



An updated list of family Scarabaeidae (Coleoptera: Scarabaeoidea) along with new faunistic records from Mizoram, India

Joyjit Ghosh¹, Debika Bhunia^{2,3}, Subhankar Kumar Sarkar³, Priyanka Ghosh² and Devanshu Gupta^{2*}

¹Department of Zoology, Prabhu Jagatbandhu College, Jhorehat, Andul-Mouri, Howrah – 711302, West Bengal, India; Email: arkazoology@gmail.com

²Zoological Survey of India, 'M'-Block, New Alipore, Kolkata – 700053, West Bengal, India; Email: dbhunia92@gmail.com, devanshuguptagb4102@gmail.com, priyankaghosh8559@gmail.com

³Department of Zoology, University of Kalyani, Kalyani – 741235, West Bengal, India; Email: sksarkarzoo18@klyuniv.ac.in

Abstract

Altogether, 56 species belonging to 25 genera and 5 subfamilies of the family Scarabaeidae are reported from the state of Mizoram in this paper based on collected materials and historical records. *Maladera hmong* Ahrens, 2004 previously known from Nepal, Vietnam, and Thailand reported for the first time from India. This study revealed the present status, distribution, and diversity of scarab beetles in Mizoram that will help in the better conservation of scarab beetle diversity in future. This baseline information will help to strengthen the conservation and management strategies which in turn will help to conserve the forests, vegetation, and wildlife of Mizoram state.

Keywords: Checklist, Diversity, Distribution, Faunistic, Scarabaeoidea

Introduction

Scarabaeidae under the superfamily Scarabaeoidea (Coleoptera) is one of the best-known Coleoptera families. The family Scarabaeidae consists of over 36,021 species worldwide, of which about 2,211 species are known from India (Chandra *et al.*, 2018; Schoolmeesters, 2023). The distribution records of Scarabaeidae from the North-East (NE) region of India have been widely published by the works of Arrow (1910, 1917, 1931), Balthasar (1963a, 1963b, 1964), Mikšič (1976, 1977, 1982, 1987), Endrödi (1985), Young (1989), Sabatinelli (1992), Ahrens *et al.* (2016), Biswas and Ghosh (2000), Chatterjee *et al.* (2000a, 2000b), Chatterjee (2000, 2004, 2007), Mittal and Jain (2015), Bhattacharyya *et al.* (2017), Geetha *et al.* (2018), and Sreedevi *et al.* (2019). Chatterjee (2007) reported 14 species of these beetles from Mizoram. However,

compared to knowledge of scarab beetles from other states of North-East India (Ghosh *et al.*, 2020a, 2020b, 2021, 2022), information on the diversity and distribution of these beetles in the state of Mizoram is lacking. During the work on unnamed specimens of scarab beetles in the Zoological Survey of India, Kolkata, the representatives of the state of Mizoram were also examined. The paper aims to provide an updated list of Scarabaeidae from Mizoram State and report 19 species as new records to the state.

Material and Methods

Study Area

Mizoram is located between 21 degree symbol 58' & 24° 35' N latitude 92 degree symbol 15' & 93° 29' E longitude and extends over 21,081 km². The Indian state of Tripura

* Author for correspondence

and Bangladesh bordered the state to the west, the Chin Hills of Myanmar to the east and south, and Manipur and Assam to the north. No fewer than 21 ranges of hills of varying heights run the length and breadth of the state. Mizoram has abundant trees, bushes, plants, shrubs and grasses. There are many rivers in the state including the Tlawng, Tuirail, Tuiwal and Koladyne. Dampa Hills and adjacent areas are part of the Dampa Tiger Reserve, which stretches across the Dampa Hills, Pathlawi Lunglen Hill, Chhawrpial Hills and many others and covers an area of 550 km².

Collection and Preservation

Samples for the study were collected by light trapping and handpicking at various locations in Mizoram state during the survey of Mizoram. While handpicking, the specimens were collected from dung, soil, and carrion. After collection, the samples were killed in jars with benzene vapours. Upon return to the laboratory, the specimens were washed with detergent to remove debris and contaminants from the body surface to reveal the morphological features for identification. They were later preserved as dry-pinned specimens. The samples were studied, identified using different literature and matched with reference collection, present at Zoological Survey of India, Kolkata. The specimens are deposited in the Zoological Survey of India, Kolkata. The photographs were taken with a Nikon SMZ-25 stereo zoom microscope using software (NIS-Elements BR 5.10.00).

Abbreviations Used in the Paper

AP: Andhra Pradesh, AR: Arunachal Pradesh, AS: Assam, BR: Bihar, CG: Chhattisgarh, GJ: Gujarat, HR: Haryana, HP: Himachal Pradesh, JK: Jammu and Kashmir, KA: Karnataka, KL: Kerala, MP: Madhya Pradesh, MH: Maharashtra, MN: Manipur, ML: Meghalaya, MZ: Mizoram, NL: Nagaland, OD: Odisha, PB: Punjab, RJ: Rajasthan, SK: Sikkim, TN: Tamil Nadu, TR: Tripura, UK: Uttarakhand, UP: Uttar Pradesh, WB: West Bengal, AN: Andaman and Nicobar Islands, DL: New Delhi; AF: Afghanistan, AG: Angola, AN: Annam, AU: Australia, BD: Bangladesh, BT: Botswana, KH: Cambodia, CG: Republic Democratic Congo, CN: China, ET: Ethiopia, FJ: Fiji, GH: Ghana, GB: Guinea-Bissau, GU: Republic of Guinea, HK: Hong Kong, ID: Indonesia, JP: Japan, KY: Kenya, LA: Laos, LK: Sri Lanka, MD: Madagascar, MZ: Mozambique,

NM: Namibia, MM: Myanmar, MY: Malaysia, NP: Nepal, PN: Papua New Guinea, PH: Philippines, PK: Pakistan, LK: Sri Lanka, SA: Saudi Arabia, SD: Sudan, SK: South Korea, SN: Senegal, SO: Somalia, SF: South Africa, SG: Singapore, TH: Thailand, TL: Timor-Leste, TW: Taiwan, TZ: Tanzania, UG: Uganda, VN: Vietnam, ZM: Zimbabwe. SR: Specimen Records; LR: Literature Records.

Results and Discussion

The present study documents 56 species belonging to 25 genera and five subfamilies, i.e. Scarabaeinae, Melolonthinae, Rutelinae, Cetoniinae and Dynastinae, under the family Scarabaeidae from the state of Mizoram. The list of species known from the Mizoram state is given in Table 1. Melolonthinae is the subfamily with the greatest number of species (25), followed by Rutelinae (15), Scarabaeinae (10), Dynastinae (5), and Cetoniinae (1). With regards to the generic richness, *Maladera* (17 species) is the most diverse genus in the region, followed by *Anomala* (9), *Mimela*, *Neoserica* (3 each), *Onthophagus*, *Digitonthophagus*, *Popillia* (2 each), *Synapsis*, *Catharsius*, *Copris*, *Onitis*, *Liatongus*, *Oniticellus*, *Apogonia*, *Lepidiota*, *Holotrichia*, *Pachyserica*, *Tetraserica*, *Adoretus*, *Oryctes*, *Blabephorus*, *Phyllognathus*, *Heteronychus*, *Chalcosoma*, and *Thaumastopeus* (1 each).

Maladera hmong [Melolonthinae] which were previously known from Myanmar and Nepal, Vietnam, and Thailand respectively, has been reported for the first time in India from this state. Besides, the paper also reports 19 species as new records to the state of Mizoram, i.e. *Oniticellus cinctus* (Fabricius), *Onthophagus (Colobonthophagus) dama* (Fabricius), *Digitonthophagus bonasus* (Fabricius), *D. catta* (Fabricius) [Scarabaeinae], *Maladera shiva* Ahrens & Fabrizi, *M. hmong* Ahrens, *M. drescheri* (Moser), *Maladera declarata* Ahrens and Fabrizi, *M. sedula* Ahrens & Fabrizi, *M. rufotestacea* (Moser), *Neoserica matura* Ahrens, *Tetraserica brahmaputrae* Ahrens [Melolonthinae], *Mimela inscripta* (Nonfried), *M. horsfieldi* Hope, *A. rugosa* Arrow, *A. dimidiata dimidiata* (Hope) [Rutelinae], *Oryctes (Rykanes) rhinoceros* Linnaeus, *Phyllognathus dionysius* (Fabricius), and *Heteronychus lioderes* Redtenbacher [Dynastinae].

The scarab beetles include primary two significant groups, based on feeding activity; (1) dung-eating scarabs are commonly called dung beetles or coprophagous, and

(2) beetle that feed on different parts of plants, like leaf, stem, root, etc. are phytophagous scarabs. During the study, ten species were dung feeders, while the rest 46 species were phytophagous or chafers. Among the dung feeders, genera like *Synapsis*, *Catharsius*, *Copris*, *Onitis*, *Onthophagus*, and *Digitonthophagus* are tunnellers, while *Liatongus* and *Oniticellus* are dwellers. This study

provides primary data and inventory on the present stand us, the composition of scarab beetles in Mizoram. It is also important for the protection and conservation of the species for the future. The present work deals with the database of scarabs, that will help the future workers for conservation, preservation, and addition to the biodiversity of scarab beetles from the state.

Table 1. Updated checklist of family Scarabaeidae so far known from Mizoram state, India. The species newly reported to the state are marked with an asterisk (*) and new in India are marked with (**)

S. No.	Taxa	Distribution in Mizoram/ Specimens Records (SR)/ Literature Records (LR)	Distribution in other Indian states and abroad
	Family Scarabaeidae Latreille, 1802 Subfamily Scarabaeinae Latreille, 1802 Genus Synapsis Bates, 1868		
1.	<i>S. tridens</i> Sharp, 1881	LR: Champai (Chatterjee, 2007; Ghosh <i>et al.</i> , 2022).	IN: AS, MN, ML, MZ, NL, OD, SK, WB; E: LA, MM, TH, VN.
	Genus Catharsius Hope, 1837		
2.	<i>C. molossus</i> (Linnaeus, 1758)	LR: Aizwal, Tehrei (Chatterjee, 2007); Dampa Tiger Reserve (Ghosh <i>et al.</i> , 2022).	IN: AN, AP, AS, BR, CG, GJ, HR, HP, KA, KL, MP, MH, ML, MZ, NL, OD, RJ, SK, TR, UP, UK; E: AF, BD, KH, LA, MY, NP, LK, TL, TW, VN
	Genus Copris Geoffroy, 1762 Subgenus Copris Geoffroy, 1762		
3.	<i>C. (C.) magicus</i> Harold, 1881	SR: Mamit, Dampa Tiger Reserve, 03.iv.2019 (1♂, 1♀), leg. S. Kushwaha. LR: Aizwal (Chatterjee, 2007); North Khaulbung (Ghosh <i>et al.</i> , 2022).	IN: AR, AP, AS, MN, ML, MZ, NL, SK, WB; E: CN, LA, TH.
	Genus Onitis Fabricius, 1798		
4.	<i>O. feae</i> Felsche, 1907	LR: Aizwal (Chatterjee, 2007).	IN: AP, AS, ML, MZ; E: MM
	Genus Liatongus Reitter, 1892		
5.	<i>L. gaganinus</i> (Hope, 1831)	SR: Mamit, Dampa Tiger Reserve, 03.iv.2019 (1♂, 1♀), leg. S. Kushwaha. LR: Aizwal, North Khaulbung (Ghosh <i>et al.</i> , 2022).	IN: AP, AS, JK, ML, MZ, NL, SK, UK, WB; E: LA, MM, TW.
	Genus Oniticellus Dejean, 1821		
6.	<i>O. cinctus</i> (Fabricius, 1775)*	SR: Mamit, Dampa Tiger Reserve, 03.iv.2019 (2♂, 1♀), leg. S. Kushwaha.	IN: AS, AP, AR, AS, CG, GJ, HR, HP, KR, MP, MH, ML, MZ, NL, PB, RJ, TR, UK, TN, WB; E: BD, CN, MY, MM, TH.
	Genus Onthophagus Latreille, 1802 Subgenus Sunenaga Ochi, 2003		

7.	<i>O. (S.) anguliceps</i> Boucomont 1914	Aizwal (Chatterjee, 2007).	IN: AS, AP, ML, MZ.
	Subgenus <i>Colobonthophagus</i> Balthasar, 1963		
8.	<i>O. (C.) dama</i> (Fabricius, 1798)*	SR: Mamit, Dampa Tiger reserve, 03.iv.2019 (1♂), leg. S. Kushwaha.	IN: AS, BR, HR, HP, ML, MZ, PB, TR, UK, UP, WB; E: PK
	Genus <i>Digitonthophagus</i> Balthasar, 1959		
9.	<i>D. bonasus</i> (Fabricius, 1775)*	SR: Mamit, Dampa Tiger Reserve, 03.iv.2019 (2♂, 1♀), leg. S. Kushwaha.	IN: AP, AR, BR, CG, DL, GJ, HR, HP, KR, JK, MP, MH, MN, ML, MZ, OD, PB, RJ, TN, TR, UP, UK, WB, MN, ML, TR; E: AF, LK, KH, MM, PK, TH, VN
10.	<i>D. catta</i> (Fabricius, 1787)*	SR: Aizawl, Mizoram University campus, 30.iii.2018 (1♂), leg. J. Ghosh. Mamit, Dampa Tiger Reserve, 03.iv.2019 (2♂), leg. S. Kushwaha.	IN: AP, AR, BR, CG, DL, GJ, HR, KR, KL, MP, MH, ML, MZ, OD, PB, RJ, TN, UP, UK, TR; E: AF, AG, BT, ET, GH, GB, KY, MD, MZ, NM, PK, CN, GU, SA, SN, SO, SF, LK, SD, TZ, UG, ZMB, ZM.
	Subfamily <i>Melolonthinae</i> Leach, 1819		
	Genus <i>Apogonia</i> Kirby, 1819		
11.	<i>A. blanchardi</i> Ritsema, 1898	SR: Saiha, Chhintuipui, 08.iv.1994 (2♂), leg. T.P. Bhattacharjee. LR: Saiha (Chatterjee, 2007).	IN: JH, KR, MZ.
	Genus <i>Lepidiota</i> Kirby, 1828		
12.	<i>L. bimaculata</i> Saunders, 1839	SR: Aizwal, Chhingehnip, 09.iv.1995 (2♂), leg. T.P. Bhattacharjee. LR: Aizwal (Chatterjee, 2007).	IN: AS, MZ, JK, SK, WB; E: CN.
	Genus <i>Holotrichia</i> Hope, 1837		
13.	<i>H. serrata</i> (Fabricius, 1787)	SR: Lauegttai North, 18.ix.1993 (2♂), leg. T.P. Bhattacharjee. Lawngttai, Chhintuipui, 03.iv.1994 (2♂), leg. T.P. Bhattacharjee. LR: Lauegttai North (Chatterjee, 2007).	IN: MH, MZ, PB, SK, WB; E: BT, LK.
	Genus <i>Maladera</i> Mulsant & Rey, 1871		
14.	<i>M. alloservitrita</i> Sreedevi <i>et al.</i> , 2018	Kolasib (Sreedevi <i>et al.</i> , 2018, 2019).	IN: MZ.
15.	<i>M. kolasibensis</i> Sreedevi <i>et al.</i> , 2018	Kolasib (Sreedevi <i>et al.</i> , 2018).	IN: MZ.
16.	<i>M. mizoramensis</i> Sreedevi <i>et al.</i> , 2018	Kolasib (Sreedevi <i>et al.</i> , 2018, 2019).	IN: MH, MZ.
17.	<i>M. viraktamathi</i> Sreedevi <i>et al.</i> , 2019	Kolasib (Sreedevi <i>et al.</i> , 2019).	IN: MZ.
18.	<i>M. clypeata</i> (Fairmaire, 1887)	Kolasib (Sreedevi <i>et al.</i> , 2018).	IN: ML, MZ.
19.	<i>M. garoana</i> Ahrens & Fabrizi, 2016	Kolasib (Sreedevi <i>et al.</i> , 2018, 2019).	IN: ML, NL, MZ.
20.	<i>M. paraprabangana</i> Ahrens & Fabrizi, 2016	SR: Dampa Tiger Reserve, 20.v.2019 (1♂), 09.v.2019 (1♂), leg. S. Kushwaha.	IN: ML, MZ.

21.	<i>M. sericella</i> (Brenske, 1898)	Kolasib (Sreedevi <i>et al.</i> , 2018, 2019).	IN: AS, ML, MZ, SK; E: LA, MM, NP, TH.
22.	<i>M. shiva</i> Ahrens & Fabrizi, 2016*	SR: Dampa Tiger Reserve, 20.v.2019 (1♂), leg. S. Kushwaha.	IN: ML, MZ.
23.	<i>M. profana</i> Ahrens and Fabrizi, 2016	LR: Kolasib (Sreedevi <i>et al.</i> , 2019).	IN: ML, NL, MZ.
24.	<i>M. hmong</i> Ahrens, 2004**	SR: Lunglei, 18.iv.1995 (1♂), leg. T.P. Bhattacharjee.	IN: MZ; E: NP, TH, VN.
25.	<i>M. drescheri</i> (Moser, 1913)*	SR: Chamapai, 04.iv.1994 (1♂), leg. S.K. Ghosh. Lunglei, Sairep, 11.iv.1995 (1♂), leg. T.P. Bhattacharjee.	IN: ML, MZ.
26.	<i>M. declarata</i> Ahrens & Fabrizi, 2016*	SR: Chamapai, 04.iv.1994, (1♂), leg. S.K. Ghosh.	IN: ML, MZ.
27.	<i>M. sedula</i> Ahrens & Fabrizi, 2016*	SR: Lunglei, 28.iv.1995 (1♂), leg. T.P. Bhattacharjee.	IN: ML, MZ.
28.	<i>M. rufotestacea</i> (Moser, 1915)*	SR: Kolasib Rest house, 14.iv.1994 (1♂), leg. A.K. Hazra.	IN: ML, MZ; E: CN, TH, VN.
29.	<i>M. bhutanensis</i> (Frey, 1975)	LR: Kolasib (Sreedevi <i>et al.</i> , 2019).	IN: SK, WB, MZ; E: BT.
30.	<i>M. kazirangae</i> Ahrens, 2004	LR: Kolasib (Sreedevi <i>et al.</i> , 2019).	IN: AS, MZ.
	Genus <i>Neoserica</i> Brenske, 1897		
31.	<i>N. matura</i> Ahrens, 2004*	SR: Lunglei, Sairep, 11.iv.1995 (1♂), leg. T.P. Bhattacharjee.	IN: ML, MZ; E: NP
32.	<i>N. speciosa</i> Brenske, 1898	LR: Kolasib (Sreedevi <i>et al.</i> , 2018, 2019).	IN: AS, ML, NL, MZ, UK.
33.	<i>N. unciforceps</i> Ahrens & Fabrizi, 2016	LR: Kolasib (Sreedevi <i>et al.</i> , 2019).	IN: ML, MZ.
	Genus <i>Pachyserica</i> Brenske, 1897		
34.	<i>P. jendeki</i> Ahrens, 2004	LR: Kolasib (Sreedevi <i>et al.</i> , 2018)	IN: AS, ML, MZ, WB; E: MM, TH.
	Genus <i>Tetraserica</i> Ahrens, 2004		
35.	<i>T. brahmaputrae</i> Ahrens, 2004*	SR: Dampa Tiger Reserve, 20.v.2019 (1♂), leg. S. Kushwaha.	IN: AS, MZ.
	Subfamily <i>Rutelinae</i> MacLeay, 1819		
	Genus <i>Adoretus</i> Dejean, 1833		
36.	<i>A. lasiopygus</i> Burmeister, 1855	SR: Aizawl, Mizoram University campus, 30.iii.2018 (1♂), leg. J. Ghosh. Mamit, Dampa Tiger Reserve, 03.iv.2019 (2♂), leg. S. Kushwaha.	IN: AS, BR, CG, HR, KR, KL, MP, MZ, OD, SK, TN, TR, UP, WB; E: BD, BT, NP, NP, LK.
	Genus <i>Mimela</i> Kirby, 1825		
37.	<i>M. schneideri</i> Ohaus, 1905	LR: Saiha, Sairep (Chatterjee, 2007), Aizwal (Ghosh <i>et al.</i> , 2022).	IN: MN, ML, MZ, NL, SK, WB; E: MM.
	<i>M. inscripta</i> (Nonfried, 1892)*	SR: Lunglei, Sairep, 18.iv.1995 (1♂, 1♀), leg. T.P. Bhattacharjee.	IN: BR, CG, MP, ML, MZ, TR; E: MM.
38.	<i>M. horsfieldi</i> Hope, 1836*	SR: Lunglei, Pukpui, 10.iv.1994 (1♂), leg. T.P. Bhattacharjee.	IN: AS, AP, HP, JK, ML, MZ, PB, SK, UK, WB; E: CN, NP, PK.

	Genus <i>Anomala</i> Samouelle, 1819		
40.	<i>A. bengalensis</i> Blanchard, 1851	LR: Lunglei (Ghosh <i>et al.</i> , 2022).	IN: AR, BR, CG, HR, HP, DL, KR, MP, MH, ML, MZ, RJ, TN, UK, WB; E: BD, MM
41.	<i>A. varicolor</i> (Gyllenhal, 1817)	LR: Lunglei (Ghosh <i>et al.</i> , 2022).	IN: AS, AN, BR, CG, HR, KR, HP, MP, OD, PB, ML, MZ, NL, SK, TN, UP, UK, WB; E: BD, BT, CN, NP, LK.
42.	<i>A. rugosa</i> Arrow, 1899*	SR: Lunglei, Pukpui, 10.iv.1994 (1♂), leg. T.P. Bhattacharjee.	IN: AS, BR, CG, HR, HP, KR, MP, MH, MZ, SK, TN, UP, TR, WB; E: BT, NP, PK
43.	<i>A. blanchardi</i> (Blanchard, 1851)	SR: Aizawl, Mizoram University campus, 30.iii.2018 (1♂), leg. J. Ghosh. LR: Mizoram (Ghosh <i>et al.</i> , 2022).	IN: ML, MZ, PY, TN, UK; E: BT, NP.
44.	<i>A. cantori</i> (Hope, 1839)	SR: Aizawl, Mizoram University campus, 30.iii.2018 (3♂), leg. J. Ghosh. LR: Dampa Tiger Reserve (Ghosh <i>et al.</i> , 2022).	IN: AS, AP, BR, CG, HR, HP, MP, MZ, ML, UK, WB; E: NP, BD, MM.
45.	<i>A. rufiventris</i> Redtenbacher, 1844	SR: Aizawl, Mizoram University campus, 30.iii.2018 (2♂), leg. J. Ghosh. LR: Dampa Tiger Reserve (Ghosh <i>et al.</i> , 2022).	IN: AS, HP, MN, ML, MZ, SK, UK, WB; E: BT, CN, NP.
46.	<i>A. truncata chlorochelys</i> Arrow, 1912	LR: Dampa Tiger Reserve (Ghosh <i>et al.</i> , 2022).	IN: MZ; E: CN, MM, MY, NP, TH, VN.
47.	<i>A. variivestis</i> Arrow, 1917	LR: Saiha (Chatterjee, 2007; Ghosh <i>et al.</i> , 2022).	IN: AP, ML, MN; E: BD, MM.
48.	<i>A. dimidiata dimidiata</i> (Hope, 1831)	SR: Mamit, Dampa Tiger Reserve, 03.iv.2019 (2♂), leg. S. Kushwaha.	IN: AS, AN, AP, BR, CG, HR, JK, MP, MH, MN, ML, MZ, PB, SK, UP, UK, TN, TR, WB; E: AF, NP, PK.
	Genus <i>Popillia</i> Serville, 1825		
49.	<i>P. cyanea</i> Hope, 1831	Aizawl (Ghosh <i>et al.</i> , 2022).	IN: AS, AP, HP, JK, ML, MZ, NL, SK, UK, WB; E: CN, NP.
50.	<i>P. marginicollis</i> Hope, 1831	SR: Mamit, Dampa Tiger Reserve, 03.iv.2019 (1♂), leg. S. Kushwaha. LR: Rotlang (Ghosh <i>et al.</i> , 2022).	IN: AS, AN, SK, UK, MZ, WB; E: CN, NP.
	Subfamily <i>Dynastinae</i> Macleay, 1819		
	Genus <i>Oryctes</i> Hellwig, 1798		
51.	<i>O. (Rykanes) rhinoceros</i> Linnaeus, 1758*	SR: Aizawl, Mizoram University Campus, 30.iii.2018 (2♀), leg. J. Ghosh. Mamit, Dampa Tiger Reserve, 03.iv.2019 (1♂), leg. S. Kushwaha.	IN: AP, AR, AN, ML, MP, MZ, MH, NL, OD, TN, TR, WB; E: AN, BD, KH, CN, FJ, ID, PN, PH, SK, LK, TW, TH, VN.
	Genus <i>Blabephorus</i> Fairmaire, 1898		
52.	<i>B. pinguis</i> Fairmare, 1898	LR: Sairep (Chatterjee, 2007).	IN: AR, AS, MZ; E: CN, ID.
	Genus <i>Phyllognathus</i> Eschscholtz, 1830		

53.	<i>P. dionysius</i> (Fabricius, 1792)*	SR: Aizawl, Mizoram University campus, 30.iii.2018 (2♀), leg. J. Ghosh. Mamit, Dampa Tiger Reserve, 03.iv.2019 (1♂), leg. S. Kushwaha.	IN: BR, CG, HP, JH, KR, MP, MH, ML, MZ, OD, SK, TN, UK, WB; E: NP, PK, LK, VN.
	Genus <i>Heteronychus</i> Dejean, 1833		
54.	<i>H. lioderes</i> Redtenbacher, 1867*	SR: Mamit, Dampa Tiger Reserve, 03.iv.2019 (1♂), leg. S. Kushwaha.	IN: AN, CG, HP, MH, MP, ML, MZ, OD, UP, UK, TR, SK, WB; E: ID, NP, TH, MY, MM.
	Genus <i>Chalcosoma</i> Hope, 1837		
55.	<i>C. atlas</i> (Linnaeus, 1858)	LR: Bilkathlir (Chatterjee, 2007; Ghosh <i>et al.</i> , 2022).	IN: MZ, E: ID, NP, MY, MM, PH.
	Subfamily Cetoniinae Leach, 1815		
	Genus <i>Thaumastopeus</i> Kraatz, 1885		
56.	<i>T. nigrinus</i> (Frolich, 1792)	SR: Mamit, Dampa Tiger Reserve, 03.iv.2019 (1♂), leg. S. Kushwaha. LR: Rotlang (Ghosh <i>et al.</i> , 2022).	IN: AN, BR, HP, AS, MN, ML, MZ, NL, PJ, SK, WB; E: BT, ID, MY, MM, LK.

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