

Palaeoasemum crowsoni and *P. duffyi*,
 a new genus and two new species of the Asemini
 (Coleoptera, Cerambycidae) from the Baltic amber

By

MOHAMMAD ABDULLAH

Mit 2 Tafeln

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Dr. ROY A. CROWSON kindly allowed me to study three specimens of the Cerambycidae in amber which he received from the Geologisches Museum in Hamburg for identification. The fourth specimen described in this paper, which is the property of the British Museum (Natural History) London, comes from the late Dr. RICHARD KLEBS who listed amber pieces representing the following genera of the Cerambycidae in his collection as identified by Dr. E. REITTER (KLEBS, 1910): near *Anaglyptus* 1, *Callidium* 1, *Gracilia* 1, *Grammoptera* 1, *Nothorrhina* 17, near *Nothorrhina* 1, *Obrium* 3, *Pachyta* 1, *Tetropium* 1, *Strangalia* 1, near *Strangalia* and *Grammoptera* 1, near *Tetropium* 1, new genus 5, genus not palaearctic 1, totally strange genus 1 and undetermined genus 2.

General information on the subject of Baltic amber may be obtained in my recent paper (ABDULLAH, 1964).

I have followed the classification of beetles proposed by CROWSON (1955). The specimen mentioned below is the holotype of the type species (*P. crowsoni*) of the genus (*Palaeoasemum*). Other specimens are less clearly visible and were not used in the following differential diagnosis. The following are the distinguishing characters visible in the specimen that place it in the superfamily Chrysomeloidea. Head not rostrate; antennae not clubbed (excluding from the Curculionoidea). Tarsi pseudotetramerous; prothorax without side edges (excluding from the Cleroidea, Cucujoidea and Lymexyloidea). Hind coxae not excavate (excluding from the Dermestoidea and Bostrychoidea). Antennae filiform (excluding from the Buprestoidea, Byrrhoidea, Cantharoidea, Dascilloidea, Dryopoidea, Elateroidea and Rhipicerioidea). Legs with distinct trochanters; antennae 11-segmented (excluding from the Stylopoidea). Abdomen without a distinct pleurite and sternite of second segment — visibility poor in the area (excluding from the Histeroidea, Hydrophiloidea, Scarabaeoidea and Staphylinoidea). Prothorax without notopleural sutures; metepisterna not touching middle coxal cavities (excluding from the Cupedoidea and Sphaerioidea). Hind coxae neither fused to metasternum nor dividing first visible abdominal sternite (excluding from the Caraboidea).

The following are the distinguishing characters presented by the material that place it in the family Cerambycidae. Antennae inserted on pronounced tubercles and capable of being reflexed backwards over body; tibiae (most probably each) with two distinct tibial spurs (observed on left hind tibia only); front coxal cavities visibly (= externally) open behind; tarsal claws simple (excluding from the Bruchidae and Chrysomelidae).

The following are the distinguishing characters seen in the specimen that place it in the subfamily Aseminae. Mentum not distinctly pedunculate; head without constriction at neck, not rostrate; front coxae not conically projecting (excluding from the Lepturinae). Last (= fourth) segment of maxillary palp broad and obtuse at apex (excluding from the Cerambycinae and Lamiinae). Elytra without large punctures in longitudinal rows; front coxae projecting; prothorax neither constricted before base nor behind front margin (excluding from the Disteniinae). Apices of front coxae projecting above level of prosternal intercoxal process; empodia absent (excluding from the Philinae). Mesonotum with stridulatory files; labrum distinct (excluding from the Prioninae, Parandrinae and Anoploderminae).

The following distinguishing characters of the tribe Asemini are visible in the specimen. Front coxal cavities open behind, intercoxal process not dilated at apex; mesepimera reaching middle coxal cavities; wings present; base of antennae not embraced by eyes (excluding from the Atimiini and Michthisomini).

In the keys of ARNETT (1962) and LINSLEY (1962), the specimen comes out to the asemine genus *Megasemum* KRAATZ, 1879 (excluding from *Arhopalus* AUDINET-SERVILLE, 1834; *Asemum* ESCHSCHOLTZ, 1830 and *Tetropium* KIRBY, 1835). The specimen, however, differs from all the above-mentioned genera and from others in the tribe in the shape of the pronotum which is nearly rectangular but constricted at base here. In this feature perhaps the closest approach is found in the genus *Nothorrhina* REDT., 1845 and the Indian species, *N. gardneri*, whose type is deposited in the British Museum (N. H.). It is my considered opinion that this is the specimen regarded by E. REITTER as being '*Bei Nothorrhina*' (KLEBS, 1910: 238).

Palacoasemum, new genus

Shape. Elongate, cylindrical.

Vestiture. Eyes with a few short hairs between facets of ommatidia.

Punctures. Coarse.

Head wider than long, widest across eyes, here narrower than pronotum at its widest part. Tempora reduced. Vertex without a median suture. Area between eyes longitudinally depressed in middle with rather parted or obliquely combed off pubescence on either side. Clypeus slightly ridged at base. Labrum distinct. Mandibles entire at apices. Maxillary palp (very) weakly securiform (appearing nearly filiform in low magnification) with apex wide and obliquely truncate; apical segment broad and obtuse at apex. Labial palp (very) weakly securiform; apical (= third) segment widest and longest. Eyes lateral, deeply emarginate, coarsely faceted. Antennae filiform, nearly half as long as body; fifth segment longest or nearly so, second segment smallest, apical (= eleventh) segment less than twice longer than tenth segment.

Thorax. Pronotum nearly rectangular but constricted at base, widest before base; without a median suture; borders not margined; pleuron broad; prosternum long in front of coxae; prosternal intercoxal process shorter than procoxae, pointed at apex; front coxal cavities visibly (= externally) open behind. Mesonotum with stridulatory files. Mesosternum short (shorter than prosternum and metasternum). Mesocoxae not contiguous. Mesepimera reaching middle coxal cavities or mesepisterna not impinging on mesocoxal cavities. Metacoxae transverse, nearly contiguous. Scutellum moderate. Elytra long, not completely

covering abdomen, leaving one or two posterior segments uncovered; parallel sided but slightly narrowed at apices; each with apex rounded, narrow, base nearly straight, wide; scutellary margin forming obtuse angle with base, confluent with sutural margins; epipleural fold distinct, absent near apex. Legs with trochanters normal, femora arcuate, tibiae slender, tarsi with third segments strongly bilobed, claws simple, empodia absent.

Abdomen with five visible sternites, apex of sixth also visible sometimes.

Type of the genus: *P. crowsoni*, new species.

Key to the species of *Palaeoasemum*

Scutellum pointed at apex; hind tarsus with third segment nearly as long as fourth segment; larger species *P. crowsoni*, new species
 Scutellum rounded at apex; hind tarsus with third segment distinctly smaller than fourth segment; smaller species *P. duffyi*, new species

(1) *Palaeoasemum crowsoni*, new species

(Figs. 1–3)

Holotype. In. 18796, collector's no. XIII B 683, Dr. R. Klebs (no. 533), in the Department of Palaeontology, British Museum (Natural History) London (originally from Museum STANTIEN and BECKER, no. 683).

Colour. Dark brown to fuscous; eyes light brown.

Vestiture. Pubescence sparse; fuscous to black; with generally distributed, short, decumbent hairs and longer, suberect to erect hairs especially around margins of pronotum, head and also on elytra.

Surface. Dull (probably throughout but portions of pronotum and elytra are damaged).

Thorax. Scutellum triangular, apex pointed.

Abdomen. Last visible sternite slightly pointed at apex. Pygidium (= last visible tergite) rounded at apex.

Measurements in mm. Total length 15. Maximum width 3.3. Head: width across eyes 2.58; minimum dorsal interocular distance 1.25; average diameter of a facet of eye 0.045. Antenna: total length 7.11; segments I–XI: 0.63, 0.33, 0.62, 0.65, 0.85, 0.73, 0.73, 0.63, 0.62, 0.57 and 0.75 respectively. Maxillary palp: total length ?; segments I–IV: ?, ? 0.15, 0.15 and 0.23 respectively. Pronotum: length 3.25; maximum width 3.13; width at apex 2.25, width at base 2. Elytron: length 9; maximum width 1.63. Front tarsal segments not distinctly visible. Middle tarsi missing. Hind tarsus: total length 1.62; segments I–V: 0.75, 0.31, 0.08, 0.08 and 0.40 respectively. Hind tibial spur 0.15.

Remarks. I have much pleasure in naming the species in honour of Dr. Roy A. Crowson. There are several specimens of small, smashed arachnids that look like mites trapped in the amber. They are visible near the head in a ventral view.

(2) *Palaeoasemum duffyi*, new species

(Figs. 4–8)

Holotype. No. 1461, in the Geologisches Museum, Hamburg, West-Germany.

Colour. Fuscous, eyes dark brown.

Vestiture. Pubescence sparse; fuscous to brown; with generally distributed, short, decumbent hairs and longer, suberect to erect hairs, latter especially distinct on elytra and around margins of pronotum (? and head — outline not clear in specimen).

Surface. Dull (compared with *P. crowsoni* brighter).

Thorax. Scutellum roughly triangular, apex rounded.

Abdomen. Apical segments not distinctly visible.

Measurements in mm. Total length 7. Maximum width 1.6. Head: width across eyes ? 1.26; minimum dorsal interocular distance ? 0.80; average diameter of a facet of eye 0.03. Antenna: total length ?; segments I—XI: ?, 0.18, 0.33, 0.30, 0.42, 0.36, 0.43, 0.36, 0.35, 0.29 and ? 0.28 respectively. Maxillary palpi not visible. Pronotum: length 1.80; maximum width ? 1.62; width at apex ?; width at base ?. Elytron: length 4.4; maximum width 1.08. Front tarsi not distinctly visible. Middle tarsus: total length 0.77; segments I—V: 0.27, 0.14, 0.03, 0.06, and 0.27 respectively. Hind tarsus: total length 0.91; segments I—V: 0.32, 0.15, 0.04, 0.07 and 0.33 respectively. Hind tibial spur 0.07.

Paratypes. No. 546, in the Geologisches Museum, Hamburg, West Germany. This specimen is visible in a side view only and is nearly black in colour. Portions of prothorax and elytra seem to have been cut off during polishing. Total length 10.5 mm.

No. 1556, in the Geologisches Museum, Hamburg, West Germany. This specimen is scarcely visible due to a milky coating over it. Total length 8.5 mm.

Remarks. I have much pleasure in naming the species in honour of Mr. E. A. J. DUFFY.

Nothorrihina granulicollis ZANG, 1905 appears to be better placed in my *Palaeoasenum* than in *Nothorrihina* REDT. but I have not examined the type. From the description the species appears to be near *P. duffyi* but differs from the latter in having the eleventh antennal segment acuminate, 'viel länger als das vorletzte und nur wenig kürzer als das fünfte' (Zang, 1905) and in the total body length of 11.8 mm. From Dr. ZANGS fig. 2, *N. granulicollis* further seems to differ from the species described here in the shape of the pronotum, which is more rectangular and parallel-sided than either in *P. crowsoni* or in *P. duffyi*.

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Summary

A new genus and two new species of the longhorn beetles are described from Baltic amber material in the Geologisches Museum in Hamburg and British Museum (Natural History). It is noted that the new genus is in some respects closer to *Nothorrihina* than to other genera of the Asemini and particularly to *N. gardneri* from India. It is sug-

gested that *N. granulicollis* Zang described from the amber probably belongs to *Palaeoasemum* ABDULLAH. Characters distinguishing *N. granulicollis* from *P. crowsoni* ABDULLAH and *P. duffyi* ABDULLAH are mentioned.

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Anschrift des Verfassers:

Dr. MOHAMMAD ABDULLAH
Senior Research Officer in Entomology
Pakistan Council of Scientific &
Industrial Research
Central Labs.
Karachi 32
W. Pakistan



Tafel I: Figs. 1-3. *Paltocosemum erouseni*, gen. et sp. nov., holotype: 1: Dorsal view; 2: ventral view; 3: lateral view. (University of Reading photographs)



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Tafel II: Figs. 4-8. *Palaeosomum duffy*, gen. et sp. nov.: 4: Dorsal view, holotype; 5: ventral view, holotype; 6: lateral view, paratype (no. 546); 7: dorso-lateral view, paratype (no. 1556); 8: ventro-lateral view, paratype (no. 1556). (University of Reading photographs)