

THE SCARABAEIDAE, COLEOPTERA OF PAKISTAN

Part IV.—Adoretini (Rutelinae) with Descriptions of Eight New Species of Adoretus from West Pakistan

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Keys (with distinguishing characters) are presented for the identification of the genera and species of the Adoretini found or likely to be discovered in East and West Pakistan. Information on their host plants is also included. New species of *Adoretus* Cast., 1840 described from West Pakistan in the collection of the University of Karachi, Tandojam Agricultural College and West Pakistan Agricultural University at Lyallpur are: *A. tufaili* Abdullah sp. n., *A. atiqi* Abdullah sp. n., *A. saleemi* Abdullah sp. n., *A. fatehi* Abdullah sp. n., *A. ismaili* Abdullah sp. n., *A. baquari* Abdullah sp. n., *A. iftikhari* Abdullah sp. n., and *A. naeemi* Abdullah sp. n.

This is the fourth of a series of papers describing the scarab beetles of our part of the world. Beetles of the tribe Adoretini are generally small in size, dull in appearance and nocturnal in habit. They are frequently attracted to light inside houses. This tribe is peculiar to the Old World where it is confined to tropical and subtropical regions.

The Adoretini are known to destroy the foliage of trees and shrubs. For example, *Adoretus lobiceps* Arrow, 1917 has been collected from rose-trees; *A. bicaudatus* Arrow, 1914 upon the bark of a mango tree; *A. sinicus* larvae upon the roots of sugar-cane; *A. lacustris* Arrow, 1917 larvae upon the roots of *Acanthus ilicifolius* and adults upon the leaves of *Avicenna* sp.; *A. boops* (Wied., 1821) Burm., 1844 upon 'ber' or *Zizyphus jujuba*; *A. fraterculus* Arrow, 1917 upon the bark of a sal tree or *Shorea robusta*; *A. gemmifer* Arrow, 1917 from sundri trees or *Heritiera littoralis*; *A. bimarginatus* Ohaus, 1914 at the roots of 'motha' or *Cyperus* sp. and 'gular' tree or *Ficus glomerata*; *A. horticola* Arrow, 1917 upon the leaves of vine, fig, apple, pear and plum at night; *A. lasiopygus* Burm., 1855 upon the leaves of grape-vine, mango, wild nettles, sugar-cane, *Phaseolus radiatus*, etc.; *A. versutus* Harold, 1869 upon rose-leaves, 'Cannas', *Lagerstraemia* sp., cacao, vines, indigo, oat-roots, apple seedlings, 'loquat' tree, etc.; and our *A. naeemi* Abdullah sp. n. on banana leaves and 'Berseem'.

Adoretini (Rutelinae)

The distinguishing feature of this tribe is the labrum which is produced downwards.

(a) A Key to the Genera and Species of West Pakistan

1. Labrum without a median process, broad, vertical; clypeus broad, consisting of four lobes

*Senior author's paper number 78 on Coleoptera.

Phaeadoretus Reitter, 1903

leaden black in colour, with the antennae and legs deep red, and clothed, not very closely, with short whitish setae, those upon the elytra arranged in longitudinal lines

P. comptus (Ménétr., 1849) Arrow, 1917.

Labrum with a median process 2

2. Labrum rounded at the apex, not serrate at the sides *Lissadoretus* Arrow, 1917 pale yellow, with the tarsi and the extreme edges of the head, pronotum and elytra brown

L. pallidus Arrow, 1917

Labrum usually truncate at the apex, serrate at the sides 3

3. Maxillary palp clubbed; hind tibia very short and broad at the apex

Pseudadoretus Semenov, 1890

very pale semitransparent testaceous yellow, with the eyes and mouth-parts alone dark, the body smooth and shining, the head and pronotum clothed with minute and inconspicuous erect setae *P. dilutellus* Semenov, 1890

Maxillary palp filiform; hind tibia not much diluted at the apex

Adoretus Castelnau, 1840 4

4. Clypeus with several lobes in front; elytral setae in longitudinal lines; leaden-black in colour with the legs and ventral surface tinged with red *A. serisetosus* Arrow, 1917

Clypeus not lobed in front 5

5. Outer margin of the front tibia serrated in its basal part 6

Outer margin of the front tibia not serrated basally 7

6. Pale yellow, with the head, the extremities of the tibiae and the tarsi dark red

A. flavus Arrow, 1917

Dark brown, with the antennae, femora and tibiae generally a little paler

A. costopilosus Ohaus, 1914

7. Yellow species 8

Brown to black species 10

8. Elytral epipleurae wide, running from shoulders almost to the extremities; bright yellow

A. bimarginatus Ohaus, 1914

Elytral epipleurae narrow, not running to elytral apices 9

9. Elongate-oval in shape

A. simplex Sharp, 1878

Elongate, not oval

A. baquari Abdullah **sp. n.**

10. Abdomen with a continuous carina coinciding with the outer margins of the elytra

A. iftikhari Abdullah **sp. n.**

Abdomen without a carina 11

11. Elytra black or brown 12

Elytra reddish brown or chestnut 17

12. Elytra light brown; labral process rounded at apex; clypeus at base convex in middle and concave at sides

A. naemi Abdullah **sp. n.**

Elytra dark brown to black 13

13. Clypeus nearly straight or rounded at base (Fig. 1) 14

Clypeus at base convex in middle and concave at sides (Fig. 4) 15

14. Lateral lobes of the aedeagus fused throughout (Fig. 3)

A. tufaili Abdullah **sp. n.**

Lateral lobes of the aedeagus separate apically

A. saleemi Abdullah **sp. n.**

15. Lateral lobes of the aedeagus deeply emarginate at apex (Fig. 6)

A. atiqi Abdullah **sp. n.**

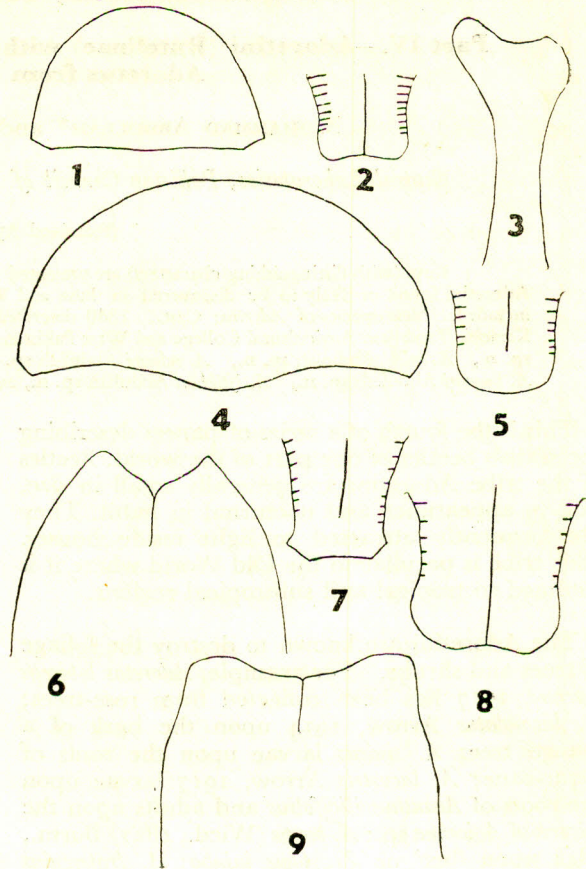


Fig. 1-9.—*Adoretus tufaili* Abdullah **sp. n.**; holotype, male: 1, clypeus; 2, median labral process, 3, apex of the aedeagus.

Adoretus atiqi Abdullah **sp. n.**; holotype, male: 4, clypeus; 5, median labral process; 6, apex of the aedeagus.

Adoretus saleemi Abdullah **sp. n.** holotype, male: 7, median labral process.

Adoretus fatehi Abdullah **sp. n.**; holotype male: 8, median labral process; 9, apex of the aedeagus.

Lateral lobes of the aedeagus only weakly emarginate at apex (Fig. 9) 16

16. Broader species (width 6-7 mm); apex of labral process rounded

A. ismaili Abdullah **sp. n.**

Narrower species (width 5 mm); apex of labral process typically slightly emarginate

A. fatehi Abdullah **sp. n.**

17. Dorsal surface shining, very thinly sprinkled with minute setae 18

Dorsal surface dull, densely pubescent 19

18. Clypeus very small, eyes very prominent
A. lithobius Ohaus, 1914
P. rugipennis Ohaus, 1912
- Clypeus and eyes moderate
A. ladakanus Ohaus, 1914
Pronotum densely punctate (male) or moderately punctate (female)
P. frontatus (Burm., 1855) Arrow, 1917
19. Dorsal surface uniformly dark 20
Dorsal surface not uniformly dark 21
4. Labrum short, triangular in front, not serrate at sides; median labral process not very long but acute
Rhamphadoretus Ohaus, 1912
testaceous yellow, with the forehead, the pronotum (except the sides), scutellum, sutural edges of the elytra, and the tarsi brown or reddish
R. suillus Arrow, 1917
20. Shorter hind claw more than half as long as the longer one; lateral lobes of the aedeagus narrowly, deeply emarginate at the apex
A. horticola Arrow, 1917
Shorter hind claw less than half as long as the longer one; lateral lobes of the aedeagus broadly, weakly emarginate at the apex
A. punjabensis Arrow, 1917
5. Labrum vertical, produced in middle as a long incurved rostrum, truncate or rounded at end, and finely serrate on each side; maxillary palp filiform
Adoretus Cast., 1840 5
21. Pronotum rather coarsely punctate, less closely punctate in the middle than at the sides; aedeagus with the lateral lobes unequal
A. versutus Harold, 1869.
6. Clypeus not lobed 6
- Pronotum finely punctate and finely granulate
A. caliginosus Burm., 1844
7. Antenna 9-segmented 7
- Not incorporated in the above key are two species which may extend to West Pakistan:
Antenna 10-segmented 8
- Adoretus afghanus* Matchatschke, Beitr. Ent., 8, 178 (1958) (Afghanistan).
7. Dark, not striped; closely hairy
A. minutus Brens., 1893
- Adoretus nigrifrons iranicus* Petrovitz, Stuttgart Beit. Naturk., 8, 7 (1958) (Baluchistan).
Pale, with dark stripes, very thinly setose
A. limbatus Blanch., 1851
- (b) **A Key to the Genera and Species Found or Likely to be Discovered in East Pakistan** (Arrow, 1917)
1. Labrum without a median process; clypeus narrow consisting of two lobes
Schizadoretus Arrow, 1917
pale ferruginous red, with the head (except the clypeus) black and the femora pale
S. rufescens Arrow, 1917
8. Elytra having small alternating patches of more densely and more sparsely aggregated setae 9
- Labrum with a median process 2
Elytra without denser aggregation of setae 11
2. Process of the labrum free, not bisecting the mouth
Pachyrrhinadoretus Ohaus, 1912 3
9. Apical calli of the elytra tufted 10
- Process of the labrum not free, bisecting the mouth 4
Apical calli not tufted
A. birmanus Var. *flavescens* Arrow, 1914
3. Pronotum sparsely punctate (male) or scarcely punctate (female)
10. Pygidium with two very dense and prominent hair-tufts
A. bicaudatus Arrow, 1914
- Outer edge of the front tibia serrated in its basal part 12
Pygidium without paired hair-tufts
A. compressus Weber, 1801
- Outer edge of the front tibia not serrated in its basal part 19

12. Two upper teeth of the front tibia not divided by an acute notch 13
 Two upper teeth of the front tibia divided by an acute notch 18
13. Elytra without prominent tufted apical calli 14
 Apical calli of elytra prominent and tufted 15
14. Clypeus small; lateral lobes of the aedeagus diverging at apex
A. lacustris Arrow, 1917
 Clypeus large; lateral lobes of the aedeagus converging at apex
A. flavus Arrow, 1917
15. Clypeus very broad; tawny yellow
A. boops (Wied., 1821) Burm., 1844
 Clypeus not very broad 16
16. Upper surface rather thinly clothed with minute setae 17
 Upper surface clothed with close-lying setae
A. fraterculus Arrow, 1917
17. Large species; without prominent costae upon the elytra
A. gemmifer Arrow, 1917
 Small species; with prominent elytral costae
A. costopilosus Ohaus, 1914
18. Clothing of the upper surface not very sparse; longer claw of front and middle feet cleft
A. serratipes Arrow, 1914
 Clothing of the upper surface very sparse; all the claws simple
A. nasalis Arrow, 1917
19. Abdomen with a continuous carina coinciding with the outer margins of the elytra 20
 Abdomen without a continuous carina coinciding with the outer edges of the elytra 22
20. Elytra with wide opaque epipleurae; front angles of the pronotum not produced
A. renardi Brenske, 1893
 Elytra without wide opaque epipleurae 17
21. Elytral epipleurae moderately wide but, not opaque
A. bimarginatus Ohaus, 1914
 Elytra without continuous epipleurae; convex; margin pale
A. affinis Arrow, 1917
22. Upper surface shining, very thinly sprinkled with minute setae; puncture of the pronotum very coarse
A. nitidus Arrow, 1914
 Closely clothed and not shining above 23
23. Colour uniform above (rather dark) 24
 Upper surface not uniformly dark coloured 27
24. Clothing of the elytra interspersed with a few long erect hairs 25
 Elytra without long erect hairs inter-spersed, elytral clothing not dense; apical calli bearing minute white tufts
A. duvauceli Blanch., 1951
25. Pygidium clothed with long hair 26
 Pygidium clothed with moderately short hair
A. furcifer Ohaus, 1914
26. Femora and tibiae dark
A. lasius Ohaus, 1914
 Femora and tibiae pale
A. posticalis Arrow, 1917
27. Bright yellow, with head red; more cylindrical
A. bicolor Brenske, 1893
 Not bright yellow 28
28. Pronotum rather coarsely punctate 29
 Pronotum finely punctate 30
29. Pronotum less closely punctate at the sides than in the middle
A. lasiopygus Burm., 1855
 Pronotum less closely punctate in the middle than at the sides
A. versutus Harold, 1869
30. Upper surface not opaque; puncture of the pronotum separate, small and regular
A. bengalensis Brenske, 1893
 Upper surface opaque, sculpture extremely fine and dense; pronotum finely granulated
A. caliginosus Burm., 1844

(c) **Genus Adoretus** Castelnau, 1840

The Pakistani species of this genus could be identified with the help of the two keys given above. The aedeagi of the male are usually distinct in the species of which males are known and this makes the identification of males easier. In some cases, the female could not be certainly identified unless associated with a male.

Only the species described as new from West Pakistan are treated below. For a description of the older species, the student is referred to Arrow (1917).

(1) *Adoretus tufaili* Abdullah, **new species**

(Figs. 1-3)

Holotype.—Male, West Pakistan, no locality data (probably Karachi), at the University of Karachi.

In Arrow (1917:300) the type keys to couplet 85-96 where it differs from *A. nitidus* Arrow, 1915 in the shape of the aedeagus (*Op. cit.*: pl. V, Fig. 26); from *A. pallens* Blanch., 1851 in not being yellow, distribution etc.; from *A. ovalis* Blanch., 1851 in the shape of the aedeagus (*Op. cit.*: pl. V, Fig. 28); from *A. andrewesi* Ohaus, 1914 in not being red brown and in not having dense punctures on pronotum; from *A. plebejus* Arrow, 1917 (*Op. cit.*: pl. V, Fig. 48) in the shape of the aedeagus; from *A. duvauceli* Blanch., 1851 in the shape of the aedeagus (*Op. cit.*: pl. V, Fig. 43); and from *A. mus* Arrow, 1914 and *A. distinguendus* Arrow, 1914 in the shape of the aedeagus (*Op. cit.*: pl. V, Figs. 35, 38 and 39).

Colour.—Dark brown to fuscous; eyes, apices of labrum and mandibles black.

Vestiture.—Sparse, white. Meso- and metatibiae with two rows of ctinidia.

Shape.—Elongated, parallel-sided.

Punctures.—Coarse, sparse, not arranged in longitudinal rows on elytra.

Head.—Epistomal suture nearly straight. Clypeus at base not appreciably wavy (Fig. 1). Median labral process weakly emarginate at apex, with a dorsal ridge running up to apex, and with sides distinctly serrate (Fig. 2).

Thorax.—Outer edge of front tibia not serrate basally. Teeth of front tibia not divided. Longer claw of front and middle legs cleft; shorter claw of hind leg nearly half as long as the other.

Abdomen.—Not carinated on sides. Aedeagus with the lateral lobes fused, long, slightly emarginate at apex; right lobe slightly shorter than left lobe (Fig. 3).

Length, 10 mm; *breadth*, 4.5 mm.

The female is not known.

It is a pleasure to name this species in honour of Dr. S.M. Tufail of the University of Karachi.

(2) *Adoretus atiqi* Abdullah, **new species**

(Figs. 4-6)

Holotype.—Male, West Pakistan, no locality data (probably Karachi), at the University of Karachi.

In Arrow (1917:300) the type keys to couplet 87 where it differs from *A. nitidus* Arrow, 1914 in the shape of the aedeagus (*Op. cit.*: pl. V, Fig. 26) and from *A. pallens* Blanch., 1851 in not being yellow, distribution etc.

Colour.—Fuscous to black, eyes yellow.

Vestiture.—Sparse, white. Mesotibia with three and metatibia with two rows of ctinidia.

Shape.—Elongated, parallel-sided.

Punctures.—Coarse, sparse (dense on head), with indications of longitudinal rows on elytra.

Head.—Epistomal suture wavy. Clypeus at base convex in middle and concave at sides (Fig. 4). Median labral process rounded at apex; dorsal ridge not running up to apex; serration on sides less prominent than in *A. tufaili* (Fig. 5).

Thorax.—Outer edge of front tibia not serrate basally. Teeth of front tibia not divided. Longer claw of front and middle legs not cleft; shorter claw of hind leg more than half longer than the other.

Abdomen.—Not carinated on sides. Aedeagus with the lateral lobes fused, deeply notched at apex (Fig. 6).

Length.—12 mm; *breadth*, 5.5 mm.

The female is not known.

It is a pleasure to name this species in honour of Mr. Atiq Bux Qadri of this department.

(3) *Adoretus saleemi* Abdullah, **new species**

(Fig. 7)

Holotype.—Male, West Pakistan, no locality data (probably Karachi), at the University of Karachi.

In Arrow (1917:300) the type keys out to *A. nitidus* Arrow, 1914 but differs in the shape of the aedeagus (*Op. cit.*: pl. V, Fig. 26) and colour, etc.

Colour.—Fuscous to black, femorae and tibiae reddish.

Vestiture.—Sparse, white. Meso- and metatibia with two rows of ctinidia, former with indication of a third one.

Shape.—Elongated, moderately broad.

Punctures.—Coarse, sparse, not arranged in longitudinal rows on elytra.

Head.—Epistomal suture nearly straight. Clypeus at base not appreciably wavy, as in Fig. 1. Median labral process truncate at apex; dorsal ridge not running up to apex; serration on sides weak, as in *A. atiqi* (Fig. 7).

Thorax.—Outer edge of front tibia not serrate basally. Teeth of front tibia not divided. Longer claw of front and middle legs cleft; shorter claw of hind leg more than half longer than the other.

Abdomen.—Not carinated on sides. Aedeagus with the lateral lobes long, pointed, unequal, as in Arrow, 1917, pl. V, Fig. 42.

Length.—11 mm; *breadth*, 5.5 mm.

The female is not known.

In the shape of the aedeagus, this species resembles *A. versutus* Harold, 1869 but differs in not being reddish chestnut, etc.

It is a pleasure to name this species in honour of Mr. Mohammad Saleem of this department.

(4) *Adoretus fatehi* Abdullah, **new species**

(Figs. 8 and 9)

Holotype.—Male, West Pakistan, no locality data (probably Karachi), at the University of Karachi.

In Arrow (1917:300) the type keys to couplet 85-96 where it differs from both *A. nitidus* Arrow,

1914 and *A. pallens* Blanch., 1851 in not being yellow and from the former in the shape of aedeagus also (*op. cit.*: pl. v, fig. 26); from *A. ovalis* Blanch., 1851 in the shape of the aedeagus (*op. cit.*: pl. V, Fig. 28); from *A. cribratus* White, 1844 in the shape of the aedeagus (*op. cit.*: pl. V, Fig. 32); and from *A. furcifer* Ohaus, 1914 in the colour of the pubescence, etc.

Colour.—Fuscous to black.

Vestiture.—Sparse but moderately dense on sides of pronotum and elytral apices; white. Meso- and metatibiae with three rows of ctinidia.

Shape.—Elongated, moderately broad.

Punctures.—Coarse, dense on head and pronotum, not arranged in longitudinal rows on elytra.

Head.—Epistomal suture wavy. Clypeus at base convex in middle and concave at sides, as in Fig. 4. Median labral process slightly emarginate at apex; dorsal ridge almost running up to apex; serrations on sides weak (Fig. 8).

Thorax.—Outer edge of front tibia not serrate basally. Teeth of front tibia not divided. Longer claw of front and middle legs cleft; shorter claw of hind leg less than half longer than the other.

Abdomen.—Not carinated on sides. Aedeagus with the lateral lobes fused, weakly emarginate at apex (Fig. 9).

Length.—11 mm; *breadth*, 5.5 mm.

Paratype.—Male, West Pakistan, no locality data (probably Karachi), at the University of Karachi. Resembles the holotype in the shape of the aedeagus, etc., but differs in that the elytra are dark brown (not fuscous) and the median labral process is rounded at apex with the dorsal ridge not running up to apex, as in Fig. 5. It is possible that the above differences may be due to specific distinction. In fact, this is what we suspect. However, until we have some information about the habits, food-plants, female sex, immature stages, etc., it is thought best not to describe the paratype using a different specific name than the holotype.

The shape of the aedeagus (Fig. 9) prompts comparison with *A. punjabensis* Arrow, 1917 (pl. IV, Figs. 35 and 36) but in this species, unlike *A. punjabensis*, the lateral lobes are not constricted towards base.

It is a pleasure to name the species in honour of Mr. Fateh Khan of this department.

(5) *Adoretus ismaili* Abdullah, **new species**

Holotype.—Male, West Pakistan, no locality data (probably Karachi), at the University of Karachi.

In Arrow (1917:300) the type keys to couplet 100 where it differs from *A. ovalis* Blanch., 1851 in the shape of the aedeagus (*Op. cit.*: pl. V, Fig. 28); from *A. andrewesi* Ohaus, 1914 in not being deep red-brown; from *A. plebejus* Arrow, 1917 (pl. V, Fig. 48) in the shape of the aedeagus; and from *A. duvauceli* Blanch., 1851 in the shape of the aedeagus (*Op. cit.*: pl. V, Fig. 43).

Colour.—Dark brown to fuscous (brownish-black).

Vestiture.—Sparse but moderately dense on sides of vertex and pronotum; white. Meso- and metatibiae with two rows of ctinidia and with indications of two more rows.

Shape.—Elongated, oval.

Punctures.—Coarse, dense on head and pronotum, not arranged in longitudinal rows on elytra.

Head.—Epistomal suture wavy. Clypeus at base convex in middle and concave at sides, as in Fig. 4. Median labral process rounded at apex; dorsal ridge not running upto apex; serration on sides weak; as in Fig. 5.

Thorax.—Outer edge of front tibia not serrate basally. Teeth of front tibia not divided. Longer claw of front and middle legs cleft; shorter claw of hind leg less than half longer than the other.

Abdomen.—Not carinated on sides. Aedeagus with the lateral lobes fused, weakly emarginate at apex, as in Fig. 9.

Length.—11.5 mm; *breadth*, 6 mm.

Paratype 1.—Male, West Pakistan, no locality data (probably Karachi), at the University of Karachi. Similar to the holotype but slightly more pubescent.

Paratypes 2.—Females, one from Nazimabad, Karachi and other from Thatta, Sind both at the University of Karachi. In the paratype from Thatta, the shorter claw of hind leg is nearly half as long as the other one. It is possible that this represents a distinct species but we do not propose so until we have examined the aedeagus of a similar male.

Length varies from 11 to 12 mm, and breadth from 6 to 7 mm.

The shape of the aedeagus prompts comparison with *A. fatehi* and *A. punjabensis* Arrow, 1917 (pl. IV, Figs. 35 and 36). Unlike the latter the tegmen is not constricted in the middle and *A. fatehi* is narrower in shape than this species.

It is a pleasure to name this species in honour of Mr. Mohammad Ismail of this department.

(6) *Adoretus baquari* Abdullah, **new species**

Holotype.—West Pakistan, Tandojam, 4.4. 1967 (M. Moin Khan), on light, at the Tandojam Agriculture College.

In Arrow (1917: 298) the type keys to couplet 13-20, where it differs from *A. leo* Arrow, 1911 in colour, vestiture and distribution; from *A. flavus* Arrow, 1917 in shape, not being elongate-oval; from *A. serratipes* Arrow, 1914 in colour and distribution; and from *A. testaceus* (Hope, 1831) Arrow, 1917 and *A. nasalis* Arrow, 1917 in that the setae are not grey but white, distribution, etc.

Colour.—Pale testaceous; head brown above with eyes black.

Vestiture.—Sparse, white. Meso- and metatibiae with two rows of ctinidia.

Shape.—Elongated, parallel-sided.

Punctures.—Coarse (fine on elytra), sparse, not arranged in longitudinal rows on elytra.

Head.—Epistomal suture nearly straight. Clypeus rounded at base, being only slightly concave in middle. Median labral process rounded at apex; without a dorsal ridge; serrations on sides well-developed. Labrum spinose (different in this character from other species described in this paper).

Thorax.—Outer edge of front tibia not serrate basally. Teeth of front tibia not divided. Longer claw of front and middle legs cleft; shorter claw of hind leg much more than half longer than the other.

Abdomen.—Missing, consequently sex not identified.

Length.—10.5 mm; *breadth*, 4.5 mm.

It is a pleasure to name this species in honour of Dr. S. Baquar of this department.

(7) *Adoretus iftikhari* Abdullah, **new species**

Holotype.—Female, West Pakistan, Lyallpur, 31-8-50, at the West Pakistan Agricultural University at Lyallpur.

In Arrow (1917:300) the type keys out to *A. incurvatus* Ohaus, 1914 but differs in colour, punctuation, etc.

Colour.—Dark brown with head fuscous.

Vestiture.—Sparse, white. Mesotibia with three rows and metatibia with two rows of ctinidia.

Shape.—Elongated, parallel-sided.

Punctures.—Coarse, sparse (but dense on head), not arranged in longitudinal rows on elytra.

Head.—Epistomal suture nearly straight. Clypeus rounded at base. Median labral process rounded and slightly swollen at apex; without a dorsal ridge; serration on sides very weak, only clear at sides of labrum before the process (different in this character from other species described in this paper).

Thorax.—Outer edge of front tibia not serrate basally. Teeth of front tibia not divided. Longer claw of front and middle legs cleft; hind legs missing.

Abdomen.—Carinated on sides (differs from all the other species described in this paper in this character).

Length.—11 mm; *breadth*, 5 mm.

The male is not known.

It is a pleasure to name this species in honour of Dr. S. Iftikhar Ahmed of this department.

(8) *Adoretus naeemi* Abdullah, **new species**

Holotype.—Female, West Pakistan, Lyallpur (M. Shafi), on banana leaves, 12-2-57, at the West Pakistan Agricultural University.

In Arrow (1917:300) the type keys to couplet 91 where it differs from both *A. lithobius* Ohaus, 1914 and *A. ladakanus* Ohaus, 1914 in not being reddish, in the shape of the clypeus, etc.

Colour.—Light brown with clypeus dark, eyes, frons and vertex black.

Vestiture.—Very sparse, white. Meso- and metatibiae with two rows of ctinidia.

Shape.—Elongate, moderately broad.

Punctures.—Coarse, sparse (slightly dense on head), not arranged in longitudinal rows on elytra.

Head.—Epistomal suture wavy. Clypeus at base convex in middle and concave at sides, as in Fig. 4. Median labral process rounded at apex; dorsal ridge almost running upto apex; serrations on sides prominent.

Thorax.—Outer edge of front tibia not serrate basally. Teeth of front tibia not divided. Front and middle claws missing. Shorter claw of hind leg more than half longer than the other.

Abdomen.—Not carinated on sides.

Length.—9 mm; *breadth*, 4.5 mm.

Paratype.—Female, West Pakistan, Lyallpur (M. Shafi), on 'Berseem', 2-6-56, at the West Pakistan Agricultural University. Similar to the holotype.

The male is not known.

It is a pleasure to name this species in honour of Dr. S. Naeem-ul-Hasan Naqvi of this department.

Reference

1. G.J. Arrow, *The Fauna of British India including Ceylon and Burma. (Coleoptera, Lamellicornia II: Rutelinae, Desmomyrinae and Euchirinae). XIII + 387 pp., pls. I-V, London (1917).*