

Orijinal araştırma (Original article)

Contributions to Agrypninae (Coleoptera: Elateridae) fauna of Pakistan with four new species and three new records

Pakistan Agrypninae faunasına (Coleoptera: Elateridae: Agrypninae)
dört yeni tür ve üç yeni kayıt ile katkılar

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Summary

In this study, four new species, which are *Adelocera baghensis* n. sp., *Agrypnus baghensis* n. sp., *Lanelater pirsuhawaensis* n. sp. and *L. pulandriensis* n. sp., were described and *Adelocera nitidus* (Candèze 1857), *Agrypnus crenicollis* (Ménétriés 1832) and *Lacon modestus* (Boisduval 1835) are new records for the fauna of Pakistan. Male genitalia of *Lacon modestus* is illustrated for the first time and determination key of the genus *Adelocera* Latreille 1829 was prepared and determination keys of the genera *Agrypnus* Eschscholtz 1829, and *Lanelater* Arnett 1952 of Pakistan were revised.

Key words: Agrypnini, new species, new records, determination keys, Pakistan.

Özet

Bu çalışmada, *Adelocera baghensis* n.sp., *Agrypnus baghensis* n. sp., *Lanelater pirsuhawaensis* n. sp. ve *L. pulandriensis* n. sp. olmak üzere dört yeni tür tanımlanmış, *Adelocera nitidus* (Candèze), *Agrypnus crenicollis* (Ménétriés 1832) ve *Lacon modestus* (Boisduval 1835) türleri Pakistan faunası için yeni kayıttır. *Lacon modestus* türünün erkek üreme organı ilk defa çizilmiş ve Pakistan *Adelocera* Latreille 1829 cinsinin tür teşhis anahtarı hazırlanmış, *Agrypnus* Eschscholtz 1829, and *Lanelater* Arnett 1952 cinslerinin tür teşhis anahtarları güncellenmiştir.

Anahtar sözcükler: Agrypnini, yeni türler, yeni kayıtlar, teşhis anahtarları, Pakistan.

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Introduction

The subfamily Agrypninae was given as one of the most ancient and primitive in the family Elateridae by Gurjeva (1969) and Dolin (1978) on the other hand, modern studies (Oba et al. 2007, Douglas 2011, Kundrata & Bocak 2011) do not support this supposition and they showed the subfamily Agrypninae as an inner clade of the phylogenetic trees of Elateridae. The most recent world reclassification of the subfamily Agrypninae was done by Von Hayek, (1973, 1979). Also, several authors (Della Beffa 1931; Vats 1986-1991; Vats & Chauhan 1992, 1993; Vats and Kashyap 1992a, 1992b, 1993, 1996; Platia 1988; Chakraborty & Chakraborty 2000) had studied on this subfamily from Indian region. Chakraborty & Chakraborty (2006) studied the Elateridae from West Bengal. Cate (2007) listed some species from Pakistan in the Elateridae section of Palaearctic Catalogue of Elateridae.

Different researchers recorded some species from different genera of Agrypninae from Pakistan (Table 1). Chaudhry et al. (1966) provided distributions of elaterid genera within Pakistan. Hashmi & Tashfeen (1992) listed Elateridae in their Coleoptera of Pakistan and also recorded several species.

Elateridae fauna of Pakistan is still described inadequately. Akhter et al. (2012a) recently contributed to the knowledge of Agrypninae of Pakistan. In that paper, thirty-two species, belonging to ten genera were listed, including eight new recorded species, the genus *Cryptalaus* Ôhira 1967 was recorded for the first time, two species *Crypalaus tamargrahensis* Akhter et al. 2012 and *Agrypnus dadarensis* Akhter et al. 2012 were described as new species and determination keys of the Pakistani species of the genera *Agrypnus* Eschscholtz 1829, *Lanelater* Arnett 1952, *Drasterius* Eschscholtz 1829 and *Heteroderes* Latreille 1834 were provided. This paper is a continuation of the exploration of Agrypninae fauna of Pakistan and four new species (*Adelocera baghensis* n. sp., *Agrypnus baghensis* n. sp., *Lanelater pirsuhawaensis* n. sp. and *L. pulandriensis* n. sp.) were described together with three new records for the subfamily Agrypninae from Pakistan based on newly collected material. New taxa were compared to its closely related species. All taxa and their distributions were listed according to the classification and convention of Cate (2007). This study makes contributions to the fauna of the subfamily Agrypninae fauna of Pakistan.

Table 1. List of Agrypninae species records of Pakistan.

Species	Literature
<i>Lacon makrani</i> (Candèze 1889)	Candèze (1889)
<i>Agrypnus ellipticus</i> (Candèze 1857)	Platia (1988)
<i>A. tibetanus</i> Reitter 1913	Platia (1988)
<i>A. cashmiriensis</i> (Della Beffa 1931)	Platia (1988)
<i>Lanelater bartoni</i> Fleutiaux 1902)	Akhter et al. (2006)
<i>L. bipunctatus</i> (Candèze 1857)	Akhter et al. (2006)
<i>L. punjabensis</i> Platia et al. 2006	Platia et al. (2006)
<i>Meristhus (Sulcimerus) afghanus</i> Platia & Gudenzi 2002	Akhter et al. (2012b)
<i>M. (S.) pakistanicus</i> Akhter et al. 2012	Akhter et al. (2012b)
<i>M. (S.) quadripunctatus</i> (Candèze 1857)	Akhter et al. (2012b)

Materials and Methods

The measurements and illustrations were made by using an ocular grid in a dissecting microscope. Body length was measured along the midline from the anterior margin of the frons to the apex of the elytra; the width was measured across the widest part of the beetle. The pronotal length was measured along the longest part; the width at the broadest part which is most usually at the hind angles.

In order to study male genitalia, the abdomen was excised at the base and boiled in 10 % KOH solution for about 10 minutes and subsequently washed in tap water. The aedeagus was dissected out and examined in glycerin. After that the body parts of the specimen fixed using water soluble transparent glue on the pin-tag strip and aedeagus was pinned with the specimen. The holotypes of the new species are deposited in Institut Royal Des Sciences Naturelles de Belgique, Bruxelles (IRSNB), while the paratypes are preserved in Natural History Museum, University of Karachi, Pakistan (NHMUK).

Abbreviations: The names of institutions, museums and private collections containing material studied are abbreviated as follows;

CAP: Akhter collection, Department of Zoology, University of Karachi, Pakistan.

NHMUK: Natural History Museum, University of Karachi, Pakistan.

IRSNB: Institut royal des sciences naturelles de Belgique, Bruxelles.

ZCP: Department of Zoology, Federal Urdu University of Arts, Science and Technology, Karachi, Pakistan.

Results

Seven species belonging to three genera were treated including four new species *Adelocera baghensis* n. sp., *Agrypnus baghensis* n. sp., *Lanelater pirsuhawaensis* n. sp. and *L. pulandriensis* n. sp. while *Adelocera nitidus* (Candèze), *Agrypnus crenicollis* (Ménétriés) and *Lacon modestus* (Boisduval) are the first records for Pakistan.

Genus *Adelocera* Latreille 1829

Key to the species of the genus *Adelocera* Latreille of Pakistan

1. Lateral sides of pronotum with flat area from proximal to apical *A. nitidus* Candèze
 1'. Lateral sides of pronotum without flat area from proximal to apical *A. baghensis* n. sp.

Adelocera nitidus (Candèze 1857)

Material examined: Kheybar Pakhton Khoa Province, lower dir, 8 males & 4 females (CAP); 2.vii.2011, leg Yaseen; Pishawar, 3 males (CAP); 10.vii.2011, leg. Ahmed, at light; Kashmir, Pulanderi, 1 male (NHMUK); 13.v.2009, leg. Ahmed, at light; Sindh Province, Tandojam, 1 male & 2 females (ZCP); 14.viii.2007, leg. Imran, at light. New record for Pakistan.

Distribution: Afghanistan, India, Pakistan (Cate 2007).

Adelocera baghensis n. sp. (Figs. 1, 2, 3, 4)

Type material: Holotype male, Kashmir, Bagh; 6.v.2008, leg Khan, at light (IRSNB) Paratype 1 male same data as Holotype (NHMUK).

Measurement: (Holotype) Length: 8 mm; width: 3.4 mm. (Paratype) Length 8.3 mm; width 3.5 mm.

Coloration: Holotype male (Fig. 1), body shiny, brown-black, with recumbent yellowish setae, red-brown at posterior angles of pronotum; first segment dark brown, with recumbent yellowish setae, remaining segments yellow-brown, with same color recumbent setae; tibiae piceous brown; claws ochraceous.

Head. Head including eyes smaller than anterior margin of pronotum, vertex deeply and broadly impressed, extends to frons, punctures coarse, deep, contiguous and confluent. Antennae (Fig. 3) not reaching at hind angles of pronotum, second segment cylindrical, longer than wide, third segment triangular slightly longer than wide, fourth segment subtrapezoidal, longer than wide, fifth to tenth segments triangular, as long as wide, last segment longer than penultimate, abruptly ellipsoidal.

Thorax. Pronotum (Fig. 2) wider than long, widest at posterior angles, pronotal disc very convex base of posterior angles rather flat, sides tapering strongly from anterior third to apex with anterior angles prolonged, acute, posteriad sinuate at mid length then subparallel nearly to apices of acuminate parallel posterior angles, an orange spot just above hind angles on either side, punctation coarse, punctures on the disc deep, with very short shiny intervals, gradually dense, contiguous and confluent at lateral extremities, propleural grooves deep to hold complete antennae, lateral margins without scales; scutellum shield-like, edged at base, flat coarsely punctate; elytra as wide as base of pronotum, convex, sides oval, widest at middle, striae deeply punctate, interstices flat, with barely fine punctures; prosternum compressed laterally and bicarinate longitudinally, metasternal grooves present, directed laterally, distal end very close to lateral margins of metasternum; prosternal spine bluntly pointed anteriorly, with coarse punctations; mesosternal cavity deep, narrow but distinct and rounded; metacoxal plate narrow, gradually broad and rounded, close to each other, very coarse and distinct punctations; tibiae elongate, cylindrical; claws simple with basal setae, distinctly oppose.

Male genital organ description (Fig. 4): Aedeagus with median lobe tapering to apex; median lobe triangular and slightly longer than parameres; parameres narrow, triangular, apically blade shaped, apex rounded; basal piece with two prominent projections.

Etymology: This species is named for the type locality.

Female: Unknown.

Diagnosis: *Adelocera baghensis* n. sp. is closely related to *Adelocera youngi* by the shape of head, pronotum and elytra, also presence of oval ochraceous spot at base of pronotum on either side but clearly separated by; third segment in *A. youngi* expanded mid-laterally while cylindrical in *Adelocera baghensis* n. sp., last segment ellipsoidal in *A. youngi* but abruptly ellipsoidal in *Adelocera baghensis* n. sp.; aedeagus with median lobe nearly acute apically in *A. youngi* while lobately produced in *Adelocera baghensis* n. sp.; parameres with apex transversely straight in *A. youngi* while rounded, narrow and elongated behind with apices in *Adelocera baghensis* n. sp.; basal plate without spines in *A. youngi* while basal plate with two prominent spines in *Adelocera baghensis* n. sp.

Genus *Agrypnus* Eschscholtz 1829

Key to the species of the genus *Agrypnus* Eschscholtz of Pakistan (modified from Akhter et.al 2012a)

1. Prothorax longer than wide	2
1'. Prothorax wider than long	8
2. Aedeagus with parameres lateral lobes near midlength (Fig. 7)	<i>A. baghensis</i> n. sp.
2'. Aedeagus with parameres without any out growth.....	3
3. Hypomerone and metasternum with grooves	4
3'. Hypomerone and metasternum without grooves	5
4. Propleurae with grooves for accommodating anterior tarsi	<i>A. dadarensis</i> Akhter et. al.
4'. Propleurae and metasternum with grooves for accommodating anterior and mid tarsi respectively, hind angles truncate	<i>A. piger</i> (Candèze)
5. Elytra crenulate laterally before middle.....	<i>A. crenicollis</i> (Ménétriés)
5'. Elytra not crenulate laterally before middle	6
6. Scutellum shield shaped	<i>A. himalyansis</i> (Jagemann)
6'. Scutellum pentagonal shaped	7
7. Scutellum impunctate, depressed medially	<i>A. cashmiriensis</i> (Della Beffa)
7'. Scutellum punctate, not depressed medially	<i>A. tibetanus</i> (Reitter)
8. Lateral margin of elytra entire without carina, apices of elytra weakly spinose	<i>A. ellipticus</i> (Candèze)
8'. Lateral margin of elytra crenulate with carina, apices of elytra rounded.....	<i>A. brachychaetus</i> (Kollar)

***Agrypnus baghensis* n. sp. (Figs. 5, 6, 7)**

Type material: Holotype male. Kashmir, Bagh; 6.v.2008, leg Khan, at light (IRSNB); 1 paratype male. Islamabad, Pirsuhawa; 10.iv.2011, leg Zubair, at light (NHMUK).

Measurement: (Holotype) Length 9.5 mm. width 3.00 mm. (Paratype) Length 10.00 mm. width 3.5 mm.

Coloration: Holotype male (Fig. 5), body, piceous brown with suberect yellow pubescence; segment 1-4 dark brown, remains light brown; tarsi and claws ochraceous.

Head. Head almost sub-triangular, with coarse and deep punctures, vestiture uniformly suberect, yellowish pubescence, sides slightly expanded laterally and covering eyes dorsally, anterior margin sinuate, frons depressed anteriorly; antennae (Fig. 6) exceeding just near the middle of pronotum, first segment long, broad, second segment small, broad, outer margin acute, third segment cylindrical, longer than broad, fourth broader than others, remaining segments serrate, last segment elongate, penultimate.

Thorax. Pronotum longer than wide, sides crenulated, rounded, sinuate before base, hind angles broadly truncated, disc with dense granular punctuations, covered with non-contiguous, dense, suberect yellow pubescence, anterior margins produced; scutellum less globose coarse punctuate with distinct, yellow, oval shaped pubescence; elytra with shoulders slightly broader than base of pronotum, sides parallel, broadened at middle, narrower towards apices, elytral margins distinct with coarse punctations, rows of pubescence along with elytral margins, interstices with dense and deep punctations; prosternal spine narrow, insect mesosternal cavity, with distinct punctations and yellow pubescences; mesosternal cavity narrow; metacoxal plate narrow and broad gradually, ventrally, an expanded triangle process near to broad margin, coarse punctation with dull yellow pubescences; tibiae narrow at base, than cylindrical up to apex, covered with dense grayish pubescences; claws piceous, far away.

Male genital organ description (Fig. 7): Aedeagus with median lobe broad, apex slightly narrowed and rounded, median lobe including basal struts longer than parameres, parameres with apex strongly decline posteriorly and forming a spine, lateral sides of parameres sinuate, struts of median lobe not emerged in the cavity of basal plate, basal plate broadly quadrangular, base straight.

Etymology: This species is named for the type locality.

Female: Unknown.

Diagnosis: *Agrypnus baghensis* n. sp. is most similar to *Agrypnus crenicollis* (Ménétriés 1832) with habitus, truncated hind angles of pronotum, sides crenulated, coarse and deep punctations on pronotum and elytra but distinguished them by second segment clearly wider in *A. crenicollis* while slightly wider in *Agrypnus baghensis* n. sp., the last segment narrow, elongate in *A. crenicollis* while slightly wider in *Agrypnus baghensis* n. sp., scutellum more globose in *A. crenicollis* while less globose in *Agrypnus baghensis* n. sp., aedeagus with parameres bear bud-like outgrowth in *Agrypnus baghensis* n. sp. which is unique character with in the genus.

Agrypnus crenicollis (Ménétriés 1832) (Figs. 8, 9)

Remarks: Prosvirov and Savitsky (2011) placed this species in the genus *Compsolacon* Reitter 1905 and discussed the status of *Compsolacon* as a separate genus on the bases of morphological, genital and as well as larval characters, however they studied limited number of specimens and did not placed appropriate taxonomic composition of *Agrypnus*, *Compsolacon* and other related genera.

Examined specimen: Kashmir, Pulanderi, 1 male; 17.vii.2007, leg Zubair, at light. (CAP).

World Distribution: Azerbaijan, Armenia, Bosnia-Erzegovina, Bulgaria, France, Georgia, Greece, Iran, Italy, Russia (Southern European territory), Serbia-Montenegro, Turkey and Ukraine (Cate 2007), New record for Pakistan.

Lacon modestus (Boisduval 1835) (Figs. 10, 11, 12)

Examined specimen: Kashmir, Bagh, 2 males; 6.v.2008, leg Khan, at light (CAP) (ZCP). New record for Pakistan.

World Distribution: India, Japan, Oman, Qatar, Saudi Arabia, Taiwan, Afrotropical, Australian region, Neotropical Region, Oriental Region and Pakistan (Cate 2007).

Key to the species of the genus *Lanelater* Arnett of Pakistan (modified from Akhter et. al 2012a)

1. Antennae reaching the middle of pronotum 2
 1'. Antennae reaching the apices of hind angle of pronotum 3
 2. Prescutelar tubercle punctured *L. bartoni* (Fleutiaux)
 2'. Prescutelar tubercle smooth and shiny *L. fuscipes* (Fabricius)
 3. Apical margin of parameres straight *L. punjabensis* Platia et al.
 3'. Apical margin of parameres truncate 4
 4. Pronotum with four depressions (Fig. 21) *L. pulandriensis* n. sp.
 4'. Pronotum without depressions 5
 5. Pronotum with distinct median line (Fig. 14), parameres longer than median lobe (Fig. 19)
 *L. pirsuhawaensis* n. sp.
 5'. Pronotum without distinct median line, parameres and median lobe equal in length
 *L. bipunctatus* (Candèze)

Lanelater pirsuhawaensis n. sp. (Figs. 13, 14, 15, 16)

Type material: Holotype male, Islamabad, Pirsuhawa; 10.iv.20011, leg. Zubair, at light (IRSNB).

Measurement: (Holotype) Length 21.00 mm; width 7.00 mm.

Coloration: Holotype male (Fig. 13), body entirely chest-nut brown, covered with short, dense and yellowish pubescence; prosternum almost black, legs and antennae ferruginous brown.

Head. Eyes convex; frons deeply impressed ahead of vertex; clypeus sinuate, coarsely punctate with long recumbent pubescence, anterior barely separated between eyes and apical margin of pronotum; antennae (Fig. 15) reaching the apices of hind angles of pronotum, second segment slightly shorter than third segment, globose, third segment cylindrical, elongate, third to tenth segments subquadrangular, third to fifth segment equal in width, sixth segment shorter than fifth, last segment longer than penultimate, ellipsoidal and regularly constricted at apical third.

Thorax. Pronotum slightly wider than long, with a distinct median line (Fig. 14), without depressions, conspicuously convex on disc, sides slightly arcuate, sinuate before base with a trace of short and median longitudinal carina, prescutellar tubercle moderate, subquadrate with punctate and shiny surface, apical margin acute with pointed apex, sides slightly arcuate, straight before posterior angles, the latter feebly diverging with tips truncate, carina running subparallel to lateral margins prolonged near middle, coarsely punctured, deep and slightly umbilicate on disc, short at surrounding of disc, dense and coarse punctured with dense recumbent pubescence at sides; scutellum subrectangular, flat to gently convex, slightly produced at apex with a depression, punctured; elytra 2.5 times longer than pronotum, widest at middle gradually narrowing toward apex, the latter with a very short spine, striae shallowly punctured on all the surface, interstriae flat with very fine punctures; subcoxal furrow regularly curved behind mesocoxae; sutures deeply furrowed as long as prosternum; prosternal spine broadly triangular with dense and coarse punctations; metacoxal plate narrow, elongated, broad before apex, covered with dense long, white pubescence.

Male genital organ description (Fig. 16): Aedeagus with median lobe very shorter than parameres, much narrower up to 1/3, base evidently swell up to middle; parameres laterally flattened, sides angulate apices rounded with slightly oblique; median struts slightly emerge in the cavity of basal plate; basal plate broad, basal margin straight.

Etymology: This species is named for the type locality.

Female: Unknown

Diagnosis: The new species is close to *Lanelater bipunctatus* (Candèze, 1857) in the body shape and coloration. These species can be easily separated by clypeus sinuate in *L. pirsuhawaensis* n. sp. while straight in *L. bipunctatus*, second segment slightly shorter than third segment in *L. pirsuhawaensis* n. sp. while second segment 1.5 times shorter than third segment (fig. 17) in *L. bipunctatus*, pronotum with a distinct median line in *L. pirsuhawaensis* n. sp. but absent in *L. bipunctatus*, lateral carina reaching up to middle in *L. pirsuhawaensis* n. sp. but shorter in *L. bipunctatus*, hind angles more acuminate in *L. pirsuhawaensis* n. sp. rather than *L. bipunctatus* and scutellum slightly produced at apex with a depression in *L. pirsuhawaensis* n. sp. while smooth squared shaped in *L. bipunctatus*.

Lanelater pulandriensis n. sp. (Figs. 18, 19, 20, 21)

Type material: Holotype male, Kashmir, Pulanderi, 17.vi.2009, leg. Zubair, at light (IRSNB); 1 paratype male; same data as holotype (CAP)

Measurement: (Holotype) Length 28.00 mm; width 8.00 mm.

Coloration: Holotype male (Fig. 18), entirely black, covered with dense yellow and slightly brown mixed pubescence, eyes dark brown, legs and antennae dull black; prosternum dull black.

Head. Head medium sized; eyes convex; frons slightly impressed ahead to vertex, clypeus transverse, broadly triangular produced anteriorly, contiguous and coarsely punctate, covered with rust to yellow dense pubescence; antennae (Fig. 20) reaching the apices of hind angles of pronotum, second segment globose, third segment longer than second segment, broad, triangular, fourth to tenth segments subquadrangulate, with dull surface, last segment longer than penultimate, narrow and ellipsoidal regularly constricted at apical third.

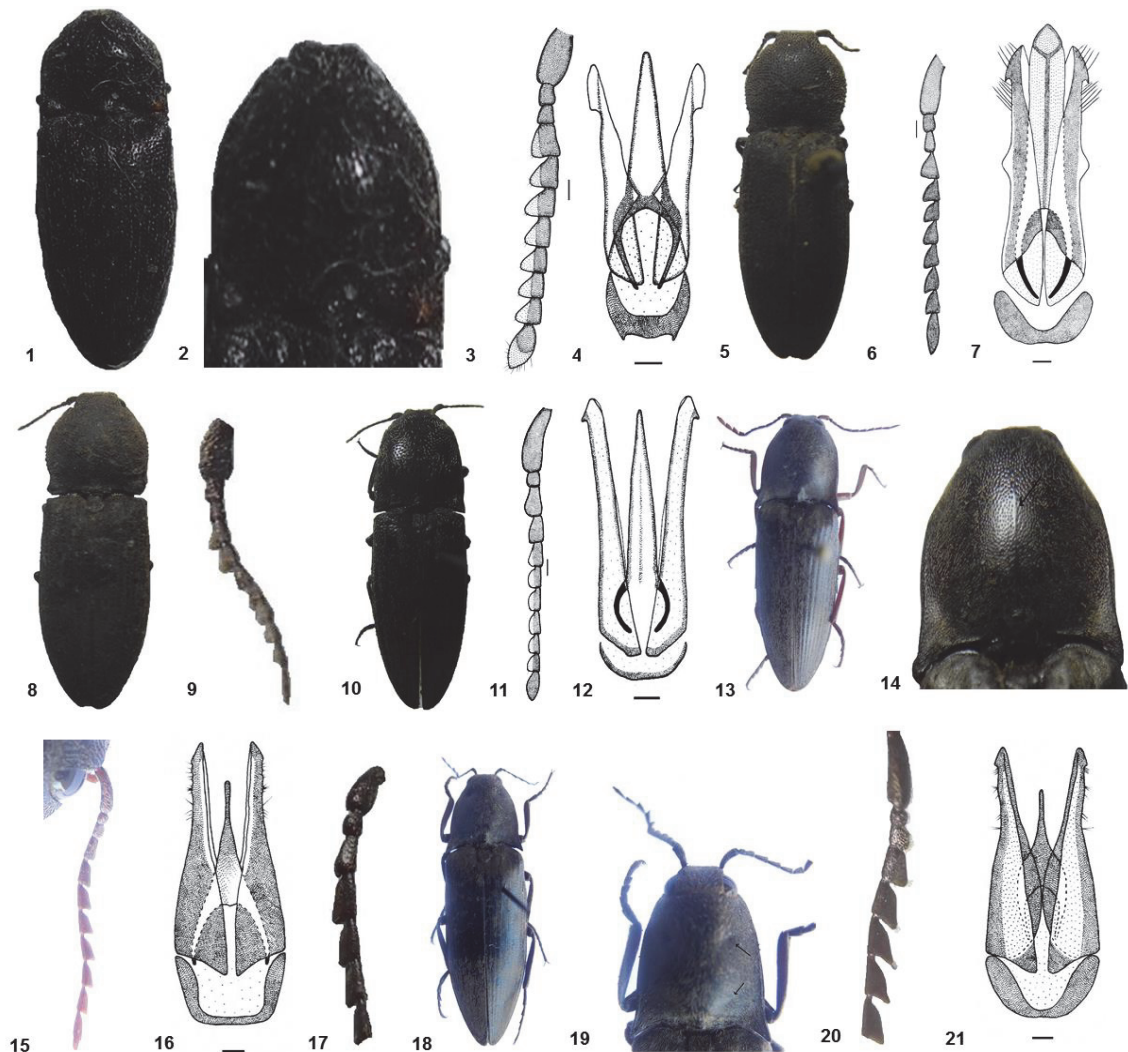
Thorax. Pronotum as long as wide, with four depressions (shown by arrows) (Fig. 19), two just above of middle and two below of middle, conspicuously convex on disc, regularly sloping at sides, with a trace of short and median longitudinal carina, apical margin fused with eyes, prescutellar tubercle moderate, subquadrate, with shiny pubescence, sides slightly arcuate, less sinuate before posterior angles, the latter feebly diverging with tips pointed to rounded, carina running subparallel to lateral margins prolonged up to middle, coarsely and deeply punctured, large punctured on disc and above, small on lateral sides; scutellum sub-rectangular, flat, punctured with pubescence; elytra 2.5 times longer than pronotum, widest at middle, gradually narrowing towards apex, the latter without spine, striae shallowly punctured on all the surface, interstriae flat with very fine granular punctures; subcoxal furrow regularly curved behind mesocoxae; prosternal sutures deeply furrowed as long as prosternum; prosternal spine broadly triangular with dense and coarse punctations; metacoxal plate narrow, elongated, broad before apex, covered with fine and dense, white pubescence..

Male genital organ description (Fig. 21): Aedeagus with median lobe much shorter than parameres, narrow, elongate, straightly broad posteriorly; parameres laterally flattened, their apical margin rounded, with distinct angle at base; median struts not emerge in the cavity of basal plate; basal plate broad, basal margin slightly sinuate at middle.

Etymology: This species is named for the type locality.

Female: Unknown.

Diagnosis: The new species resembles *L. densus* Vats and Kashyap 1993 in the body shape, the antennae exceeding the middle of the pronotum, and the hind angles of the pronotum with short carina. These species can be easily separated by the body with grey pubescence in *L. densus* while rust brown in *L. pulandriensis* n. sp., pronotum with a shallow longitudinal median depression in *L. densus* while two pair of depressions, one pair before the base of pronotum and other upper the middle of pronotum in *L. pulandriensis* n. sp., aedeagus with median lobe finger-like projection, swollen at middle in *L. densus* while elongate, finger-like projection without swollen part in *L. pulandriensis* n. sp., basal plate square shaped in *L. densus* while rounded in *L. pulandriensis* n. sp., and parameres with outer margin oblique scarcely in *L. densus* but straight in *L. pulandriensis* n. sp.



Figures 1-23. *Adelocera baghensis* n. sp. Holotype (figs. 1-4): 1. Habitus (dorsal); 2. Pronotum, 3. Antenna, 4. Aedeagus (dorsal); *Agrypnus baghensis* n. sp. Holotype (figs. 5-7): 5. Habitus, 6. Antenna, 7. Aedeagus (dorsal); *Agrypnus crenicollis* (figs. 8-9) 8. Habitus, 9. Antenna; *Lanelater pirsuhawaensis* n. sp. Holotype (figs. 10-12): 10. Habitus (dorsal), 11. Antenna, 12. Aedeagus (dorsal); *Lanelater pirsuhawaensis* n. sp. Holotype (figs. 13-16): 13. Habitus (dorsal); 14. Pronotum; 15. Antenna; 16. Aedeagus (dorsal). *Lanelater bipunctatus* (fig. 17): 17. Antenna; *Lanelater pulandriensis* Holotype (figs. 18-21): 18. Habitus; 19. Pronotum (pronotal depressions are shown by arrows); 20. Eight first segments; 21. Aedeagus (dorsal). (Scale lines: Fig. 3, 0.25 mm; Fig. 4, 0.25mm; Fig. 6, 0.25 mm; Fig. 7, 0.6 mm; Fig. 11, 0.25 mm; Fig. 12, 0.25 mm; Fig. 16, 0.6 mm; Fig. 20, 0.6 mm.)

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