



## **A Catalogue of Longhorn Beetles (Coleoptera: Cerambycidae) of Jharkhand, India**

**Kariyanna B.<sup>13</sup>, Mohan M.<sup>2\*</sup> and Rajeev Gupta<sup>3</sup>**

<sup>13</sup>Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chhattisgarh-492012, India

<sup>2</sup>ICAR-National Bureau of Agricultural Insect Resources, Bengaluru, Karnataka-560024, India

<sup>3</sup>Current address: University of Agricultural Sciences, Raichur, Karnataka-584101, India

\*Corresponding author e-mail: kariyannabento@gmail.com

### **ABSTRACT**

*The longhorn beetles are getting interested for the researcher because of their diversity and pest status. The current study has consolidated the longhorn beetle fauna of Jharkhand comprising of 17 species, 15 genera, 14 tribes under three subfamilies. Among the subfamilies, the Cerambycinae shares nine species, followed by Lamiinae (seven species) and Prioninae (one species).*

Received 14.09.2017

Revised 15.10.2017

Accepted 02.11.2017

### **INTRODUCTION**

The longhorn beetles are one of the important insect groups contain the maximum diversity. The records of longhorn beetles from the eastern Indian is very poor and many species yet to be explored. Gahan [1], Stebbing [2], Beeson [3], Breuning [4, 5, 6, 7, 8, 9, 10, 11, 12 and 13] Mukhopadhyay & Biswas [14 and 15], Mukhopadhyay & Halder [16] have made detailed studies on Indian longhorn beetles. Recently, Kariyanna [17] has prepared a complete checklist information on Indian longhorn beetles. Nearly 1/3<sup>rd</sup> of the Jharkhand state (29.6%) is covered by forest and having a greater diversity of insect species including longhorn beetles. Because of its wider forest cover and varied topography, this state contains the maximum longhorn beetles and most of them are reported from the Chota Nagpur plateau. The present study has consolidated the entire fauna of the longhorn beetles of Jharkhand.

### **HIERARCHICAL CATALOGUE**

#### **Sub-family: Cerambycinae**

#### **Tribe: Callidiopini**

***Ceresium* Newman, 1842e:** 322 (type sp.: *Ceresium raripilum* (Newman, 1842); (Subsequent design.

Thomson, 1864: 236); *Diatomocephala* Blanchard in d'Urville, 1853: 266. *Paraceresium* Matsushita, 1932a: 71. *Rhaphidera* Perroud, 1855: 336. *Rhaphidodera* Gemminger & Harold, 1872: 2831.

#### **1. *Ceresium rufum* Lameere, 1890**

*Ceresium rufum* Lameere, 1890; Gahan, [1]: 157.

**Distribution:** India (UP; Jharkhand: Konbir; WB).

#### **Tribe: Callichromatini**

***Pachyteria* Audinet-Serville, 1833:** 553 (type sp.: *Cerambyx fasciatus* Fabricius, 1775).

#### **1. *Pachyteria fasciata* (Fabricius, 1775)**

*Cerambyx fasciatus* Fabricius, 1775: 168.

*Cerambyx populneus* Schröter, 1776: 349.

*Pachyteria fasciata* Audinet-Serville, 1833: 554; Gahan, [1]: 195.

*Pachyteria voluptuosa* Thomson, 1865: 568; Thomson, 1878a: 5 (Type).

**Distribution:** India (India Orientalis, TN: Nagapattinam; WB; Assam; Jharkhand: Ranchi; CG; Bihar; MH; Odisha; Chota Nagpur; Himalaya), Surinam, Cambodia Himalayas; Tranquebar; Sri Lanka; Thailand, Vietnam, Nepal & China.

**Tribe: Cerambycini**

**Trirachys** Hope, 1845a: 11 (type sp.: *Trirachys orientalis* Hope, 1841); *Trirrachis* Gemminger & Harold, 1873: 2801 (unjustified emendation).

**1. Trirachys holosericea (Fabricius, 1787)**

*Ceramryx holosericeus* Fabricius, 1787: 135.

*Hammaticherus holosericeus* White, 1853b: 128

*Pachydissus velutinus* Thomson, 1865: 576

*Pachydissus similis* Gahan, 1890a: 52

*Neocerambyx similis* Bates, 1891: 21.

*Aeolesthes holosericeus* Gahan, 1891: 20.

*Aeolesthes holosericea* Pic, 1935b: 12; Sinha [18]

*Aeolesthes (s. str.) holosericea* Gressitt & Rondon, 1970: 65.

*Aeolesthes (Aeolesthes) holosericea* Makihara et al., 2008: 99.

**Distribution:** India (Jharkhand; AR; Jammu; MH: Kolhapur Distr.), China: Henan, Shaanxi, Fujian, Guangdong, Hongkong, Hainan, Guangxi, Sichuan, Yunnan; Myanmar, Laos, Thailand, Sri Lanka, Vietnam: Thua Thien-Hue & Indonesia.

**Tribe: Cleomenini**

**Kurarua Gressitt, 1936:** 92 (type sp.: *Kurarua constrictipennis* Gressitt, 1936); *Cleomenella* Fisher, 1940: 203. *Sikimpaza* Heyrovský, 1961: 140.

**1. Kurarua imbuta Holzschuh, 1999**

*Kurarua imbuta* Holzschuh, [19]: 32.

**Distribution:** India (MH; Jharkhand; Chota-Nagpore: Nowatoli).

**2. Kurarua latipennis Holzschuh, 1991**

*Kurarua latipennis* Holzschuh, [20]: 61.

**Distribution:** India (Jharkhand: Chota Nagpur).

**Tribe: Compsocerini**

**Demonax J. Thomson, 1860:** 226 (type sp.: *Demonax nigrofasciatus* J. Thomson, 1860); *Grammographus* Chevrolat, 1863: 285; *Elezira* Pascoe, 1869: 637.

**1. Demonax formicoïdes (Lameere, 1890)**

*Clytus formicoïdes* Lameere, 1890.

*Demonax formicoïdes* Gahan, [1]: 297.

**Distribution:** India (Jharkhand: Chota Nagpur, Kunbir and Nowatoli).

**Tribe: Pyrestini**

**Pachylocerus Hope, 1834:** 19 (type sp.: *Pachylocerus corallinus* Hope, 1834).

**1. Pachylocerus crassicornis (Olivier, 1795)**

*Cerambix crassicornis* Olivier, 1795: 51.

*Pachylocerus crassicornis* White, 1853b: 124; Gahan, [1]: 226.

*Pachylocerus plumiferus* Lameere, 1890.

**Distribution:** India (South India; Kerala: Trivandrum; WB: Calcutta; Jharkhand: Chota Nagpur; MH: Phaltan, Satara district; UP: Kunbir), Sumatra & Sri Lanka.

**Pyrestes Pascoe, 1857b:** 96 (type sp.: *Pyrestes haematicus* Pascoe, 1857); *Pyresthes* Thomson, 1864: 159 (Unjustified emendation).

**1. Pyrestes pyrrhus Gahan, 1906**

*Pyrestes pyrrhus* Gahan, [1]: 228.

**Distribution:** India (Jharkhand: Chota Nagpur, Nowatoli; CG,) & Nepal.

**Tribe: Stenopterini**

**Kunbir Lameere, 1890:** ccxiii (type sp.: *Kunbir telephoroïdes* Lameere, 1890); *Debilis* Fairmaire, 1895: 178. *Debilissa* Aurivillius, 1912: 274; *Debilissima* Pic, 1924a (unjustified emendation); *Debilissa* (*Kurseongia*) Pic, 1930b: 15.

**1. *Kunbir telephoroïdes* Lameere, 1890**

*Kunbir telephoroïdes* Lameere, 1890; Gahan, [1]: 174.

**Distribution:** India (Uttar-Pradesh: Kunbir; Jharkhand: Chota Nagpur).

**Sub-family: Lamiinae**

**Tribe: Acanthocinini**

**Mimoxenolea Breuning, 1960c:** 36 (type sp.: *Mimoxenolea bicoloricornis* Breuning); *Mimaeschopalaea* Breuning, 1961l: 31.

**1. *Mimoxenolea ornata* (Breuning, 1961)**

*Mimaeschopalaea ornata* Breuning, [1961]: 31.

*Mimoxenolea ornata* Breuning, [12]: 200.

**Distribution:** India (Jharkhand: Bundaloya forest).

**Tribe: Apomecynini**

***Atimura* Pascoe, 1863a:** 548 (type sp.: *Atimura terminata* Pascoe, 1863).

**1. *Atimura strandi* Breuning, 1940**

*Atimura strandi* Breuning, [5]: 162.

**Distribution:** India (Jharkhand: Chota Nagpur; CG).

**Tribe: Dorcaschematini**

***Olenecamptus* Chevrolat, 1835:** 134 (type sp.: *Olenecamptus serratus* Chevrolat, 1835); *Authades* J. Thomson, 1857d: 191; *Ibidimorphum* Motschulsky, 1860.

**1. *Olenecamptus blairi* Breuning, 1936**

*Olenecamptus blairi* Breuning, [4]: 320.

**Distribution:** India (Jharkhand: Chota Nagpur, Nowatoli; CG).

**2. *Olenecamptus rufus* Breuning, 1947**

*Olenecamptus rufus* Breuning, [6]: 29.

**Distribution:** India (Jharkhand: Chota-Nagpur, Nowatoli).

**Tribe: Eunidiini**

***Eunidia* Erichson, 1843:** 261 (type sp.: *Eunidia nebulosa* Erichson); *Frixus* J. Thomson, 1857f: 313; *Friscus* (subsequent incorrect spelling); *Anomoesia* Pascoe, 1858a: 255; *Syessita* Pascoe, 1864c: 284; *Tritomicrus* Fairmaire, 1892: 125; *Paphraecia* Fairmaire, 1894: 332; *Semiclinia* Fairmaire, 1898b: 254; *Mycerinella* Heller, 1924b: 203; *Boucardia* Pic, 1925e: 31; *Aserixia* Pic, 1925e: 31.

**1. *Eunidia nigroapicaloides* Breuning, 1976**

*Eunidia nigroapicaloides* Breuning, [11]: 207.

**Distribution:** India (Jharkhand: Chota Nagpur, Nowatoli; CG).

**Tribe: Lamiini**

***Acalolepta* Pascoe, 1858a:** 247 (type sp.: *Acalolepta pusio* Pascoe, 1858); *Cypriola* J. Thomson, 1864: 16. *Dihammus* J. Thomson, 1864: 80. *Neanthes* Pascoe, 1878: 372. *Haplohammus* Bates, 1884: 239. *Astynoscelis* Pic, 1904c: 8. *Niphohammus* Matsushita, 1932b: 170. *Saitoa* Matsushita, 1937: 104.

**1. *Acalolepta nagporensis* Breuning, 1982**

*Acalolepta nagporensis* Breuning, [13]: 18.

**Distribution:** India (Jharkhand: Chota Nagpore, Navatoli; CG).

**Tribe: Macrotomini**

**Sub-tribe: Macrotomina**

**Anomophysis** Quentin & Villiers, 1981: 374 (type sp.: *Prionus spinosus* Fabricius, 1787).

**1. *Anomophysis plagiata* (Waterhouse, 1884)**

*Macrotoma plagiata* Waterhouse, 1884b: 381.

*Macrotoma vidua* Lameere, 1903: 167, 200.

*Macrotoma (Zooblax) plagiata* Lameere, 1913: 28.

*Macrotoma (Zooblax) vidua* Lameere, 1913: 28 (Cat.).

*Macrotoma (Zooblax) crenata* Gressitt & Rondon, 1970: 13.

*Anomophysis plagiata* Quentin & Villiers, [21]: 361, 376, 383.

**Distribution:** India (N-India; Jharkhand: Ranchi; WB: Darjeeling; Himachal Pradesh: Simla, Solan; Manipur; AR), Cental Asia, Sri Lanka, Myanmar, Pakistan: Karachi, Afghanistan: Kaboul & Laos.

**Sub-family: Prioninae**

**Tribe: Prionini**

***Dorysthenes (Paraphrus)* J. Thomson, 1861: 330** (type sp.: *Cyrthognathus granulosus* Thomson, 1861).

**1. *Dorysthenes (Paraphrus) granulosus* (Thomson, 1861)**

*Cyrthognathus granulosus* Thomson, 1861: 329.

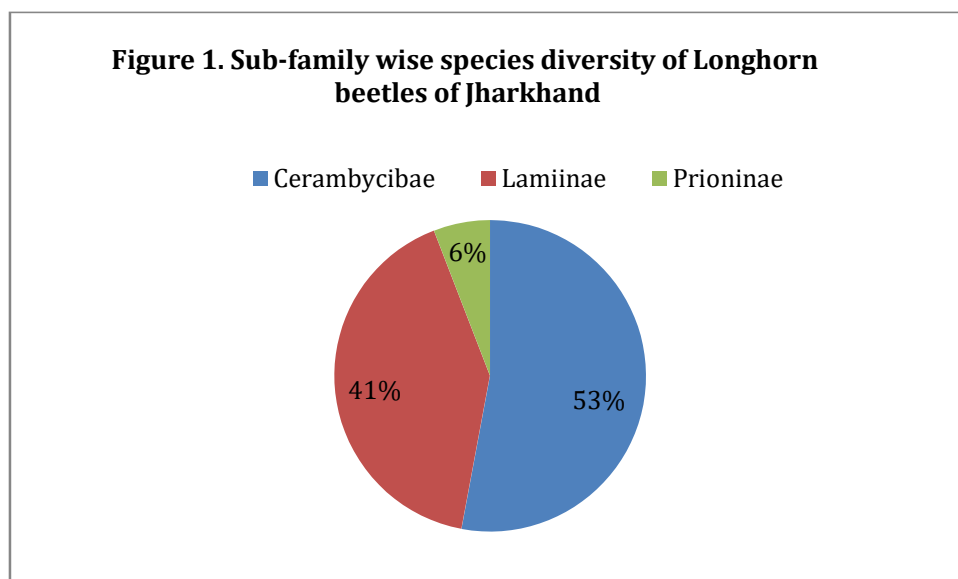
*Paraphrus granulosus* Thomson, 1864: 281; Lameer, [22]: ccx.

*Dorysthenes (Paraphrus) granulosus* Gressitt, 1950a: 9.

*Dorysthenes granulosus* Li et al., 1981: 93.

*Doythenes granulosus* Zhang & Chen, 1992: 24.

**Distribution:** India (Sikkim: Mungphu; UP: Tetara; Jharkhand: Kunbir; WB), Caren Hills, Lashio, China: Zhejiang, Fujian, Guangdong, Hong Kong, Hainan, Guangxi, Guizhou, Yunnan; Vietnam, Laos, Myanmar & Thailand.



**DISCUSSION**

There are 17 species of longhorn beetles documented from Jharkhand. They are classified into 15 genera, 14 tribes, and three sub-families. Among all the reported species, cerambycinae contributes greater diversity (53%), followed by lamiinae comprises of 41 per cent species and prioninae holds very poor species diversity (Figure 1). This report clearly indicates that the study on longhorn beetle from Jharkhand is still infancy stage and it needs more concentration by the scientific community.

**ACKNOWLEDGEMENT**

The authors acknowledge the infrastructure facilities provided by the Director, ICAR-NBAIR, Bengaluru. The support rendered by Head, Entomology, IGKV, Raipur is gratefully acknowledged. We are also

grateful to Dr. Francesco Vitali, Entomologist, MNMH, Paris, and Cerambycoidea forum for helping with the literature.

## REFERENCES

- Gahan, C.J. (1906). The Fauna of British India, including Ceylon and Burma. Coleoptera. - Vol. I. (Cerambycidae). London, C. T. Bingham xviii + 329 pp.
- Stebbing, E.P. (1914). *Family Cerambycidae. In: Indian Forest Insects of economic importance*. London, 268–385.
- Beeson, C.F.C. (1941). The Ecology and Control of the Forest Insects of India and the Neighbouring Countries. Aswant Singh, The Vasant Press, Dehra Dun, ii + 1007 pp.
- Breuning, S. (1936). Novae species Cerambycidarum. V. Festschrift zum 60. *Geburtstage von Professor Dr. Embrik Strand, Riga*, 1:274-325.
- Breuning, S. (1940). Novae species Cerambycidarum. IX. *Folia Zoologica et Hydrobiologica, Riga*, 10(1):115-214.
- Breuning, S. (1947). Nouvelles formes de Longicornes du Musée de Stockholm. *Arkiv för Zoologi, Uppsala*, 39A(6):1–68.
- Breuning, S. (1960). Catalogue des Lamiaires du Monde (Col. Céramb.). *Verlag des Museums G. Frey, Tutzing bei München*, 3:109-182.
- Breuning, S. (1962). Catalogue des Lamiaires du Monde (Col. Céramb.). *Verlag des Museums G. Frey, Tutzing bei München*, 6:387-459.
- Breuning, S. (1966). Catalogue des Lamiaires du Monde (Col. Céramb.). *Verlag des Museums G. Frey, Tutzing bei München*, 9:659-765.
- Breuning, S. (1969). Nouveaux Coléoptères Cerambycidae des collections du Muséum de Paris. *Bulletin du Muséum National d'Histoire Naturelle de Paris (2ème série)*, 41(3):655-670.
- Breuning, S. (1976). Nouveaux Apomecynini des collections du Muséum national d'Histoire naturelle, Paris [Col., Cerambycidae Lamiinae]. *Bulletin de la Société Entomologique de France, Paris*, 81(5-6):207-208.
- Breuning, S. (1977). Révision de la tribu des Acanthocinini de la région Asiato-Australienne (Coleoptera: Cerambycidae) Deuxième partie. *Mitteilungen aus dem Zoologischen Museum in Berlin*, 53(2):199-276.
- Breuning, S. (1982a). Diagnoses préliminaires de nouveaux Lamiinae du Muséum National d'Histoire Naturelle de Paris [Coleoptera, Cerambycidae]. *Annales de la Société Entomologique de France, Paris, New Series*, 18(1):9–29.
- Mukhopadhyay, P. and Biswas, S. (2000a). Insecta: Coleoptera: Cerambycidae. Fauna of Meghalaya, State Fauna Series. *Zool. Surv. India, Kolkata*, 4(5):41-67.
- Mukhopadhyay, P. and Biswas, S. (2000b). Coleoptera: Cerambycidae. Fauna of Tripura, State Fauna Series. *Zool. Surv. India*, 7(3):139- 142.
- Mukhopadhyay, P. and S. K. Halder. (2004). Fauna of Manipur (part-2) Insects. Insecta : Coleoptera: Cerambycidae. *State Fauna Series*, 10:421-431.
- Kariyanna, B. (2016). An analysis of the species diversity and distribution of agriculturally important longhorn beetles (Cerambycidae: Coleoptera) from India. M.sc.(ag.) thesis, Department of Entomology, College of Agriculture, Raipur, Faculty of Agriculture, Indira Gandhi Krishi Vishvavidyalaya, Raipur, Chhattisgarh. 351-588 pp.
- Sinha, Ravi Bhushan, Debnath, Anil Kumar, Singh, Bishwa Mohan Kumar, and Prasad, Bhagwan Chandra. (2011). Laboratory culture of stem borer, *Aeolesthes holosericea* F., method developed. Available from Nature Precedings <<http://hdl.handle.net/10101/npre.2011.5640.1>>
- Holzschuh, C. (1999) Beschreibung von 71 neuen Bockkäfern aus Asien, vorwiegend aus China, Laos, Thailand und Indien (Coleoptera, Cerambycidae). Schriftenreihe der Forstlichen Bundesversuchsanstalt (FBVA-Berichte), Wien, 110, 1–64.
- Holzschuh, C. (1991) 45 neue Bockkäfer aus Asien, vorwiegend aus Thailand (Coleoptera: Disteniidae und Cerambycidae). Schriftenreihe der Forstlichen Bundesversuchsanstalt (FBVA-Berichte), Wien, 51, 35–75.
- Quentin, R. M. and A. Villiers. 1982. A propos d'Acanthophorini, Derobrachini et Notophysini, avec description du genre nouveau *Namibius* [Col. Cerambycidae Prioninae] Bulletin de la Société Entomologique de France, Paris 86(9 & 10): 248-251, 1 fig.
- Lameere, A.A.L. (1890) Note sur les Tricténotomides, les Prionides et les Cérambycides du Chota-Nagpore. Comptes-Rendus des Séances de la Société Entomologique de Belgique, Bruxelles, 13 (4), ccx-ccxiv.

## CITATION OF THIS ARTICLE

Kariyanna B., Mohan M. and Rajeev Gupta. A Catalogue of Longhorn Beetles (Coloepoptera: Cerambycidae) Of Jharkhand, India. Bull. Env. Pharmacol. Life Sci., Vol 6 Special issue 4, 2017: 114-118