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Diversity of Blattidids (Cockroaches) in Nilgiri hills, Tamil Nadu

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Abstract

Nilgiri's hills is located at an altitude of 1000 to 2600 MSL, and has a variety of forest types covered with its latitudinal and longitudinal location is 130 km (Latitude: 11°12' N to 11°37' N) by 185 km (Longitude: 76°30' E to 76°55' E). This research investigated the diversity and abundance of Blattids (Cockroaches) found in several types of plantation in the forest area. The Blattids were collected by using artocarpus traps and by hand picking methods. In this present study on attempt in made to report baseline taxonomy and classification of 18 species Blattids under 15 genera belonging to 3 families from Nilgiri Biosphere reserve based on available literature, online data base and some specimens were collected from Nilgiri hills during the period of October, November and December, 2018. *Microdina forceps*, *Neostylopyga maindroni* and *Pseudectobia luneli* are endemic to Tamil Nadu after the first description there is no report from this area.

Keywords: Diversity, abundance, blattids, Nilgiri hills, Tamil Nadu

Introduction

The cockroaches are one of the oldest forms of living insect. Blattids are an important insect group in these forest ecosystems, because Blattids dependence on food sources from various species of trees and leaf litters. In some natural ecosystems, cockroaches play an important role in nutrient cycling and pollination processes. They commonly reside in leaf litters and dead woods. However a few cockroaches live in tree barks and plant holes. Globally, Blattodea accounts to total of 7570 species so far reported, out of which 4641 species cockroaches and 2929 species are termites, (McKittrick, 1964 and Roth, L.M, 2003) [5, 17]. In India, a total of 170 species under 65 genera and 6 families are reported so far reported. (Prabakaran and Senraj 2018) [9]. Nymphs of Cockroaches are wood borers and tend to choose dead or decaying wood, and some species are considered pests. Diversity of Blattids has been shown to vary among different forest types (Maeto *et al.* 2002; Ohsawa 2004) [4, 6], and to be affected by forest diversity (Ohsawa 2004) [6], and forest size (Pavuk & Wadsworth 2013). The structure of a community of Blattids in a region is very closely related to the composition and development of trees. Different species of cockroaches will choose different species of tree or shrub (Sakenin *et al.* 2011) [19]. The aim of this research was to study the diversity of blatted communities in different types of plantation forest within Nilgiri hill region.

Materials and Methods

Study area: The study was conducted from October, November and December, 2018 in five types of forest plantations, differentiated by location, and predominant trees. The forest type is moist evergreen, Semi evergreen, Thorn, Savannah woodland, and Sholas grasslands type of forests; all within Nilgiri's hills and part of Western Ghats of Tamil Nadu. Nilgiri's district is mostly hilly forest has an elevation of 1000 to 2600 Msl. covered with its latitudinal and longitudinal location is 130 km (Latitude: 11°12' N to 11°37' N) by 185 km (Longitude: 76°30' E to 76°55' E).

Collection and preservation: Cockroaches were collected during the month of October, November and December, 2018, using hand picking and artocarpus traps methods. After the collection of cockroaches, specimens were preserved in the Laboratory of Entomology division, Zoological Survey of India, Southern regional Centre, Chennai. Blattids (>10 mm length) were pinned, while smaller ones (<10 mm length) were mounted on triangle paper. After pinning, the blatted specimens were labeled according to field collection data.

The specimens were identified using standard keys coined by the world experts and based on verified by reference to the specimen collection in the entomological Museum of Zoological Survey of India.

Result and Discussion

This species list was prepared based on the available literature and materials available in the National Zoological Collections of Southern Regional Centre, Zoological survey of India, Chennai along with specimens collected from Nilgiri hills during the period from October, November and December, 2018. All the specimens were deposited in this same institute. *Blattella germanica*, *Supella longipalpa* and *Periplaneta americana*, these species are well adapted in human habitat and these species are domestic pest. *Microdina forceps*, *Neostylopyga maindroni* and *Pseudectobia luneli* are endemic to Tamil Nadu after the first description there is no report from this area. Remaining species are live in both Eastern Ghats and Western Ghats of Tamil Nadu area. This is a primary attempt to explore the species checklist of blattids from this Nilgiri hills, the species count may be increase in future.

Abbreviation

MMUM - The Manchester Museum of the University of Manchester, Manchester, UK.

MHNG - The Natural History Museum of Geneva.

BMNH - British Museum of Natural History.

MNHN - The French National Museum of Natural History @ Muséum national d'histoire naturelle

ZMUC - Zoological Museum, University of Copenhagen.

LSUK - Linnaean Society, London, United Kingdom.

List of Blattids from Nilgiri Hills, Tamil Nadu

Order: Blattodea

Superfamily: Blaberoidea Saussure, 1864

Family: Blaberidae Saussure, 1864

Subfamily: Epilamprinae Brunner von Wattenwyl, 1865

Tribe *Morphnini* McKittrick, 1964^[5]

Genus *Morphna* Shelford, 1910

1. *Morphna lucida* Anisutkin, 2014

Tribe Thoracini Rehn, 1951

Genus *Phlebonotus* Saussure, 1862

2. *Phlebonotus anomalus* Saussure, 1863

Genus *Thorax* Saussure, 1862

3. *Thorax porcellana* (Saussure, 1862)

Genus *Calolamprodes* Bei-Bienko, 1969

4. *Calolamprodes (Calolamprodes) characterosa* (Walker, 1868)

Genus *Princisola* Gurney & Roth, 1976

5. *Princisola pulchra* (Shelford, 1910)

Subfamily Panesthiinae

Genus *Microdina* Kirby, 1903

6. *Microdina forceps* (Saussure, 1869)

Genus *Panesthia* Serville, 1831

7. *Panesthia monstrosa* Wood-Mason, 1876

8. *Panesthia quinquedentata* Kirby, 1903

Subfamily Perisphaerinae Brunner von Wattenwyl, 1865

Genus *Pseudoglomeris* Brunner Von Wattenwyl, 1893

9. *Pseudoglomeris humbertiana* (Saussure, 1863)

10. *Pseudoglomeris terranea* (Walker, 1871)

Subfamily Pycnoscelinae

Genus *Pycnoscelus* Scudder, 1862

11. *Pycnoscelus tenebriger* (Walker, 1868)

Family Ectobiidae Brunner von Wattenwyl, 1865

Subfamily Blattellinae Karny, 1908

Genus: *Blattella* Caudell, 1903

12. *Blattella germanica* (Linnaeus, 1767)

Subfamily Pseudophyllodromiinae Hebard, 1929

Genus *Balta* Tepper, 1893

13. *Balta reticulata* (Fabricius, 1798)

Genus *Pseudectobia* Saussure, 1869

14. *Pseudectobia luneli* (Saussure, 1868)

Genus *Supella* Shelford, 1911

Subgenus *Supella* Shelford, 1911

15. *Supella (Supella) longipalpa* (Fabricius, 1798)

Superfamily Blattoidea Latreille, 1810

Epifamily Blattoidea Latreille, 1810

Family Blattidae Latreille, 1810

Subfamily Blattinae Latreille, 1810

Genus *Neostylopyga* Shelford, 1911

16. *Neostylopyga maindroni* (Shelford, 1911)

17. *Neostylopyga sexpustulata* (Walker, 1871)

Genus *Periplaneta* Burmeister, 1838

18. *Periplaneta americana* (Linnaeus, 1758)

Description

1. *Morphna lucida* Anisutkin, 2014

2014. *Morphna lucida* Anisutkin, *Zootaxa*, 3847 (3): 309.

Type locality: India: Tamil Nadu: Nilgiri: Devala.

Location of Type: The Manchester Museum of the University of Manchester, Manchester, UK.

Distribution: India: Tamil Nadu: Nilgiri Hills: Devala.

Elsewhere: Nil

Remarks: Endemic to India. This species has been included based on literature (Anisutkin, 2014).

2. *Phlebonotus anomalus* Saussure, 1863

1863. *Phlebonotus anomalus* Saussure, *Mém. Soc. Phys. hist. Nat. Genève.*, 17: 141

1868. *Phlebonotum anomalus* Walker, *Cata. Spec. Blat. Coll. Brit. Museum.*, p. 65.

1871. *Paraphoraspis anomala* Walker, *Cata. Spec. Derm. Salt. Coll. Brit. Mus.*, p.11.

1895. *Phlebonota anomalus* Saussure, *Revue suisse de zoologie.*, p.335.

1910. *Phlebonotus anomalus* Kirby, *Syn. Cat. Orthop.*, p. 110.

2014. *Phlebonotus anomalus* Anisutkin, *Zootaxa*, 3847 (3): 330.

Type locality: Tamil Nadu: Nilgiri.

Distribution: India: Tamil Nadu: Coimbatore, Nilgiri and Pondicherry.

Elsewhere: Nil

Remarks: Endemic to India. This species has been included based on literature (Anisutkin, 2014).

3. *Thorax porcellana* (Saussure, 1862)

1862. *Phoraspis (Thorax) porcellana* Saussure, *Rev. Mag. Zool.*, 2(14): 228.

1865. *Paraphoraspis notata* Brunner von Wattenwyl, *Nouveau Système des Blattaires.* p. 164

1869. *Thorax porcellana* Saussure, *Mem. Soc. phy.d'hist. nat.de Genève.*, p.79.

1967. *Thorax porcellana* Princis. *Orthopterorum Catalogus.* (11): 640.

2014. *Thorax porcellana* Anisyutkin *Zootaxa*. 3847 (3): 321.

Type locality: India: Tamil Nadu: Nilgiris.

Location of type: MHNG Geneva Museum.

Distribution: India: Tamil Nadu: Coimbatore: Anamalai Hills, Nilgiris and Gudalur. Kerala: Cochin.

Elsewhere: Sri Lanka.

Remarks: Endemic to South Asia. This species has been included based on literature (Anisyutkin, 2014).

4. *Calolamprodes (Calolamprodes) characterosa* (Walker, 1868)

1868. *Epilampra characterosa* Walker, *Cata. Spec. Blat. Coll. Brit. Museum*, p. 209.

1904. *Calolamprodes characterosa* (Walker, 1868) Kirby, *Syn. Cat. Orthop.*, p. 117.

1951. *Epilampra tranquebarica* Princis, *Spolia Mus. Zool. Hauniensis*, 12: 35.

1963. *Calolamprodes characterosa* Princis, *Orthopterorum Catalogus*, (4):148.

2014. *Calolamprodes (Calolamprodes) characterosa* Anisyutkin, *Zootaxa*, 3847 (3): 319.

Type locality: India: West Bengal.

Location of type: BMNH London

Distribution: India: Tamil Nadu: Madras, Coimbatore: Marudamalai Hills, Nilgiri (Devala)

Tirupur (Avanashi), Dindigul (Nilakkottai), Madurai, Nagapattinam. Karnataka: Mysore (Hunsur), West Bengal.

Elsewhere: Sri Lanka. (Anisyutkin, 2014)

Remarks: Endemic to south Asia. This species has been included based on literature (Anisyutkin, 2014).

5. *Princisola pulchra* (Shelford, 1910)

1910. *Audreia pulchra* Shelford, *Genera Insectorum*. p. 11.

1963. *Calolampra pulchra* Princis, *Orthopterorum Catalogus*. p. 142.

1976. *Princisola pulchra* Gurney & Roth, *Proc. Ento. Soc. Wash.*, 78(1): 83.

Type locality: India: Nilgiris–Coonoor.

Location of type: MNHN - Paris

Distribution: India: Tamil Nadu: Nilgiris - Coonoor.

Elsewhere: Nil

Remarks: Endemic to India. This species included based on literature (Gurney and Roth, 1976).

6. *Microdina forceps* (Saussure, 1869)

1869. *Panesthia forceps* Saussure, *Mem. Soc. Geneve.*, 20: 287.

1895. *Salganea forceps* Saussure, *Rev. Suisse Zool.*, 3: 303.

1903. *Microdina forceps* (Saussure) Kirby, *Ann. Mag. Nat. Hist.* (7): 409.

1965. *Microdina forceps* Princis, *Orthopterorum Catalogus*. (7): 330.

1979. *Microdina forceps* Roth, *Aust. J. Zool.*, Suppl. Ser., 69: 98.

Type locality: India: Pondicherry

Location of type: Geneva Museum

Distribution: India: Tamil Nadu: Pondicherry and Nilgiri.

Elsewhere: None

Remarks: Endemic to India. This species included based on literature (Roth 1979)^[11]

7. *Panesthia monstrosa* Wood-Mason, 1876

1876. *Panesthia monstrosa* Wood-Mason, *Journ. Asiat. Soc., Bengal.*, 15(2):189.

1897. *Panesthia panteli* Bolívar, *Annls Soc. Ent. Fr.*, 66: 307.

1903. *Dicellonotus laevis* Kirby, *Ann. Mag. Nat. Hist.*, 7 (11): 409.

1965. *Panesthia monstrosa* Princis, *Orthopterorum Catalogus*. (7): 330.

1979. *Panesthia monstrosa* Roth, *Aust. J. Zool.*, Suppl. Ser., 74: 107.

Type locality: South India

Location of type: Unknown

Distribution: India: Tamil Nadu-Coimbatore: Anaimalai Hills, Cinchona, Coonoor, Nilgiri, Attakatti, Marudamalai Hills, Valparai, Thiruchirapalli, Madurai, Kerala:

Chalakydy, *Cochin*. West Bengal: Darjling: Kurseong; Sikkim.

Elsewhere: None

Remarks: Endemic to India. This species included based on literature (Roth 1979)^[11].

9. *Panesthia quinquedentata* Kirby, 1903

1903. *Panesthia quinquedentata* Kirby, *Ann. Mag. Nat. Hist.*, 7 (11): 411.

1965. *Panesthia quinquedentata* Princis, *Orthopterorum Catalogus*. (7): 309.

1979. *Panesthia quinquedentata* Roth, *Aust. J. Zool.*, Suppl. Ser., 74: 110.

Type locality: India: Tamil Nadu: Nilgiri

Location of type: BMNH London

Distribution: India: Tamil Nadu: Nilgiri Hills: Coonoor.

Elsewhere: None

Remarks: Endemic to India. This species included based on literature (Roth 1979)^[11].

9. *Pseudoglomeris humbertiana* (Saussure, 1863)

1863. *Perisphaeria humbertiana* Saussure, *Melanges Orthop.*, p. 136.

1863. *Perisphaeria orientalis* Saussure, *Mém. Soc. Phys. Hist. Nat. Genève.*, 17: 137.

1964. *Trichoblatta humbertiana* (Saussure1863) Princis, *Orthopterorum Catalogus*. (6): 208.

2018. *Pseudoglomeris humbertiana* (Saussure, 1863) Xin-Ran Li, *Zootaxa*. 4410 (2): 259.

Type locality: Sri Lanka

Location of type: Unknown

Distribution: India: Tamil Nadu: Nilgiri.

Elsewhere: Sri Lanka

Remarks: Endemic to South Asia.

10. *Pseudoglomeris terranea* (Walker, 1871)

1871. *Ischnoptera terranea* Walker, *Cata. Derm. Coll. Part V. Supp. Cata. Blat.*, p. 32.

1895. *Pseudoglomeris antennata* Saussure & Zehntner, *Revue suisse de zoologie.*, 3: 39.

1964. *Pseudoglomeris terranea* Princis, *Orthopterorum Catalogus*. (6): 212.

Type locality: India: Bombay

Location of type: BMNH London

Distribution: India: Tamil Nadu: Nilgiris, Karnataka:

Bangalore, Madhya Pradesh, Bombay, Elsewhere: Burma.

Remarks: This species included based on literature (Princis 1950).

11. *Pycnoscelus tenebriger* (Walker, 1868)

1868. *Panchlora tenebriger* Walker, *Cata. Spec. Blat. Coll. British Museum*.p. 31.

1871. *Panchlora submarginata* Walker, *Cata. Derm.Coll. Part V. Supp. Cata.Blat.*,p. 7.

1950. *Pycnoscelus rufus* Bei-Bienko, *Fauna SSSR* (N. S.). (40):268.

1964. *Pycnoscelus tenebriger* Princis, *Orthopterorum Catalogus*. (6): 273.

1998. *Pycnoscelus tenebriger* Roth, *Oriental Insects*.32: 115.

Type locality: North India

Location of type: BMNH London

Distribution: India: Tamil Nadu- Nilgiri; Andhra Pradesh: Barkuda Island, Chilka Lake, Karnataka: Shimoga; Mysore; Uttarakand: Dehra Dun, (Himalaya), Bombay, Elsewhere: Afghanistan

Remarks: This species included based on literature (Roth 1998) [15].

12. *Blattella germanica* (Linnaeus, 1767)

1767. *Blatta germanica* Linnaeus, *Systematurae* 1, ed. 12, *Holmiae.*, p. 688.

1763. *Blatta transfuga* Brünnich, *Den Danske Atlas ellerKongeriges Dannemark*.1: 679.

1769. *Blatta daurica* Laxmann, *Sibirische Briefe, Goettingen & Gotha.*, p. 48.

1773. *Blatta asiatica* Pallas, *Reisen durch verschied. Provinzen d. Russ. Reich.*, 2: 727.

1794. *Blatta obliquata* Daldorf, *Skrivteraf Nat.urhistorie-Selskabet*. 2 (2): 164.

1838. *Blatta bivittata* Serville, *Librairie Encyclopédique de Roret.*, p. 108.

1893. *Ischnoptera paralella* Tepper, *Trans. R. Soc. S. Austral.*, 17: 53.

1895. *Phyllodromia magna* Tepper, *Trans. R. Soc. S. Aust.* 19: 19.

1908. *Blattella germanica shuguroffi* Karny, *Denkschr. med-naturw. Ges. Jena.*, 13: 377.

1925. *Phyllodromia cuneivittata* Hanitsch, *Sarawak Museum Journal*. 3(1): 86.

1931. *Phyllodromia niitakana* Shiraki, *Insecta Matsumurana*. 5(4): 204.

1969. *Ischnoptera paralella* Princis, *Orthopterorum Catalogus*. (13): 1011.

1969. *Blattella germanica* Princis, *Orthopterorum Catalogus*. (13): 807.

1985. *Blattella germanica* Roth, *Ent. Scand. Suppl.*, 22: 18.

Type locality: Denmark: Dania

Location of type: The Linnean Society- London.

Distribution: India: Tamil Nadu: Coimbatore; Anamalai Hills; Nilgiris, Arunachal Pradesh; West Bengal; Sikkim.

Elsewhere: Cosmopolitan [Asian origin]

Remarks: This species is found throughout the world and is probably the Worst **Domiciliary**

Pest Cockroach. This habitat citation included based on literature (Roth 1997) [14].

13. *Balta reticulata* (Fabricius, 1798)

1798. *Blatta reticulata* Fabricius, *Suppl. Ent. syst., Hafniae.*, p. 186.

1863. *Blatta humbertiana* Saussure, *Mém. Soc. Phys. hist. Nat. Genève.*, 17: 153.

1908. *Phyllodromia mendica* Shelford, *Genera Insectorum.*, 73: 12.

1929. *Mareta humbertiana* Hebard, *Proc. Acad. Nat. Sci. Phil.* 81: 24.

1969. *Balta reticulata* (Fabricius, 1798) Princis, *Orthopterorum Catalogus.*, (13): 979.

Type locality: India

Location of type: ZMUC Copenhagen

Distribution: India: Tamil Nadu: Nilgiris; Bihar: Pusa.

Elsewhere: Thailand; Singapore; Sri Lanka.

Remarks: This species included based on literature (Hebard 1929).

14. *Pseudectobia luneli* (Saussure, 1868)

1868. *Blatta luneli* Saussure, *Rev. Mag. Zool.*, 2(20): 355.

1871. *Ectobia luneli* (Saussure) Walker, *Cat. Derm. Salt. Brit. Mus.* 5, *Suppl. Blatt.*, p. 15.

1908. *Phyllodromia luneli* (Saussure) Shelford, *Gen. Ins.*, 73: 12.

1969. *Pseudectobia luneli* Princis, *Orthopterorum Catalogus.*, (13): 996.

Type locality: India: Tamil Nadu: Nilgiri

Location of type: MHNG

Distribution: India: Tamil Nadu: Nilgiri.

Elsewhere: None

Remarks: Endemic to India. This species included based on literature (Roth 1990).

15. *Supella (Supella) longipalpa* (Fabricius, 1798)

1798. *Blatta longipalpa* Fabricius, *Suppl. Ent. syst., Hafniae.*, p.185.

1838. *Blatta (Phyllodromia) supellectilium* Serville, *Librairie Encyclo. de Roret.*, p.114.

1862. *Blatta cubensis* Saussure, *Rev. Mag. Zool.*, 2(14): 165.

1863. *Blatta phalerata* Saussure, *Mém. Soc. Phys. hist. Nat. Genève.*, 17: 151.

1868. *Blatta extenuata* Walker, *Cata. Blattariae in the Coll. British Museum.*, p. 221.

1868. *Blatta incise* Walker, *Cata. Blattariae in the Collection of the British Museum.*, p. 109.

1868. *Schnoptera quadriplaga* Walker, *Cata. Blattariae in the Coll. British Museum.*, p. 121.

1868. *Ischnoptera vacillans* Walker, *Cata. Blattariae in the Coll. British Museum:* 114.

1871. *Blatta subfasciata* Walker, *Cat. Derm. Salt. Brit. Mus.* 5, *Suppl. Blatt.*, p. 26.

1871. *Blatta transversalis* Walker, *Cat. Derm.Salt. Brit. Mus.* 5, *Suppl. Blatt.*, p. 25.

Type locality: India

Location of type: ZMUC Copenhagen

Common name: Brown banded cockroach.

Distribution: India: Tamil Nadu: Chennai, Maharashtra: Bombay; West Bengal (Mandal 1993)

Cosmopolitan species spread all over India.

Elsewhere: Circumtropical [African origin]

Remarks: One of the important Domestic Pest.

16. *Neostylopyga maindroni* (Shelford, 1911)

1911. *Stylopyga maindroni* Shelford, *The Annals and magazine of natural history.*, 8: 5.

1966. *Neostylopyga maindroni* (Shelford) Princis, *Orthopterorum Catalogus.*, (11): 537.

Type locality: India: Tamil Nadu: Nilgiri: Coonoor

Location of type: Paris Museum

Distribution: India: Tamil Nadu: Nilgiri: Coonoor.

Elsewhere: None

Remarks: Endemic to India. This species included based on literature (Shelford, 1911).

17. *Neostylopyga sexpustulata* (Walker, 1871)

1871. *Polyzosteria sexpustulata* Walker, *Cat. Derm. Salt. Brit. Mus.* 5, Suppl. Blatt., p.36.

1906. *Periplaneta bioculata* Paiva, *J. Asiat. Soc. Bengal N.S.*, 2: 346.

1904. *Blatta sexpustulata* Kirby, *Sys. Cat. Orth.* 1: 140.

1908. *Stylopyga sexpustulata* Shelford, *Gen. Ins.* 109: 14.

1957. *Neostylopyga sexpustulata* Princis, *Opusc. ent.* 22: 97

1966. *Neostylopyga sexpustulata* Princis, *Orthopterorum Catalogus* (8): 537.

Type locality: India: Bombay

Location of type: BMNH London

Material examined: 1♀ Nilgiri: Marganpet, 15.12.2016, Coll. S Prabakaran.

Distribution: India: Tamil Nadu: Kolli Hills; Maharashtra: Bombay; Uttar Pradesh; Bihar;

Orissa; Karnataka and Andhra Pradesh.

Remarks: Endemic to India.

18. *Periplaneta americana* (Linnaeus, 1758)

1758. *Blatta Americana* Linnaeus, *Systematurae 1, ed. 10, Holmiae.*, p. 424.

1813. *Blatta siccifolia* Stoll, *Represent. exact. coloreed'apres nature d. Spectres.*, p.14.

1822 *Blatta heros* Eschscholtz, *Entomographien, Erste Lief., Berlin.*, p. 83.

1868. *Periplaneta stolidus* Walker, *Cata. Blat. Coll. British Museum.*, p. 128.

1901. *Periplaneta americana colorata* Rehn, *Tran. Amer. Ento. Soc.*, 27: 220.

1966. *Periplaneta americana* (Linnaeus, 1758) Princis, *Orthopterorum Catalogus.*, (8): 405.

Type locality: America

Location of type: LSUK Linnean

Common name: American Cockroach

Distribution: India: Tamil Nadu: Thiruchirapalli, Nilgiri; Arunachal Pradesh: Papumpare district; West Bengal: Darjeeling District, Birbhum District, Calcutta District, Murshidabad District, Maida District; Sikkim.

Elsewhere: America & Cosmopolitan (African origin)

Remarks: This is a cosmopolitan species and one of the most important domiciliary cockroach pests.

Conclusion

Present investigation dealt with existed identified Blattids lying in SRC/ZSI/Chennai and based on the various original description data's and specimens collected from in-situ a total 87 examples of cockroaches from different plant ecosystem in Nilgiri hills, a part of an Western Ghats region. The diversity study revealed that *Blattella germanica* (24exs) was most

dominant followed by *Pseudoglomeris humbertiana* (21exs), *Supella* (*Supella*) *longipalpa* (18exs) and *Periplaneta americana* (13exs). The knowledge gathered here will provide useful information for future studies aiming to understand more deeply the processes of speciation and faunal diversity of insects particularly Blattids (Cockroaches) in Nilgiri hills, Western Ghats part of Tamil Nadu.

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