounded foveola at midlength and somewhat deeper at base representing traces of median sulcus, barely perceptible (interrupted at middle) narrow depression along apical margin, and pair of shallow prehumeral pits. Pronotal puncturation rather deep, moderately coarse and dense, regular on disk and along sides, perceptibly confluent into concentric rugae in between.

Elytra at humeri almost as wide as pronotum, sides slightly sinuate behind them, attaining maximum width a bit behind midlength and regularly arcuately tapering to jointly rounded apices; subhumeral incision moderately deep; lateroapical margins distinctly denticulate. Lateral parts rather deeply punctatostriate, striae conspicuously deepened apically, but first two completely confused in anterior half; intervals very distinctly irregularly punctulate.

Prosternal process convex; proepisterna broadly, regularly, deeply excavate. Punctulation rather coarse and dense medially, sparser on proepisterna; coarse on median parts of metasternum and metacoxae, fine at sides; on abdomen fine (except on intercoxal process), laterally dense, along midline sparser.

Geographical distribution: Unique holotype has been collected near the eastern border of what is now Kerala State in SW-India.

Remarks: Differs from *A beesoni OBB.* mainly in colouration, proportions, and development of elytal striae: it is darker than OBENBERGER's species (pronotum black with very slight plumbeous hue *vs.* bronzed-black with strong aeneous lustre, elytra darker brownish-black with only anterior half of sides predominantly testaceous as compared to almost entire lateral portions pale), less elongated (L:W≈2.8 *vs.* 2.9-3.0), with two perisutural striae totally confused in anterior half (indistinct but more or less traceable in *A beesoni OBB.*

Acmaeodera (Distethya) singhala sp.n.

Material examined:

Holotype: "SRI LANKA: Tri. Dist., Trincomalee, China Bay Ridge Bungalow, 0-100', 13-17-V-1976" "Collected by, K. V. Krombein, P. B. Karunaratne, S. Karunaratne, D. W. Balasooriya" "*Acmaeodera kerremansi Stebb.*, Sv. Bílý det. 1981" [ø SB]

Paratypes: "SRI LANKA: Tri. Dist., Trincomalee, China Bay Ridge Bungalow, 0-100', 13-17-V-1976" "Collected by, K. V. Krombein, P. B. Karunaratne, S. Karunaratne, D. W. Balasooriya" "*Acmaeodera kerremansi Stebb.*, Sv. Bílý det. 1981" [1ø SB]; "SRI LANKA: Tri. Dist., Trincomalee, China Bay Ridge Bungalow, 0-100', 13-17-V-1976" "Collected by, K. V. Krombein, P. B. Karunaratne, S. Karunaratne, D. W. Balasooriya" [1ø SB]; "SRI LANKA: Tri. Dist., Trincomalee, China Bay Ridge Bungalow, 0-100', 13-17-V-1976" "Collected by, K. V. Krombein, P. B. Karunaratne, S. Karunaratne, D. W. Balasooriya" [1ø (RBH: BPgxz)]

Additional material: none

Characters

Holotype: 5.17×1.70 mm. Metallic aeneous-bronzed (partly changed artificially – due to preparation – into violet- or bluish-black), with yellow sides of pronotum (narrow

anteriorly, gradually widening towards posterior margin, but not quite reaching it) and numerous yellow irregular spots on elytra (more dense and largely confluent towards sides, almost absent along suture); legs and antennae dark brown (legs partly yellowish). All the body covered with dense, semierect, whitish pubescence.

Epistome broadly and rather deeply sinuate, separated from front by broad depression and indistinct transverse ridge. Front a little wider than long, appreciably narrowing towards epistome, nearly flat, with very shallow longitudinal depression; frontal punctulation deep and rather sparse, surface between punctures distinctly microsculptured. Antennae short, not reaching posterior angles of pronotum, serrate from 4. joint; 1. joint club-shaped, as long as following two together; 2. ovate, massive; 3. conical, as long as 2. but more slender; 4. as long as wide, a little shorter than 3.; 5.-10.much wider than long, roundedly triangular; 11 egg-shaped, by half longer than 10.

Pronotum about 0.60 times as long as wide, maximum width near basal fourth, from there roundedly narrowed towards base and strongly, almost rectilinearly towards apex; lateral carina sharp, entire; anterior margin distinctly bisinuate, posterior nearly straight. Median longitudinal and basal transverse depressions hardly appreciable; punctulation deep, moderately dense (more so towards sides); surface in between covered with distinct microsculpture.

Elytra *ca*. 2.3 times longer than wide behind humeri; as wide at base as pronotum, then widened to behind humeral tubercles and strongly narrowed to about anterior sixth, diverging again to midlength and cuneately tapering to narrowly rounded apices. Subhumeral incision not very deep but distinct; lateroapical margins finely dentate. Humeral tubercles rather prominent, scutellar region shallowly depressed, otherwise elytra regularly convex. Striae moderately deep on posterior half, replaced by rows of deep punctures anterolaterally, completely confused on scutellar area; intervals rather coarsely punctulate (punctures almost as coarse as those in striae).

Prosternal process about as long as wide, rounded at apex, convex; posterior margins of metacoxae very slightly, anterior a little stronger emarginate. Punctulation of ventral side rather deep and dense, almost uniform except lateral depressed parts of prosternum where it is sparse. Protibia widened to apex, strongly curved inwards in proximal two thirds and slightly but distinctly outwards near distal end; its external ridge smooth, lateroapical angle widened to form a broad tooth; mesotibia similar in shape but curvatures less strong; metatibia also (though very shallowly) S-shaped but with maximum width at apical third, narrowed towards apex; claws broadly toothed.

Variability: Paratypes differ mainly in size (4.72×1.59 – 5.51×1.78 mm.), a little also in colouration (in the smallest one yellow lateral band on pronotum is reduced to separate anterior and posterior elongated spots) and sculpture (inner three striae in at least one – BPgxz in my collction – specimen confused between elytral base and midlength) otherwise nearly identical.

Geographical distribution: Known only from the type-series collected in northeastern Ceylon: Trincomalee; the only representative of sg. *Distethya sg.n*. inhabiting the island

Remarks: *A. singhala sp.n.* is extremely similar to *A. beesoni* OBB., but the structure of its protibia (broadened at apex, with no denticles at external edge) and sculpture of abdomen (almost as densely punctured medially as on the sides) make it easily distinguishable as well from that species and its races, as from *A. mariae sp.n.* and, probably, *A. cincticollis* KERR.; from the latter a new species differs also in having elytral striae confused in the scutellar region, and from all in definitely metallic colouration of the dark parts of the dorsal side.

Acmaeodera (Distethya) leveyi sp.n.

Material examined:

Holotype: "*14.IV.1915.4., In dry Hololepta integrifolia stem, Pusa W.S., C: no: 1198*" [ø (BMNH)]

Paratypes: "*14.IV.1915.4., In dry Hololepta integrifolia stem, Pusa W.S., C: no: 1198*" [1ø (BMNH), 1♂ (RBH: Bpgxo) 1ø (BPgxp)]; "*15.IV.1915.4., In dry Hololepta integrifolia stem, Pusa W.S., C: no: 1198*" [1ø (BMNH), 1♂ (RBH: BPgxq)]; "*19.IV.1915.4., In dry Hololepta integrifolia stem, Pusa W.S., C: no: 1198*" [1♂ (BMNH), 1ø (RBH: BPgxr)]; "*23.IV.1915.4., In dry Hololepta integrifolia stem, Pusa W.S., C: no: 1198*" [1♂, 1ø (BMNH), 1♂ (RBH: BPgxs]

Additional material: none

Characters

Holotype *[see reservation at the end!]*: 6.1×1.8 mm. Markedly elongated, *strongly convex (subcylindrical).* Darker than relatives: *piceous-black;* lateral bands on pronotum, *basal half of outer two interstriae and ca. 20 almost regularly arranged, nearly evenly disposed over remaining surface, rather large and but slightly elongated elytral spots clayey-yellow; antennae and legs piceous-brown. Dorsal pubescence short but dense, erect or (elytra) semierect; ventral somewhat longer, not so dense, recumbent.*

Front nearly equilateral, parallelsided, coarsely and densely punctured. Antennae serrate fom 4. joint, joints 5.-10 wider than long.

Pronotum globular, distinctly wider than elytra, widest at basal third; sides strongly rounded, anterior margin shallowly bisinuate with somewhat produced broad median lobe, base perceptibly emarginate, basal angles obliterated; lateral carinae not very sharp but entire; disk almost regularly convex: with but two (at base and at midlength) shallow rounded foveolae representing median sulcus, and indistinct prehumeral pits; puncturation rather fine and moderately dense.

Elytral sides distinctly emarginate between not very prominent humeral protuberances and midlength, then arcuately tapering to near apices with shallow but discernible sinuation before them*; subhumeral sinuation shallow but distinct, lateroapical margin conspicuously denticulate. Striae continuous, markedly deepened apically, somewhat confused around shallow periscutellar foveola; punctures in striae moderately coarse, on intervals very fine.*

Ventral side finely and rather sparsely punctulate. Protibiae flattened, with irregular row of fine tuberculiform denticles on outer edge.

[The description made in 1978 in BMNH has been since unfortunately lost; not having now access to the holotype, I must have substituted presentation (above) of its characterization with those of one of the paratypes [BPgxr, according to my notes "*identical to the holotype*"] (*in italics*; only few characters of the true holotype, based on remarks made elsewhere, are written in normal font).

Variability: Paratypes vary in size (4.7×1.4 – 6.2×1.8 mm.) and markedly in colouration: in some (like the holotype) yellow markings are rather broad (extending to two or sometimes three interstriae) and equally distributed over almost the entire elytral surface; in others they form narrow (single interval) long streaks medially and apically but fuse together into homogeneously pale laterobasal spot occupying anterior half of elytral sides between 4. or 5. stria and lateral margin; the majority of unsexed specimens belong to the dark variety, while all those determined otherwise as males are pale [moreover, although the largest (6.2×1.8mm.) specimen is pale, otherwise pale examples are invariably smaller (4.7×1.4–5.6×1.6 mm.) than representatives of the dark variety (5.8×1.7–6.1×1.8 mm.)], so colouration is apparently a sexually dimorphic character in this species.

Geographical distribution: Type-series has been collected in "*Pusa W.S.*" – I do not know what does "*W.S.*" mean, but "*Pusa*" almost certainly refers to the town in Bihar State (India) at $25^0$59'N-$85^0$41'E. No other locality has been known to me.

Remarks: *A. leveyi sp.n.* is easily recognizable within *Distethya sg.n.* by its markedly elongated and convex (almost cylindrical) body, globular pronotum with broadly obliterated basal angles, and very slightly but discernibly "caudate" (sides subsinuate before apices) elytra; whether or not the apparent sexual dimorphism in colour is a specificity of this species or a feature shared with other representatives of the *Beesoni*-circle remains unclear until more extensive material of those latter becomes available.

Markodera sg.n.

Type species: *Acmaeodera arya sp.n.*

General characteristics: The combination of slender, agriliform body proportions, unicolorous (no reddish or yellowish lateral bands) pronotum, irregular mixture of brownish-black and clayey-yellow markings on elytra, almost straight dorsal profile between midlength of pronotum and that of elytra, puncturation of pronotal sides confluent into longitudinal rugae, lateral pronotal carinae well marked but strongly obtuse-angled in cross-section (no depression along sides of proepisterna), *&c.*, makes the subgenus easily recognizable among the Indo-Pacific *Acmaeodera ESCH.*, while compact round squamules densely covering ventral side even by themselves distinguish it from all Old World representatives of the genus except some *Cobosiella VOLK.* [*e.g. A. (C.) maciejewskii sp.n.*], "*Xantheremia VOLK.*" [like *A. (X.) irrorella C.G.* – by the way, in my opinion this subgenus is a heterogeneous grouping of not closely related taxa: *e.g.* "*ɾpynna flavipennis*" (ВОЛКОВИЧ 1979) has little in common with the type-species, *A. koenigi (GGB.)*, with its globular pronotum widest far before base, obliterated lateral carina, peculiar epistome, setose (no true scales) pubescence *&c.*] and – judging from description – *Paratethya BÍLÝ*, differing from the former two in shape (both dorsal and lateral aspect) of body, proportions, conformation of pronotal lateral carina *&c.*, and from all in pattern of colouration and distinct median sulcus of pronotum.

Remarks: VOLKOVITSH (BÍLÝ *& al.* 2011) includes *A. holynskii VOLK.*, considered by him a synonym of *A. arya sp.n.*, to sg. *Cobosiella VOLK.*, "*based on such characters as slender body with acuminate elytral apices (Plate 10) and, particularly, branched scales on ventral surface and pronotal sides, and male genitalia*". VOLKOVITSH is unquestionably the best connoisseur of **Acmaeoderini KERR.**, the more astonishing both his conclusion and argumentation seem to me: shape of body is just one of the features of both *A. holynskii VOLK.* and *A. arya sp.n.* most conspicuously ***different*** from *Cobosiella VOLK.*; elytral apices are in neither of them "acuminate" but always narrowly rounded [he had probably in mind elytral sides cuneately rather than arcuately tapering to apices, but this on the one hand does not seem to fit *e.g. A. (C.) kerzhneri VOLK.* or *A. (C.) glebi VOLK.*, while on the other is associated with quite different elytral structure and so evidently of convergent origin]; "*branched scales*" in *Cobosiella VOLK.* are in fact mostly long, thin setae or even simply hair, partly more or less tight clumps of them, and only in small part ovate or round true scales, similar indeed to those in *A. arya sp.n.* but not significantly differing from ventral squamulae of *e.g. A. (Xantheremia) irrorata C.G.* or many *Acmaeoderella COB.*, either: I am unable to find out in what respect they might have been described as "*branched*"…; as to the enigmatic (the Author does not precise what concretely is so special of *aedoeagi* in *Cobosiella VOLK.* and *A. holynskii VOLK.* to consider them "*in spite of some differences*" closely related) similarity of male genitalia, on the one hand VOLKOVITSH (*e.g.* ВОЛКОВИЧ 1979: 337) himself widely discusses the pitfalls (including also the dependence on – often narrowly adaptive – structure of ovipositor) of too much credence to it, on the other (as I have frequently pointed out) "*Genitalic characters are frequently very useful as diagnostic features to distinguish between closely related species, which sometimes do not apparently differ in anything else*", but – ***just therefore!*** – "*As indicators of phylogenetic affinity genitalic characters are especially unreliable: the very function of their interspecific differentiation (to serve as [a component of] specific mate recognition system [SMRS]) causes their frequent involvement in reproductive*

character displacement … what leads to the commonly observed pattern of striking genitalic dissimilarity in closely allied sympatric species and near-identity in non-relatives" (HOŁYŃSKI 2009) – and indeed striking examples of convergence (*e.g.* between *Xantheremia VOLK.* and Nearctic *Acmaeoderopsis BARR*) have been cited by VOLKOVITSH (ВОЛКОВИЧ 1979) himself . So, none of the characters set forth to justify the inclusion of *A. holynskii VOLK.* in *Cobosiella VOLK.* seem convincing – contrary to "*some differences*" ["*irregular and asymmetric elytral marking; elongated pronotum with distinct medial depression and concave pronotal base; dense scaly pubescence, nearly entirely concealing background on the head, pronotal sides and ventral surface; male antennae long, expanded from antennomere 4*", and especially shape (lateral view!) and colouration (bronzed- rather than bluish- or violaceous-black) of body and pronotal sculpture] which are truly persuasive and more than sufficient to warrant separation into the new subgenus. The affinities of *Markodera sg.n.* must remain undisclosed until the general classification of the **Acmaeoderini Kerr.** has been comprehensively revised; superficial evaluation of morphological characters suggest its place somewhere between *Paratethya BÍLÝ* and the *cisti*-group [which itself should, in my opinion, be separated from *Acmaeotethya VOLK.*, having very little in common with the type of the subgenus, *A. degener (SCOP.)*].

Included species: *A. arya sp.n., A. holynskii VOLK.*

Geographical distribution: From northern and central India through Pakistan and S-Persia to eastern fringes of Arabian Peninsula.

Acmaeodera (Markodera) arya sp.n.

Material examined:

Holotype: "Out of Sundariwood, Dehra Dun, Dt. 13-7-1911" "50" [♂ (BMNH)]

Paratypes: "Out of Sundariwood, Dehra Dun, Dt. 13-7-1911" "45" [ø (RBH: BPgxl)]; "Out of Sundariwood, Dehra Dun, Dt. 20-7-1911" [ø (BMNH)]; "Out of Sundariwood, Dehra Dun, Dt. 24-7-1911" "38" [ø (BMNH)]; "Out of Sundariwood, Dehra Dun, Dt. 24-7-1911" "40" [ø (BMNH)]; "Out of Sundariwood, Dt. 20-6-1911" "36" [ø (RBH: BPgxh)]; "Out of Sundariwood, Dt. 20-6-1911" "37" [ø (RBH: BPgxi)]; "Out of Sundariwood, Dt. 20-6-1911" [ø (BMNH)]; "Out of Sundariwood, Dt. 20-6-1911" "39" [ø (RBH: BPgxj)]; "Out of Sundariwood, Dt. 30-6-1911" "41" [ø (RBH: BPgxk)]; "Out of Sundariwood, Dt. 30-6-1911" "46" [♂ (RBH: BPgxm)]; "Out of Sundariwood, Dt. 30-6-1911" "47" [♂ (RBH: BPgxm)]; "Out of Sundariwood, Dt. 30-6-1911" "48" [ø (BMNH)]; "Out of Sundariwood, Dt. 3-7-1911" "57" [ø (BMNH)]; "Out of Sundariwood, Dt. 7-7-1911" "51" [ø (BMNH)]; "Out of Sundariwood, Dt. 10-7-1911" "42" [ø (BMNH)]

Additional material: none

Characters

Holotype: Male, 6.2×1.7 mm. Head and pronotum bronzed-black with rather strong aeneous lustre, elytra black with two lateral intervals and numerous irregular spots on the remaining surface yellow (sutural interstria entirely black); ventral side bronzed-black with strong plumbeous lustre.

Epistome deeply and broadly emarginate, very finely sculptured. Front parallelsided, a little bit longer than wide, strongly convex in lateral aspect, very slightly so viewed from above, without any conspicuous depression; surface rather deeply but finely punctured (with smooth longitudinal stripe along midline), covered with dense and long, soft, whitish hair.

Pronotum *ca.* 1.5× wider than long, sides rather slightly rounded, maximum width near basal third, somewhat more convergent towards apex than to base, basal margin very shallowly emarginate, apical almost imperceptibly bisinuate, posterior angles rounded; median sulcus conspicuous all along, prehumeral foveae connected with transverse prebasal depression; pronotal sculpture consists of deep punctures, rather fine and sparse at middle of anterior half, becoming much coarser towards base and much denser towards sides, where

they fuse into distinct irregular longitudinal rugae; marginal carina not prominent but sharp, entire; pronotal surface covered with long whitish hair similar to that of front, denser on sides but distinct also at middle of disk.

Elytra as wide as pronotum, sides shallowly sinuate in anterior half behind rather prominent humeri (narrowest at *ca.* basal sixth), then arcuately convergent to conspicuously denticulate apices; subhumeral incision not very deep but distinct. Striae shallow in basal part, much deeper apically, punctures in them moderately coarse, on slightly convex intervals shallow and indistinct; each interstria with regular row of short, semierect white setulae.

Ventral surface rather finely and sparsely punctulate, densely covered with small rounded scales almost entirely concealing background (somewhat sparser only along midline of abdomen).

Variability: Paratypes differ in size (4.9×1.4 – 7.5×2.2 mm.) and slightly in colouration (yellow markings are more or less developed but sutural interstria is invariably dark and lateral two entirely or almost entirely yellow); especially both specimens determined as males – visible tips of *aedoeagi* – are smaller (5.2×1.4, 6.2×1.7) than all but two of the others and yellow spaces of elytra being distinctly paler and more extensive). [*The description of the holotype, made in London 39 years ago, lacks some details which now seem worth mentioning – not having the possibility to check them on the holotype, I am supplementing the description here based on paratypes from my collection:* Colouration of elytral markings rather dark, clayey-yellow in males, still distinctly darker almost brownish-yellow in unsexed (probably female) specimens; pubescence of head dense, soft, semierect, on pronotum (especially on disk) more recumbent; pronotal sides relatively slighly rounded (BW:MW:AW≈1.25:1.33:1); elytra *ca.* as wide at middle as at base; proepisterna but slightly depressed anteromedially, covered with regular, not very dense, ocellate punctures; prosternal process wide, parallelsided, coarsely but rather sparsely punctured; rounded abdominal sqamules are gradually replaced towards midline with first clumps of, then separate setulae.].

Geographical distribution: Type-series has been collected in the vicinities of Dehra Dun (India: Uttar Pradesh), but it is somewhat problematic locality: the specimens have been labelled as "out of Sundariwood", the name usually appled *Heritiera fomes*, a mangrove tree highly unlikely in submontane area; Dehra Dun is the site of the Forest Research Institute, so (unless "sundariwood" is locally used for a different plant in Uttar Pradesh, or perhaps – as suggested by having been written with capital letter: "**S**undariwood" – it is just the name of some forest near Dehra Dun) it seems conceivable that the beetles had been reared from material imported (for some experiments?) from elsewhere. I have also seen a specimen from Pakistan: Mithi; I found two so named localities, both in southern Sindh, one of them (24^{0}20'N-69^{0}00'N) just at the border of the large area (Rann of Kutch) of salt marshes where mangroves do occur. VOLKOVITSH (BÍLÝ *& al.* 2011), under *A. holynskii VOLK.*, quotes several localities between India and Arabian Peninsula, but as long as the relation of that name to *A. arya sp.n.* (synonym? subspecies? distinct species?) has not been clarified (see below!) it remains unknown which of these occurrences refer to the present species.

Remarks: VOLKOVITSH (BÍLÝ *& al.* 2011) considers *A. arya* (then unpublished name) a synonym of his newly described *A. holynskii VOLK.* (type locality: United Arab Emirates, Sharjah), but some points of the description and picture make it difficult for me to accept their taxonomic identity. Unfortunately (having never seen any specimen from Arabian Peninsula) I have had no possibility of direct comparison, so I cannot assess the value of the apparent differences with certainty, but judging from VOLKOVITSH's detailled description they seem sufficiently significant to disclaim synonymy. Already a glance at the picture (fig. 10 in BÍLÝ *& al.* 2011) shows the holotype as differing in colouration (head and pronotum bright bronzed, elytral markings lighter yellow, black spaces – especially perisutural band, ocupying almost entire two inner interstriae – more exensive and more regular), proportions (pronotal

sides more rounded and more convergent anterad, elytra definitely wider at humeri than at midlength), structure (more regularly convex) and pilosity (recumbent) of head and pronotum; some of these differences may be individual, sexual, or simply photographic artifact, but some are supported also by the description and seem at least partly real: "*dark elements* [on elytra] *concentrating on 1st–2nd and 5–9th intervals*" [in *A. mariae sp.n.* only almost entirely dark 1. and almost entirely yellow outermost two intervals differ sensibly in pigmentation from 3. or 4.], "*Frons with … recumbent setiform scales*" [VOLKOVITSH – not only here – classifies as "scales" what in my opinion are simply hair or setae], no mention of transverse prebasal pronotal depression, elytral "*sides slightly widened at humeri, subparallel towards posterior 1/3*". Not seen from the picture is the difference in size ["*length 7.5 (5.1–10.2) mm, width 2.2 (1.4–3.0) mm"* – it is not quite clear what is "*7.5*" and "*2.2*", but most probably the average; if so, the ***mean*** value for *A. holynskii VOLK. s.l.* – ***including*** the majority of the type-series of *A. arya sp.n.* (what explains also the overlap in other traits!) – equals the ***maximum*** for the latter, the smallest specimens of both being, understandably, nearly identical], subhumeral incision [described as "*deep*" – what, however, may be just different subjective evaluation]; as to the "*oval, branched scales*" – see Remarks on the subgenus!

With those described herein, the following taxa of **Acmaeoderini KERR.** have been hitherto known to occur in the Indian Prov. of the Indo-Pacific Region (names of the taxa known to me only from descriptions written in *red*):

Acmaeoderini KERREMANS 1893a
Acmaeoderina KERREMANS 1893a
Acmaeodera ESCHSCHOLTZ 1829
Paracmaeodera THÉRY 1946
aurifera CASTELNAU et GORY 1835
siwalika HOŁYŃSKI 1993a
sindhia HOŁYŃSKI 1993a
aurifera s.str.
Cobosiella VOLKOVITSH 1979
stictipennis CASTELNAU et GORY 1835
stictipennis s.str.
beharensis OBENBERGER 1924 [?= *interrupta KERR.*?]
interrupta KERREMANS 1892
indica KERREMANS 1914
maciejewskii sp.n.
kerzhneri VOLKOVITSH 2008
glebi VOLKOVITSH 2009
Squamicroacmaeodera VOLKOVITSH 1986
belli KERREMANS 1893b
Sg. indet.
gardneri OBENBERGER 1928
Lisposcelis VOLKOVITSH 1979
mariae sp.n.
jacobsoni OBENBERGER 1928
Distethya sg.n.
quadristriata VOLKOVITSH 2013
uvarovi OBENBERGER 1928
cincticollis KERREMANS 1893b
kerremansi STEBBING 1914
beesoni OBENBERGER 1928
drawida sp.n.
singhala sp.n.
leveyi sp.n.
Markodera sg.n.
arya sp.n.
Omphalothorax VOLKOVITSH 1979
prosopiphaga VOLKOVITSH 2013

Key to the identification of intralimital taxa

1(17) Yellowish-white to red elytral markings, if present, not numerous but relatively large, regular in shape, symmetrical, on pure black to metallic bluish background

2 (3) Pronotum regularly sulcate along midline. Colouraion bright metallic, bi- or tricolorous (not uniformly dark blue or bronzed), without non-metallic yellowish or reddish markings ..... ***A. (Paracmaeodera THY.) aurifera C.G.***

a (b) Pronotal disk with distinct transverse depression at middle; median sulcus with 2-3 rows of contrastingly coarser punctures ..... ***A. (P.) a. siwalika HOŁ.***

b (a) Pronotal disk without transverse depression at midlength; punctures in median sulcus similar to those elsewhere

c (d) Elytral interstriae only slightly grooved near apices, finely and more or less irregularly punctulate ..... ***A. (P.) a. sindhia HOŁ.***

d (c) Apical parts of elytral interstriae deeply and rather extensively grooved, with mostly uniserial coarser puncturation ..... ***A. (P.) aurifera C.G. s.str.***

3 (2) Pronotum at most with traces of median sulcus. Colouration black to dark blue with large whitish to red markings, or unicolorous bronzed

4(16) Elytra black or blue with yellow or red markings ..... ***A. (Cobosiella VOLK.)***

5(14) Pubescence of dorsal side (except sometimes pronotal sides) consists of sparse, thin, inconspicuous setulae

6 (7) Each elytron with single reddish L-shaped lateral marking .... ***A. (C.) stictipennis C.G. s.str.***

7 (6) Elytra with three pairs of lateral markings (sometimes narrowly connected along margins)

8(13) Ventral pubescence consists predominantly of thin setae or hairs, ovate scales absent or restricted to sides. Larger (length >7 mm.) species

9(10) Each elytron with small rounded yellow spot at middle of width at anterior quarter .. .. ***A. (C.) beharensis OBB.***

10 (9) Anterior half of elytral disk unicolorous, dark

11(12) Pronotum widest behind midlength; pronotal depressions shallow, transverse peribasal sulcus not prolonged anterad ..... ***A. (C.) interrupta KERR.***

12(11) Pronotum widest just before midlength; pronotal depressions deep, transverse peribasal sulcus prolonged along sides almost to anterior angles ***A. (C.) indica KERR.***

13 (8) Sternum and abdomen entirely covered with small, widely ovate squamulae. Body length <7 mm. ..... ***A. (C.) maciejewskii sp. n.***

14 (5) At least elytral apices covered with lanceolate scales

15(16) Anterior ⅔ of elytra, except humeral tubercle and two perisutural interstriae, uniformly red, apical third entirely dark ..... ***A. (C.) kerzhneri VOLK.***

16(15) Red elytral pattern consists of almost entire two perimarginal intervals, somewhat S-shaped longitudinal diskal band on basal half, and broad transverse spot reaching 2. stria at apical quarter ..... ***A. (C.) glebi VOLK.***

16 (4) Body unicolorous, dark bronzed ..... ***A. (Squamicroacmaeodera VOLK.) belli KERR.***

17 (1) Elytra with numerous small, more or less irregular markings

18(39) Pronotum much wider than long, widest behind midlength; lateral carina sharp, well developed

19(20) Elytral margins without subhumeral incision ..... ***A. (sg.?) gardneri OBB.***

20(19) Subhumeral incision often shallow but distinct

21(22) Protibiae sharply, prominently denticulate along outer edge

23(24) Pronotum black, sides bordered with yellow .... ***A. (Lisposcelis VOLK.) mariae sp. n.***

24(23) Pronotum dark bronzed, unicolorous ..... ***A. (L.) jakobsoni OBB.***

25(21) Protibiae smooth or but very finely, inconspicuously denticulate

26(41) Pronotal sides bordered with yellow. Pubescence consisting entirely of thin setae .... ***A. (Distethya sg.n.)***

27(30) Body markedly flattened; convexity of basal parts of pronotum and elytra in lateral view very slight; dorsal profile with but hardly discernible re-entrant pronotoelytral angle

28(29) Each elytron with two narrow, regular or almost so, yellow longitudinal vittae .... ***A. (D.) quadristriata VOLK.***

29(28) Elytra with numerous, more or less elongated, yellow markings spread all-over the surface ..... ***A. (D.) uvarovi OBB.***

30(27) Body not conspicuously flattened; pronotum strongly, almost regularly convex throughout; re-entrant pronotoelytral angle in lateral aspect conspicuous

31(38) Elytral sides arcuately converging towards apices

32(33) Yellow markings in apical half of elytra condensed into two rather broad, nearly regular obliquely transverse bands ..... ***A. (D.) cincticollis KERR.***

33(32) Yellow elytral markings small, irregular, not forming transverse bands

34(35) Yellow border of pronotum not extending to anterior margin .... ***A. (D.) kerremansi STEBB.***

35(34) Yellow pronotal border entire

36(37) Elytral striae discernible all along ..... ***A. (D.) drawida sp.n..***

37(36) Inner two or three striae confused in anterior half ..... ***A. (D.) beesoni OBB.***

38(31) Apical half of elytra cuneate or slightly caudate: lateroapical margins straightly or somewhat sinuately tapering

39(40) Inner two or three striae confused in anterior half ..... ***A. (D.) singhala sp.n.***

40(39) Elytral striae nearly regular all along ..... ***A. (D.) leveyi sp.n..***

41(26) Pronotum concolorous. Ventral side covered with broadly ovate squamulae .... ***A. (Markodera sg.n.) arya sp.n.***

42(18) Pronotum nearly as long as wide, widest before midlength, unicolorous; lateral carina inconspicuous ..... ***A. (Omphalothorax VOLK.) prosopiphaga VOLK.***

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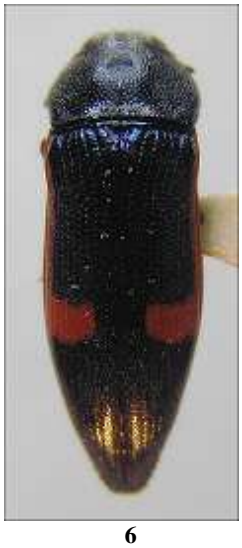

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Explanations to figures

[note that striking colour differences in *Paracmaeodera* THY. reflect sexual and individual variability, not subspecific differentiation]

1. *A. (Paracmaeodera) aurifera C.G. sindhia* HOŁ. ♀ **PT** RBH:BPdlc, dors. – India: Ajmer
2. *A. (Paracmaeodera) aurifera C.G. s.str.* ♀ RBH:BPayd, dors. – India: Kumaon: Haldwani distr.
3. *A. (Paracmaeodera) aurifera C.G. s.str.* ♂ RBH:BPefc, dors. – [no localitylabel]
4. *A. (Paracmaeodera) aurifera siwalika* HOŁ. ♂ **PT** RBH:BPayi, dors. – India: Dehra Dun
5. *A. (Paracmaeodera) aurifera C.G. sindhia* HOŁ. ♀ **PT** RBH:BPdlc, lat. – India: Ajmer
6. *A. (Cobosiella) stictipennis C.G. s.str.* ø RBH:BPjbg, dors. – India: Haryana: Khijarabad, X-XI 2005
7. *A. (Cobosiella) interrupta* KERR. ø RBH:BPjbh, dors. – India: Haryana: Khijarabad, X-XI 2005
8. *A. (Cobosiella) indica* KERR. ♂ RBH:BPjbj, dors. – India: Nilgiri Hills
9. *A. (Cobosiella) maciejewskii* HOŁ. ø **HT** BPizf, dors. – India: Nilgiri Hills, 900 m.,VI 1954
10. *A. (Cobosiella) stictipennis C.G. s.str.* ø RBH:BPjbg, lat. – India: Haryana: Khijarabad, X-XI 2005
11. *A. (Cobosiella) interrupta* KERR. ø RBH:BPjbh, lat. – India: Haryana: Khijarabad, X-XI 2005
12. *A. (Cobosiella) indica* KERR. ♂ RBH:BPjbj, lat. – India: Nilgiri Hills
13. *A. (Cobosiella) maciejewskii* HOŁ. ø **HT** BPizf, lat. – India: Nilgiri Hills, 900 m.,VI 1954
14. *A. (Squamicroacmaeodera) belli* KERR. ø BPdla, dors. – India: Belgaum
15. *A. (Lisposcelis) mariae* HOŁ. ø **HT** BPgxt, dors. – India: Dehra Dun, 4 V 1931
16. *A. (Squamicroacmaeodera) BELLI KERR.* ø BPdla, lat. – India: Belgaum
17. *A. (Lisposcelis) mariae* HOŁ. ø **HT** BPgxt, lat. – India: Dehra Dun, 4 V 1931
18. *A. (Distethya) quadristriata* VOLK. ø BPkrg, dors. – Pakistan: NWFP: Besham, 20 V 1993
19. *A. (Distethya) uvarovi* OBB. ø BPkrf, dors. – Pakistan: NWFP: Paress, 11-14 VI 1991
20. *A. (Distethya) quadristriata* VOLK. ø BPkrg, lat. – Pakistan: NWFP: Besham, 20 V 1993
21. *A. (Distethya) uvarovi* OBB. ø BPkrf, lat. – Pakistan: NWFP: Paress, 11-14 VI 1991
22. *A. (Distethya) beesoni* OBB. ♂ BPgxx, dors. – India: Dehra Dun, 21 V 1937
23. *A. (Distethya) drawida* HOŁ. ø **HT** BPgxy, dors. – India: Kerala: Palghat, 9 VI 1931
24. *A. (Distethya) singhala* HOŁ. ø **PT** BPgxz, dors. – Ceylon: Trincomalee, 13-17 V 1976
25. *A. (Distethya) leveyi* HOŁ. ♂ **PT** BPgxo, dors. – India: Pusa, 14 IV 1915
26. *A. (Distethya) drawida* HOŁ. ø **HT** BPgxy, lat. – India: Kerala: Palghat, 9 VI 1931
27. *A. (Markodera) arya* HOŁ. ø BPgxl, lat. – India: 'Sundariwood', 26 VI 1911
27. *A. (Markodera) arya* HOŁ. ø BPgxl, dors. – India: 'Sundariwood', 26 VI 1911

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