

## A new species of *Azarea* Uvarov, 1926 from North West India (Orthoptera, Acrididae, Gomphocerinae)

by

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ABSTRACT. — The genus *Azarea* Uvarov, 1926, was known from two West African species. Now a third one is described, *A. indica* sp.n. from India.

### INTRODUCTION

The genus *Azarea* Uvarov, 1926, was known from the type-species *A. lloydi* Uvarov, 1926, and *A. verticula* Jago, 1966, both occurring in West Africa. The species being described below is the first record of the genus from India.

#### *Azarea indica* sp.n.

Holotype. — ♂, small, slender (fig. 1). Head (fig. 2) elongate, longer than pronotum, gradually narrowing in front, vertex with well developed median carina throughout. Antennae slightly longer than combined length of head and pronotum, first six segments triquetrous and expanded, remaining segments cylindrical. Eyes flattened oval, markedly narrowed in front. Fastigium of vertex (fig. 3) as long as longest diameter of eye, and one and a half times longer than its basal width, with pair of oblique, shallow furrows. Vertex between eyes and occiput with a number of distinct but low ridges parallel to median carina. Frontal costa with carinae raised, sulcate throughout except for extreme lower part. Lateral facial carina well developed, in profile slightly sinuous.

Pronotum (fig. 2) with distinct median and lateral carinae, with several longitudinal ridges between them, more distinctly and regularly on meta- and prozonas; two sulci crossing dorsum, only posterior one cutting median carina well behind middle of pronotal length; lower margin of lateral lobe straight. Mesosternal lobe slightly longer than wide, interspace narrower than width of lobe and somewhat constricted in the middle. Metasternal lobes contiguous medially. Metathoracic pleurae densely and coarsely punctate. Tympanum comparatively large.

Tegmen narrow, longer than abdomen, tip acutely pointed, costal area markedly widened with series of oblique transverse veins. Hind wing slightly shorter than tegmen. Hind femur long, slender, shorter than abdomen, stridulatory pegs well developed; outer upper lobe of hind knee markedly longer than inner upper lobe (fig. 5). Hind tibia without external apical spine, arolia well developed, longer than half the length of claws.

Abdominal terminalia (fig. 6). Epiproct triangular, longer than basal width, with median furrow widening posteriorly, tip broadly pointed. Cercus pubescent, compressed laterally, longer than epiproct, broadly rounded posteriorly. Subgenital plate fairly long, bluntly pointed apically. Phallic complex as in fig. 8-9. Epiphallus (fig. 8) bridge-shaped, ancorae rather long and broad, anterior processes lying at right angle to ancorae, lophi lobiform and sculptured.

General coloration uniformly pale brown.

Allotype. — ♀, larger than holotype. First ten segments of antennae triquetrous and expanded, fastigium of vertex wider and less tapering in front. Costal area of tegmen normal, not widened. Cercus shorter than epiproct. Ovipositor valves short and thick.

Variation. — The median furrow of the epiproct of one paratypic male is not widening posteriorly. The general colour of the pronotum of some paratypes is slightly darker and the tegmina may show few irregularly scattered darker blotches.

Measurements (length in mm). — Holo - (♂) and allotype (♀): body ♂ 23.0, ♀ 32.5; head ♂ 5.0, ♀ 7.8; pronotum ♂ 3.5, ♀ 5.2; tegmen ♂ 18.5, ♀ 26.0; hind femur ♂ 9.5, ♀ 12.3. Paratypes: body ♂ 21.0-22.5, ♀ 29.0-29.5; head ♂ 4.5-5, ♀ 6.6-7.0; pronotum ♂ 3.1-3.5, ♀ 4.8-5.0; tegmen ♂ 17.0-18.5, ♀ 24.0-24.8; hind femur ♂ 8.5-9.0, ♀ 11.8-12.1.

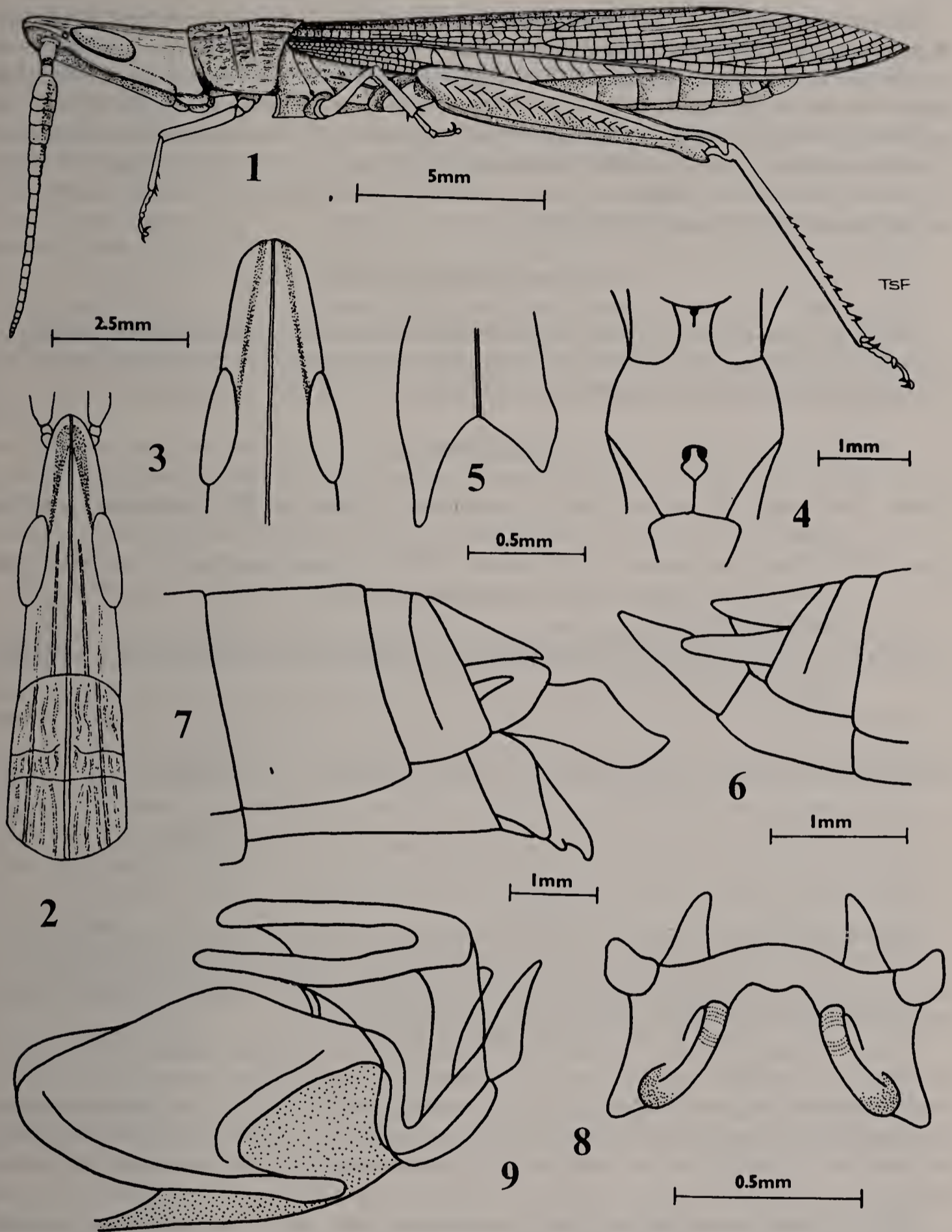


Fig. 1—9. *Azarea indica* sp.n.: 1, male (holotype); 2, male, head and pronotum, from above; 3, female, fastigium of vertex, from above; 4, male, meso- and metathoracic lobes; 5, male, hind knee, from above; 6, male, abdominal terminalia, lateral view; 7, female, idem; 8, epiphallus, from above; 9, aedeagus, lateral view.

Material studied. — ♂ holotype: India, Pb., Dist. Gurdaspur, Batala, 12.I.1976; ♀ allotype: India, Punjab, Ludhiana, 18.II.1970; paratypes: as holotype (1 ♂); as allotype (4 ♂, 1 ♀); as allotype, 22.II.1970 (2 ♂); India, Punjab, Dist. Amritsar, Taran, 14.II.1970 (3 ♂, 1 ♀) (all specimens Coll. Asket Singh). Besides a nymph from Batala, 12.I.1970. Type-series deposited in the collection of the Zoological Survey of India.

Differential diagnosis. — The new species is closely related to the type-species *A. lloydi* from West Africa and differs from it in the following features: furrows of vertex weaker, apex of tegmen more acutely pointed, lateral pronotal carinae more distinct, lower margin of pronotal lateral lobe not sinuate but straight, upper lobes of hind knee not of equal length but outer one markedly the longest, shape of lophi and anterior processes of epiphallus, distinct coloration. From *A. verticula* it differs by distinct coloration, larger size, longer fastigium, shape of ancorae and lateral processes of epiphallus, lateral carinae of pronotum cut by only two sulci and in broadly rounded hind margin of pronotum.

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Congresverslagen behoren doorgaans niet tot de meest uitnodigende lektuur. De lange aaneenrijging van artikelen, met hun meestal zeer bondige, oppervlakkige inhoud maken dat weinigen geneigd zullen zijn de inhoud van a tot z door te lezen. Achter het uiterlijk van een boek verbergt zich het innerlijk van een magazine, waarin ieder zich het zijne zoekt. Beide — verslag en magazine — worden dan ook snel oud en dienen het liefst vers van de pers genoten te worden.

De hier te bespreken paperback heeft wat dat betreft alles mee. De produktie was bijzonder vlot. De ca. 140 bijdragen werden al voor de aanvang van het kongres verzameld en gebundeld om als een soort programma te kunnen dienen. Door waar mogelijk de oorspronkelijke manuscripten „quick and dirty” te clicheren werd tegelijkertijd een grauwe eentonigheid in uitvoering voorkomen. De meeste bijdragen hebben de lengte en vorm van een kort artikel en zijn dus goed leesbaar. Soms wordt alleen een samenvatting gegeven, of alleen maar een titel. Praktisch alle bijdragen zijn in het Engels gesteld.

De bijdragen zijn in verschillende groepen gerangschikt. Na een paar inleidende verhalen (Michener, De Wilde) volgen de mededelingen over eigen werk verdeeld over 6 sessies en een groep „ongesorteerd”. In Sessie I komen de hormonen met betrekking tot o.a. de kaste-differentiatie aan bod. Veel potentiële spoorferomonen bij mieren en termieten zijn opgespoord, maar over hun werkelijke betekenis is nog maar weinig of niets bekend (Sessie II). In de volgen-