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Garima Singh
Department of Zoology,
Rajasthan University, Jaipur,
Rajasthan, India

Rajendra Singh
Department of Zoology, D.D.U.
Gorakhpur University,
Gorakhpur, Uttar Pradesh, India

Updated check-list of Indian Eriosomatinae (Aphidinae: Aphididae: Hemiptera) and their food plants

Garima Singh and Rajendra Singh

Abstract

The articles provides updated checklist of Indian aphids (Aphididae: Hemiptera) belonging to the subfamily Eriosomatinae and their food plants. Out of 470 valid species of world Eriosomatinae assigned to 53 genera, in India only 64 species assigned to 19 genera were recorded so far, out of which 22 species are endemic. Some of them are pestiferous. These aphids feed on 130 valid plant species belonging to 30 plant families. *Tetraneura (Tetraneurella) nigriabdominalis* was observed highly polyphagous infesting 64 plant species followed by *Geoica lucifuga* (22 plant species), *Tetraneura (Tetraneura) radicolica* (17 plant species), *Tetraneura (Indotetraneura) basui* (13 plant species), and *Forda orientalis* (12 plant species). The most preferred plants for these aphids belong to family Poaceae (76 plant species), followed by family Rosaceae (17 species), Saliaceae (9 species), Anacardiaceae (6 species) and Asteraceae (6 species). The host plant of *Ceratopemphigella delhiensis* is still not known as it was only light trapped.

Keywords: Eriosomatinae, Eriosomatini, Fordini, Pemphigini, checklist, food plant, records, food plant catalogue

Introduction

The Eriosomatinae is one of the subfamily of the family Aphididae (Aphidoidea: Sternorrhyncha: Hemiptera) and is composed of 470 valid species belonging to 53 genera distributed in the Holarctic and Oriental regions^[1]. Earlier, it was known as Pemphiginae^[2, 3] or Pemphigidae^[4, 5]. The Eriosomatinae has been considered primitive among Aphididae according to certain morphological traits, e.g., the 3-faceted eyes observed in aptera, the reduced antennal segments, and vestigial siphunculi^[5]. Based on morphological and biological evidences, Eriosomatinae was grouped into 3 tribes: Eriosomatini, Pemphigini, and Fordini^[3, 6, 7]. Although, in past these tribes were divided into subtribes^[2, 5], in recent aphid taxonomy, there was no such subdivisions^[1, 8, 7].

The members of Eriosomatinae, commonly called as woolly aphids, are sucking insects that live on plant juice and produce filamentous waxy white covering which resembles cotton or wool. The adults are winged and migrate to new locations where they lay egg masses. The nymphs often form large cottony masses on twigs, for protection from predators. The Eriosomatinae is typically known for inducing galls on primary host plants and displays a heteroecious holocyclic life history, i.e. seasonal host alternation and cyclical parthenogenesis, and host-plant specificity^[9, 10]. The woolly apple aphid, *Eriosoma lanigerum* (Hausmann, 1802) is a widespread pest of fruit trees, feeding principally on apple, but also, pears, hawthorn, ash, alders, elms and oaks^[11,-13]. Similarly, the rice root aphid, *Tetraneura (Tetraneurella) nigriabdominalis* (Sasaki, 1899) is a major pest of many cereal crops, particular rice and millets. The biology and brief history of taxonomy of these aphids are summarized by Ghosh^[14]. The nomenclatural as well as hierarchy of categories in aphid taxonomy was recently described^[6-8, 15].

In the series of publications regarding the catalogue of the aphid species and their food plants in India^[15-25], this article is the next in series dealing with Indian Eriosomatinae.

This paper is the next one, in the series (after subfamilies Aiceoninae, Anoeciinae, Chaitophorinae and Drepanosiphinae^[15]; Aphidinae^[16-24]; and Calaphidinae^[25] concerning the food plant catalogue of Indian Aphididae based on the survey of existing literature. In most of the literature published earlier, several errors crept in scientific names of the aphids and plants even in the recent ones.

Correspondence
Rajendra Singh
Department of Zoology, D.D.U.
Gorakhpur University,
Gorakhpur, Uttar Pradesh, India

It happens because such contents become outdated quickly and, due to their perceived comprehensiveness, readers sometimes overlook newer sources of data. Additionally, the researches on aphid taxonomy as well as their host plants is continued with the description of new taxa, the modified status of others, and the publication of other nomenclatural decisions. In the present compilation, attempts have been made to correct these errors in the scientific names of the aphids following recent taxonomic literatures [1, 3, 8, 26-30] and for plants, <http://www.ars-grin.gov> and <http://www.theplantlist.org> (version 1.1). At several places, their synonymies were also mentioned. The food plants of all 64 species of Indian Eriosomatinae assigned under 19 genera are catalogued both aphid-wise and plant-wise. Aphid species marked with (*) are wrongly reported for another valid species, and marked with (?) no plant species exists in literature by this name.

A. Aphid - Food Plants Record of Eriosomatinae

I. Tribe: Eriosomatini

1. *Eriosoma kashmiricum* Ghosh, Verma & Raychaudhuri, 1976

= *Eriosoma (Eriosoma) kashmiricum* Ghosh, Verma & Raychaudhuri, 1976 [31]

= *Eriosoma (Schizoneura) kashmiricum* Ghosh, Verma & Raychaudhuri, 1976 [14]

- *Alnus* sp. (Betulaceae) [14, 32, 33]
- *Ulmus villosa* Brandis ex Gamble (= *Ulmus laevigata* Royle) (Ulmaceae) [34, 35]
- *Ulmus* sp. (Ulmaceae) [36, 37]

2. *Eriosoma lanigerum* (Hausmann, 1802)

= *Eriosoma (Eriosoma) lanigerum* (Hausmann, 1802) [31]

= *Schizoneura lanigerum* (Hausmann, 1802) [38, 39]

- *Cestrum nocturnum* L. (Solanaceae) [40]
- *Cotoneaster* sp. (Rosaceae) [34]
- *Malus baccata* (L.) Borkh. (= *Pyrus baccata* L.) (Rosaceae) [41, 42]
- *Malus domestica* Borkh. (= *Pyrus malus* L.) (Rosaceae) [41-55]
- *Malus sylvestris* (L.) Mill. (= *Pyrus sylvestris* L.) (Rosaceae) [41, 50]
- *Malus* sp. (Rosaceae) [56]
- *Pyrus communis* L. (Rosaceae) [45, 50, 52]
- *Pyrus polycarpa* Hook.f. (Rosaceae) [14]
- *Pyrus* sp. (Rosaceae) [40, 57]
- Unidentified plant: [41, 58]; (Rosaceae) [59]

3. *Eriosoma lanuginosum* (Hartig, 1839)

= *Eriosoma (Schizoneura) lanuginosum* (Hartig, 1839) [14]

= *Eriosoma taskhari* Gulamullah, 1942 [14]

- *Populus deltoides* Marshall (Salicaceae) [60]
- *Populus* sp. (Salicaceae) [61]

4. *Eriosoma longipilosum* Chakrabarti & Raychaudhuri, 1975

= *Eriosoma (Schizoneura) longipilosum* Chakrabarti & Raychaudhuri, 1975 [14]

- *Pteris* sp. (Pteridaceae) [43, 62]

5. *Eriosoma phaenax* Mordvilko, 1923

= *Eriosoma (Schizoneura) phaenax* Mordvilko, 1923 [14]

- *Ulmus montana* Stokes (Ulmaceae) [14, 37]
- *Ulmus wallichiana* Planch. (Ulmaceae) [43, 63, 64]

6. *Eriosoma* sp.

- *Cotoneaster aitchisoni* Schneider (Rosaceae) [65]
- *Lonicera* sp. (Caprifoliaceae) [66]

7. *Eriosoma ulmi* (Linnaeus, 1758)

= *Eriosoma (Schizoneura) ulmi* (Linnaeus, 1758) [14, 67]

- *Ulmus villosa* Brandis ex Gamble (= *Ulmus laevigata* Royle) (Ulmaceae) [55, 68]
- *Ulmus wallichiana* Planch. (Ulmaceae) [37]

8. *Hemipodaphis monstrosa* David, Narayanan & Rajasingh, 1971

- Unidentified plants [69]

9. *Kaltenbachella carpnicola* Ghosh, Chakrabarti & Bhattacharya, 1981

- *Carpinus* sp. (Corylaceae) [34, 70]

10. *Kaltenbachella pallida* (Haliday, 1838)

- *Ulmus* sp. (Ulmaceae) [34]

11. *Schizoneurella indica* Hille Ris Lambers, 1973

- *Malus pumila* Mill. (Rosaceae) [59]
- *Ulmus* sp. (Ulmaceae) [83]
- *Ulmus villosa* Brandis ex Gamble (Ulmaceae) [37, 59]
- *Ulmus wallichiana* Planch. (Ulmaceae) [55, 64, 68]

12. *Tetraneura (Indotetraneura) basui* Hille Ris Lambers, 1970

= *Tetraneura basui* Hille Ris Lambers, 1970 [31, 72]

- *Capillipedium* sp. (Poaceae) [73]
- *Chrysanthemum* sp. (Asteraceae) [74]
- *Echinochloa colona* (L.) Link (Poaceae) [73, 75, 76]
- *Eleusine coracana* (L.) Gaertn. (Poaceae) [77]
- *Eleusine indica* (L.) Gaertn. (Poaceae) [73, 75, 76]
- *Eragrostis amabilis* (L.) Wight & Arn. (Poaceae) [77, 78]
- *Oryza sativa* L. (Poaceae) [73, 75, 76]
- *Paspalum conjugatum* Bergius (Poaceae) [73]
- *Paspalum scrobiculatum* L. (= *Paspalum commersonii* Lam.) (Poaceae) [73]
- *Pennisetum glaucum* (L.) R. Br. (= *Setaria glauca* (L.) P. Beauv.) (Poaceae) [73, 75, 76]
- *Pogonatherum paniceum* (Lam.) Hack. (Poaceae) [73, 75, 76]
- *Polypogon monspeliensis* (L.) Desf. (Poaceae) [73, 75, 76]
- Unidentified plants (Poaceae) [75, 76]

13. *Tetraneura (Indotetraneura) javensis* van der Goot, 1917

= *Tetraneura javensis* van der Goot, 1917 [31]

= *Tetraneura cynodoti coimbatorensis* George, 1927 (nomen nudum)

= *Tetraneura ulmi* (Linnaeus, 1758) [47, 79]

= *Tetraneura* sp. [79]

- *Capillipedium* sp. (Poaceae) [50]
- *Echinochloa colona* (L.) Link (= *Panicum colonum* L.) (Poaceae) [50, 79]
- *Eleusine coracana* (L.) Gaertn. (Poaceae) [50, 79, 80]
- *Oryza sativa* L. (Poaceae) [50, 79, 80]
- *Panicum javanicum* Poir. (Poaceae) [79]
- *Panicum miliaceum* L. (Poaceae) [50, 79]
- *Saccharum officinarum* L. (Poaceae) [47, 50, 81, 82]
- *Setaria italica* (L.) P. Beauv. (Poaceae) [50, 79]
- *Sorghum bicolor* (L.) Moench (Poaceae) [50, 79]

- *Ulmus villosa* Brandis ex Gamble (Ulmaceae) [34]
- Unidentified plants: [41, 47]

14. *Tetraneura (Indotetraneura) lambersi* Chakrabarti & Maity, 1978

- = *Tetraneura lambersi* Chakrabarti & Maity, 1978 [31]
 • Unidentified plant (Poaceae) [83]

15. *Tetraneura (Indotetraneura) utpali* Chakrabarti, Maity & Bhattacharya, 1982

- *Apluda mutica* L. (Poaceae) [84]

16. *Tetraneura (Tetraneura) indica* Ghosh L.K., 1977

- = *Tetraneura indica* Ghosh, 1977 [14]
 • *Agrostis agrostiflora* (Beck) Janch. & H. Neumayer (= *Calamagrostis pilosa* (P. Beauv.) Greuter) (Poaceae) [14, 85]

17. *Tetraneura (Tetraneura) kalimpongensis* Raychaudhuri, Pal & Ghosh, 1978

- = *Tetraneura kalimpongensis* Raychaudhuri, Pal & Ghosh, 1978 [14, 76]
 • *Pennisetum* sp. (Poaceae) [73, 75, 76]
 • *Saccharum officinarum* L. (Poaceae) [73, 75, 76]

18. *Tetraneura (Tetraneura) multisetosa* Raychaudhuri, Pal & Ghosh, 1978

- = *Tetraneura multisetosa* Raychaudhuri, Pal & Ghosh, 1978 [14, 53]
 • *Capillipedium parviflorum* (R. Br.) Stapf. (Poaceae) [73, 75, 76]
 • *Imperata cylindrica* (L.) Raeusch. (Poaceae) [73, 75, 76]
 • Unidentified plants (Poaceae) [75, 76]

19. *Tetraneura (Tetraneura) radiculicola* Strand, 1929

- = *Tetraneura radiculicola* Strand, 1929 [41, 83, 86, 87]
 = *Tetraneura heterohirsuta* Carver & Basu, 1961 [88]
 • *Brachiaria ramosa* (L.) Stapf. (Poaceae) [73, 75, 76, 89]
 • *Capillipedium* sp. (Poaceae) [73, 75, 76, 89]
 • *Echinochloa crus-galli* (L.) P. Beauv. (Poaceae) [73, 75, 76]
 • *Eleusine coracana* (L.) Gaertn. (Poaceae) [31, 73, 90]
 • *Eleusine* sp. (Poaceae) [89, 91]
 • *Eragrostis gangetica* (Roxb.) Steud. (Poaceae) [73, 75, 76]
 • *Eragrostis tenella* (L.) Beauv. ex Roem. (Poaceae) [31, 76]
 • *Erianthus* sp. (Poaceae) [89, 91]
 • *Imperata cylindrica* (L.) Raeusch. (= *Imperata arundinacea* Cirillo) (Poaceae) [41, 50, 52, 73, 75, 76, 88, 92, 93]
 • *Imperata* sp. (Poaceae) [83, 89]
 • *Oryza sativa* L. (Poaceae) [89, 94]
 • *Pennisetum glaucum* (L.) R. Br. (= *Setaria glauca* (L.) P. Beauv.) (Poaceae) [73, 75, 76]
 • *Poa* sp. (Poaceae) [34]
 • *Pogonatherum paniceum* (Lam.) Hack. (Poaceae) [73, 75, 76]
 • *Polypogon fugax* Nees ex Steud. (Poaceae) [73, 75, 76]
 • *Triticum aestivum* ssp. *aestivum* L. (= *Triticum vulgare* Vill.) (Poaceae) [73, 75, 76]

20. *Tetraneura (Tetraneura) sikkimensis* Raychaudhuri, Pal & Ghosh, 1978

- = *Tetraneura sikkimensis* Raychaudhuri, Pal & Ghosh, 1978 [76]
 • *Eragrostis nigra* Nees ex Steud. (Poaceae) [14, 73, 75, 76]

21. *Tetraneura (Tetraneura) ulmi* (Linnaeus, 1758)

- = *Tetraneura ulmi* (Linnaeus, 1758) [76]
 • *Ulmus wallichiana* Planch. (Ulmaceae) [95]
 • *Ulmus* sp. (Ulmaceae) [37]

22. *Tetraneura (Tetraneurella) nigriabdominalis* (Sasaki, 1899)

- = *Tetraneura hirsuta* (Baker, 1921) [44, 81, 91, 96-99]
 = *Tetraneura nigriabdominalis* (Sasaki, 1899) [76, 73]
 • *Andropogon hallii* Hack. (Poaceae) [44, 81]
 • *Axonopus compressus* (Sw.) P. Beauv. (Poaceae) [73, 75, 76]
 • *Bothriochloa pertusa* (L.) A. Camus (Poaceae) [34]
 • *Brachiaria ramosa* (L.) Stapf. (Poaceae) [73, 75, 76]
 • *Brachiaria* sp. (Poaceae) [73]
 • *Brachypodium* sp. (Poaceae) [34, 37]
 • *Capillipedium parviflorum* (R. Br.) Stapf. (Poaceae) [73]
 • *Capillipedium* sp. (Poaceae) [75, 76]
 • *Cenchrus ciliaris* L. (= *Pennisetum cenchroides* Rich.) (Poaceae) [44, 81]
 • *Chionachne semiteres* (Benth.) Henrard (Poaceae) [44, 81]
 • *Chrysanthemum* sp. (Asteraceae) [50, 111]
 • *Chrysopogon aciculatus* (Retz.) Trin. (= *Andropogon aciculatus* Retz.) (Poaceae) [73, 75, 76]
 • *Cymbopogon martini* (Roxb.) Watson (Poaceae) [44, 81]
 • *Cynodon dactylon* (L.) Pers. (Poaceae) [35, 51, 73, 75, 76]
 • *Cynodon* sp. (Poaceae) [73, 75, 76]
 • *Cyperus rotundus* L. (Cyperaceae) [50, 101]
 • *Dactyloctenium aegypticum* (L.) Willd. (Poaceae) [44, 73, 75, 76, 81]
 • *Dichanthium annulatum* (Forssk.) Stapf. (Poaceae) [44, 73, 81]
 • *Digitaria* sp. (Poaceae) [44, 73, 81]
 • *Echinochloa colona* (L.) Link (Poaceae) [73, 75, 76, 81, 98]
 • *Echinochloa* sp. (Poaceae) [34]
 • *Eleusine coracana* (L.) Gaertn. (Poaceae) [44, 50, 52, 73, 75, 76, 81, 82, 97]
 • *Eleusine indica* (L.) Gaertn. (Poaceae) [73, 75, 76, 83]
 • *Eragrostis gangetica* (Roxb.) Steud. (Poaceae) [73, 75, 76]
 • *Eragrostis interrupta* Beauv. (Poaceae) [78, 102]
 • *Eragrostis nigra* Nees ex Steud. (Poaceae) [73, 75, 76]
 • *Eragrostis tenella* (L.) Beauv. ex Roem. (Poaceae) [73, 75, 76]
 • *Ficus* sp. (Moraceae) [50, 52]
 • *Imperata cylindrica* (L.) Raeusch. (= *Imperata arundinacea* Cirillo) (Poaceae) [50, 73, 75, 76]
 • *Inula cappa* (Buch.-Ham. Ex D. Don) DC. (Asteraceae) [50, 52]
 • *Iseilema laxum* Hack. (Poaceae) [44, 81]
 • *Musa paradisiaca* L. (Musaceae) [50, 52]
 • *Nicotiana* sp. (Solanaceae) [50, 111]
 • *Oplismenus burmannii* (Retz.) P. Beauv. (Poaceae) [73, 75, 76]
 • *Oryza sativa* L. (Poaceae) [44, 51, 59, 73, 75, 76, 78, 81]
 • *Panicum maximum* Jacq. (Poaceae) [44, 80, 81]
 • *Panicum miliaceum* L. (Poaceae) [81]
 • *Paspalum conjugatum* Bergius (Poaceae) [73, 75, 76, 78, 102]
 • *Paspalum dialatum* Poir. (Poaceae) [50, 52]
 • *Paspalum scrobiculatum* L. (= *Paspalum commersonii* Lam.) (Poaceae) [73]
 • *Paspalum* sp. (Poaceae) [73]
 • *Pennisetum glaucum* (L.) R. Br. (= *Setaria glauca* (L.) P. Beauv.) (Poaceae) [73, 75, 76, 83]
 • *Pennisetum purpureum* Schumach. (Poaceae) [44, 81]

- *Pennisetum setigerum* (Vahl) Wipff. (= *Cenchrus setigerus* Vahl.) (Poaceae) [44, 80, 81]
- *Pennisetum* sp. (Poaceae) [34]
- *Pisum sativum* L. (Fabaceae) [111]
- *Poa* sp. (Poaceae) [34]
- *Pogonatherum paniceum* (Lam.) Hack. (= *Pogonatherum saccharoideum* P. Beauv.) (Poaceae) [14, 73, 75, 76]
- *Polypogon fugax* Nees ex Steud. (Poaceae) [73, 75, 76]
- *Polypogon monspeliensis* (L.) Desf. (Poaceae) [73, 75, 76]
- *Populus* sp. (Salicaceae) [40]
- *Rootus onii?* (Poaceae) [50, 52]
- *Saccharum officinarum* L. (Poaceae) [50, 81, 96]
- *Schima nervosum?* (Theaceae) [44, 81]
- *Setaria intermedia* Roem. & Schult. (Poaceae) [83]
- *Setaria italica* (L.) P. Beauv. (Poaceae) [81, 82]
- *Setaria pumila* ssp. *pallidefusca* (Schum.) B.K. Simon (= *Setaria pallido-fusca* (Schum.) Stapt & C.E. Hubb.) (Poaceae) [75, 76]
- *Sorghum bicolor* (L.) Moench. (= *Sorghum vulgare* Pers.) (Poaceae) [44, 80, 81]
- *Sorghum halepense* (L.) Pers. (= *Andropogon halepensis* (L.) Brot. (Poaceae) [34, 44, 81, 103]
- *Synedrella nodiflora* (L.) Gaertn. (= *Synedrella nodifolia* misnomer) (Asteraceae) [50, 52]
- *Triticum aestivum* L. (= *Triticum vulgare* Vill.) (Poaceae) [73, 103]
- *Urochloa panicoides* Beauv. (= *Urochloa helopus* (Trin.) Stapf.) (Poaceae) [81]
- *Zea mays* L. (Poaceae) [50, 52]
- Unidentified plants: Brassicaceae [81, 104, 105]; Poaceae [45, 50, 78, 81, 99]; Solanaceae [81, 104, 105]

23. *Tetraneura* sp.

- *Ailanthus altissima* (P. Mill.) Swingle (Simaroubaceae) [55, 65]
- *Populus alba* L. (Salicaceae) [106]

II. Tribe: Fordini

24. *Asiphonella cynodonti* (Das, 1918)

= *Geoca cynodonti* (Das) [47, 81]

- *Cynodon dactylon* (L.) Pers. (Poaceae) [47, 73, 75, 76, 81]

25. *Baizongia pistaciae* (Linnaeus, 1767)

= *Pemphigus aedificator* Buckton, 1893 [33, 38, 40, 107]

= *Dasia aedificator* (Buckton, 1893) [81]

- *Malus domestica* Borkh. (= *Pyrus malus* L.) (Rosaceae) [40]
- *Pistacia fastula?* (Anacardiaceae) [40, 57]
- *Pistacia integerrima* J. Stewart ex Brandis (Anacardiaceae) [33, 81]
- *Pistacia terebinthus* L. (Anacardiaceae) [38, 81]
- *Pistacia* sp. (Anacardiaceae) [37, 43, 62]
- Unidentified plant: Asteraceae [40]

26. *Chaetogeica folioidentata* (Tao 1947)

Chakrabarti and Sarkar [34] and Ghosh [14] considered Indian samples of this species as *Chaetogeica graminiphaga* Raychaudhuri, Pal & Ghosh, 1978

- *Vicia faba* L. (Fabaceae) [111]
- *Eleusine indica* (L.) Gaertn. (Poaceae) [73, 76]
- *Ischaemum* sp. (Poaceae) [73]
- *Polypogon fugax* Nees ex Steud. (Poaceae) [73, 76]
- Unidentified plants (Poaceae) [76]

27. *Chaetogeica graminiphaga* Raychaudhuri, Pal & Ghosh, 1978

- *Capillipedium parviflorum* (R. Br.) Stapf. (Poaceae) [73, 75, 76]
- *Eleusine indica* (L.) Gaertn. (Poaceae) [75]
- *Polypogon fugax* Nees ex Steud. (Poaceae) [75]
- Unidentified plants (Poaceae) [75]

28. *Chaetogeica polychaeta* Raychaudhuri, Pal & Ghosh, 1978

- *Capillipedium* sp. (Poaceae) [73]
- *Cynodon dactylon* (L.) Pers. (Poaceae) [51]
- *Oryza sativa* L. (Poaceae) [73, 75, 76]
- Unidentified plants (Poaceae) [51, 75, 76]

29. *Chaetogeica* sp.

- Unidentified plants (Poaceae) [50, 59]

30. *Forda hirsuta* Mordvilko, 1928

- *Pennisetum glaucum* (L.) R. Br. (= *Setaria glauca* (L.) P. Beauv.) (Poaceae) [82]
- *Sorghum bicolor* (L.) Moench (Poaceae) [82]

31. *Forda marginata* Koch, 1857

= *Forda trivialis* Passerini, 1860 [31, 76, 73]

= *Forda* sp. [52]

- *Arundinaria* sp. (Poaceae) [73]
- *Eragrostis nigra* Nees ex Steud. (Poaceae) [108]
- *Eragrostis uniloides* (Retz.) Nees ex Steud. (Poaceae) [73]
- *Imperata cylindrica* (L.) Raeusch. (= *Imperata arundinacea* Cirillo) (Poaceae) [14]
- *Pistacia integerrima* J. Stewart (Anacardiaceae) [34]
- *Pistacia* sp. (Anacardiaceae) [109, 110]
- *Poa annua* L. (Poaceae) [34]
- *Triticum aestivum* ssp. *aestivum* L. (= *Triticum vulgare* Vill.) (Poaceae) [14, 52, 73, 75, 76]
- Unidentified plant (Poaceae) [93]

32. *Forda orientalis* George, 1920

= *Forda (Pentaphis) orientalis* George, 1920 [111]

- *Andropogon* sp. (Poaceae) [50]
- *Bothriochloa insculpta* (Hochst. ex A. Rich) A. Camus (Poaceae) [43, 111]
- *Bothriochloa pertusa* (L.) A. Camus (Poaceae) [34]
- *Bothriochloa* sp. (Poaceae) [34]
- *Brachiaria* sp. (Poaceae) [34]
- *Dichanthium* sp. (Poaceae) [34]
- *Oryza sativa* L. (Poaceae) [80]
- *Pennisetum glaucum* (L.) R. Br. (= *Setaria glauca* (L.) P. Beauv.) (Poaceae) [50, 81, 111]
- *Poa* sp. (Poaceae) [34]
- *Sorghum bicolor* (L.) Moench. (= *Sorghum vulgare* Pers.) (Poaceae) [14, 47, 81, 111]
- *Toona ciliata* M. Roem. (Meliaceae) [37, 112]

33. *Forda riccobonii* (Stefani, 1899)

- *Bothriochloa pertusa* (L.) A. Camus (Poaceae) [14, 34, 113]
- *Bothriochloa* sp. (Poaceae) [84]
- *Dichanthium annulatum* (Forssk.) Stapf. (Poaceae) [34]
- *Dichanthium* sp. (Poaceae) [84]
- *Pistacia integerrima* J. Stewart (Anacardiaceae) [10]
- *Poa* sp. (Poaceae) [34]

34. *Forda* sp.

- *Andropogon* sp. (Poaceae) [50]
- *Lonicera quinquelocularis* Hardw. (Caprifoliaceae) [66]
- *Prunus* sp. (Rosaceae) [106]
- *Sorghum bicolor* (L.) Moench (= *Andropogon vulgaris* Raspail) (Poaceae) [47, 81]
- *Triticum aestivum* L. (Poaceae) [50]

35. *Geoica indica* Kulkarni & Rao, 1981

- Grass root (Poaceae) [114]

36. *Geoica lucifuga* (Zehntner, 1897)

- *Bothriochloa* sp. (Poaceae) [34]
- *Carex* sp. (Cyperaceae) [73]
- *Cynodon dactylon* (L.) Pers. (Poaceae) [51, 73, 75, 76]
- *Cyperus rotundus* L. (Cyperaceae) [74, 115]
- *Dichanthium annulatum* (Forssk.) Stapf. (Poaceae) [34]
- *Dichanthium* sp. (Poaceae) [34]
- *Eleusine coracana* (L.) Gaertn. (Poaceae) [73]
- *Eleusine indica* (L.) Gaertn. (Poaceae) [73]
- *Eragrostis nigra* Nees ex Steud. (Poaceae) [73]
- *Imperata cylindrica* (L.) Raeusch. (= *Imperata arundinacea* Cirillo) (Poaceae) [73]
- *Oryza sativa* L. (Poaceae) [52, 73, 75, 77, 78, 76]
- *Paspalidium flavidum* (Retz.) A. Camus (Poaceae) [34]
- *Paspalum scrobiculatum* L. (= *Paspalum commersonii* Lam.; = *Paspalum commestatum* misnomer for *Paspalum commutatum* Nees?) (Poaceae) [73, 75, 76]
- *Poa annua* L. (Poaceae) [73]
- *Poa* sp. (Poaceae) [34]
- *Saccharum officinarum* L. (Poaceae) [41, 52]
- *Solanum tuberosum* L. (Solanaceae) [41, 50]
- *Sorghum bicolor* (L.) Moench (Poaceae) [81, 116]
- *Sorghum halepense* (L.) Pers. (Poaceae) [34]
- *Sporobolus* sp. (Poaceae) [73, 75, 76]
- *Triticum aestivum* ssp. *aestivum* L. (= *Triticum vulgare* Vill.) (Poaceae) [44, 73, 74, 81]
- Unidentified plants: Cyperaceae [76]; Poaceae [76]

37. *Geoica sikkimensis* Raychaudhuri, Pal & Ghosh, 1978

= *Geoica* sp. [52]

- *Polypogon fugax* Nees ex Steud. (Poaceae) [73, 75, 76]

38. *Geoica* sp.

- *Andropogon* sp. (Poaceae) [47, 50]
- *Sorghum bicolor* (L.) Moench (Poaceae) [47]

39. *Geoica utricularia utricularia* (Passerini, 1856)

= *Geoica utricularia* (Passerini, 1856) [34]

- *Pistacia integerrima* J. Stewart (Anacardiaceae) [34]

40. *Kaburagia ailanthi* Chowdhari, Basu, Chakrabarti & Raychaudhuri, 1969

- *Ailanthus altissima* (P. Mill.) Swingle (= *Ailanthus glandulosa* Desf.) (Simaroubaceae) [37, 40, 85]
- *Ailanthus* sp. (Simaroubaceae) [117]

41. *Kaburagia* sp.

- *Ailanthus* sp. (Simaroubaceae) [118]

42. *Smynthuodes betae* Westwood, 1849

= *Trifidaphis gossypii* Kulkarni, 1956 [41, 81]

= *Smynthuodes* sp. [52]

= *Forda trivialis* Passerini, 1860* [75]

- *Cynodon dactylon* (L.) Pers. (Poaceae) [50, 52, 73, 75, 76]
- *Galinsoga parviflora* Cav. (Asteraceae) [40]
- *Gossypium* sp. (Malvaceae) [41, 119]
- *Phaseolus vulgaris* L. (Fabaceae) [41, 120]
- *Setaria palmifolia* (J. Koeing) Stapf. (Poaceae) [73]
- *Triticum aestivum* ssp. *aestivum* L. (= *Triticum vulgare* Vill.) (Poaceae) [75]
- *Vigna radiata* (L.) R. Wiczek var. *radiata* (= *Phaseolus radiatus* L.) (Fabaceae) [50]
- Unidentified plant (Poaceae) [76]

43. *Smynthuodes* sp.

- *Cynodon dactylon* (L.) Pers. (Poaceae) [50]

III. Tribe: Pemphigini**44. *Ceratopemphigella delhiensis* Menon & Pawar, 1958**

- On light trap [14, 81, 121, 122]

45. *Epipemphigus imaicus* (Cholodkovsky, 1912)

- *Ailanthus altissima* (P. Mill.) Swingle (= *Ailanthus glandulosa* Desf.) (Simaroubaceae) [40, 85, 123]
- *Malus domestica* Borkh. (= *Pyrus malus* L.) (Rosaceae) [53]
- *Polygonum alatum* Buch.-Ham. ex D. Don (Polygonaceae) [124]
- *Populus ciliata* Wall. ex Royle (Salicaceae) [33, 37, 40, 43, 123, 125]
- *Populus deltoides* Marshall (Salicaceae) [60]
- *Populus* sp. (Salicaceae) [40, 41, 126]
- *Pyrus* sp. (Rosaceae) [40]
- Unidentified plant [40, 126]

46. *Epipemphigus marginalis* Chakrabarti & Banerjee, 1993

- *Impatiens falcifer* Hook.f. (Balsaminaceae) [124]
- *Populus ciliata* Wall. ex Royle (Salicaceae) [124]

47. *Formosaphis micheliae* Takahashi, 1925

- *Buchanania latifolia* Roxb. (Anacardiaceae) [102]
- *Magnolia campbelli* Hook.f. & Thoms. (Magnoliaceae) [41, 52, 76]
- *Magnolia champaka* (L.) Baill. ex Pierre (= *Michelia champaka* L.) (Magnoliaceae) [51, 76, 102]
- *Magnolia stellata* (Siebold & Zucc.) Maxim. (Magnoliaceae) [41, 52, 76]
- *Olea* sp. (Oleaceae) [52, 76]

48. *Pachypappa populi* (Linnaeus, 1758)

= *Aphis populi* Linnaeus, 1758 [60]

- *Populus deltoides* Marshall (Salicaceae) [60]

49. *Pemphigus (Pemphiginus) vesicarius* Passerini, 1861

- *Populus* sp. (Salicaceae) [37]

50. *Pemphigus (Pemphigus) bursarius* (Linnaeus, 1758)

= *Pemphigus lichtensteini* Tullgren, 1909 [127]

- *Populus deltoides* Marshall (Salicaceae) [60]
- *Populus nigra* var. *italica* Muench. (Salicaceae) [128]
- *Populus* sp. (Salicaceae) [52, 76]
- *Quercus* sp. (Fagaceae) [52, 76, 127]

51. *Pemphigus (Pemphigus) dorocola* Matsumura, 1917

- *Populus ciliata* Wall. ex Royle (Salicaceae) [34, 129]

52. *Pemphigus (Pemphigus) eastopi* Mondal ex Ghosh, 1984= *Pemphigus eastopi* Mondal, 1977 (nom. nudum) [130]

- *Populus ciliata* Wall. ex Royle (Salicaceae) [14]

53. *Pemphigus (Pemphigus) immunis* Buckton, 1896= *Pemphigus immunis* Buckton, 1896 [14]

- *Populus alba* L. (Salicaceae) [66]
- *Populus caspica* (Bornm.) Bornm. (Salicaceae) [64]
- *Populus ciliata* Wall. ex Royle (Salicaceae) [34, 55]
- *Populus deltoides* Marshall (Salicaceae) [60]
- *Populus nigra* L. (Salicaceae) [37, 64]
- *Populus* sp. (Salicaceae) [131, 132, 133]
- *Populus tremula* L. (Salicaceae) [81]
- Unidentified plants [38]

54. *Pemphigus (Pemphigus) indicus* Kieffer, 1908

- Unidentified plants [37, 134]

55. *Pemphigus (Pemphigus) matsumurai* Monzen, 1929

- *Gnaphalium* sp. (Asteraceae) [10]

- *Populus ciliata* Wall. ex Royle (Salicaceae) [135]

56. *Pemphigus (Pemphigus) mordwilkoii* Cholodkovsky, 1912= *Pemphigus mordvilkoii* Cholodkovsky, 1912 [14]

- *Populus caspica* (Bornm.) Bornm. (Salicaceae) [55, 136]
- *Populus ciliata* Wall. ex Royle (Salicaceae) [37, 43, 137, 138]
- *Populus* sp. (Salicaceae) [34, 43, 61]

57. *Pemphigus (Pemphigus) nainitalensis* Cholodkovsky, 1912

- *Populus* sp. (Salicaceae) [43]

58. *Pemphigus (Pemphigus) napaeus* Buckton, 1896

- *Populus alba* L. (Salicaceae) [55]
- *Populus euphratica* Olivier (Salicaceae) [37]
- *Populus* sp. (Salicaceae) [38, 81, 131, 133]

59. *Pemphigus (Pemphigus) spyrotheceae spyrotheceae* Passerini, 1856= *Pemphigus spyrotheceae* Passerini, 1856 [14, 139]

- *Populus nigra* L. (Salicaceae) [14, 37]

60. *Pemphigus (Pemphigus) vulgaris* Raychaudhuri, Pal & Ghosh, 1978

- *Triticum aestivum* ssp. *aestivum* L. (= *Triticum vulgare* Vill.) (Poaceae) [74, 75, 76, 140]
- Unidentified plant (Poaceae) [76]

61. *Pemphigus* sp.

- *Abies pindrow* (Royle) Brandis (Pinaceae) [106]
- *Morus alba* L. (Moraceae) [106]
- *Populus alba* L. (Salicaceae) [33]
- *Populus ciliata* Wall. ex Royle (Salicaceae) [37, 66, 118, 117]
- *Populus* sp. (Salicaceae) [74, 40, 141]
- *Prunus cerasus* L. (Rosaceae) [40, 57]
- Unidentified plant (Poaceae) [142, 143, 144]

62. *Prociphilus (Prociphilus) caryae fitchii* Baker & Davidson, 1917

- *Lonicera quinquelocularis* Hardw. (Caprifoliaceae) [14]

63. *Prociphilus (Prociphilus) cornifoliae* Singh, Das & Raychaudhuri, 1977

- *Cornus* sp. (Cornaceae) [145]

64. *Prociphilus (Prociphilus) micheliae* Hille Ris Lambers, 1933= *Prociphilus micheliae* Hille Ris Lambers, 1933 [146]

- *Magnolia champaka* (L.) Baill. ex Pierre (= *Michelia champaka* L.) (Magnoliaceae) [33, 43, 146]
- *Michelia* sp. (Magnoliaceae) [76]

65. *Prociphilus (Prociphilus) oriens* Mordvilko, 1935

- Unidentified plants [14]

66. *Prociphilus (Prociphilus) osmanthae* Essig & Kuwana, 1918

- *Alnus nepalensis* D. Don (Betulaceae) [64, 66]
- *Croton* sp. (Euphorbiaceae) [35, 147]
- *Magnolia champaka* (L.) Baill. ex Pierre (= *Michelia champaka* L.) (Magnoliaceae) [147]
- Unidentified plants [76, 148]

67. *Prociphilus (Prociphilus) taxus* (Ghosh *et al.*, 1969)= *Anocaudus taxus* Ghosh, Chakrabarti, Chowdhuri & Raychaudhuri, 1969 [40, 125]

- *Taxus baccata* L. (Taxaceae) [40, 125]
- *Taxus* sp. (Taxaceae) [59]

68. *Prociphilus (Stagona) himalayensis* Chakrabarti, 1976= *Prociphilus himalayensis* Chakrabarti 1976 [149]

- *Lonicera quinquelocularis* Hardw. (Caprifoliaceae) [150, 151]
- *Pinus wallichiana* A.B. Jacks. (= *Pinus excelsa* Wall. ex D. Don) (Pinaceae) [40, 149, 151]
- *Pinus* sp. (Pinaceae) [152]

69. *Prociphilus (Stagona) xylostei* (de Geer, 1773)

- *Syringa emodi* Wall. ex Royle (= *Syringea emodi* misnomer) (Oleaceae) [14]

70. *Prociphilus* sp. A

- *Fraxinus floribunda* Wall. (= *Paraxinus floribunda* misnomer) (Oleaceae) [153]
- *Photinia notoniana* Wight & Arn. (Rosaceae) [153]

71. *Prociphilus* sp. B

- *Fraxinus floribunda* Wall. (= *Paraxinus floribunda* misnomer) (Oleaceae) [153]
- *Photinia notoniana* Wight & Arn. (Rosaceae) [153]

72. *Prociphilus* sp.= *Stagona* sp. [154]

- *Crataegus songarica* K. Koch (Rosaceae) [64]
- *Fraxinus floribunda* Wall. (= *Paraxinus floribunda* misnomer) (Oleaceae) [76]
- *Lonicera quinquelocularis* Hardw. (Caprifoliaceae) [33, 55, 129, 154]
- *Photinia notoniana* Wight & Arn. (Rosaceae) [52, 76]
- *Populus* sp. (Salicaceae) [155]
- *Setaria* sp. (Poaceae) [118]
- *Tsuga dumosa* (D. Don) Don Fichler (= *Tsuga brunoniana* (Wall.) Carriere) (Pinaceae) [41, 156]

73. *Thecabius (Thecabius) affinis* (Kaltenbach, 1843)

- *Geranium* sp. (Geraniaceae) ^[83]
- *Ranunculus hirtellus* Royle ex D. Don (Ranunculaceae) ^[14, 83, 112]

B. Food Plants - Aphids Record of Eriosomatinae

1. *Abies pindrow* (Pinaceae)

- *Pemphigus* sp.

2. *Agrostis agrostiflora* (Poaceae)

- *Tetraneura (Tetraneura) indica*

3. *Ailanthus altissima* (Simaroubaceae)

- *Epipemphigus imaicus*
- *Kaburagia ailanthi*
- *Tetraneura* sp.

4. *Ailanthus* sp. (Simaroubaceae)

- *Kaburagia* sp.
- *Kaburagia ailanthi*

5. *Alnus nepalensis* (Betulaceae)

- *Prociphilus (Prociphilus) osmanthae*

6. *Alnus* sp. (Betulaceae)

- *Eriosoma kashmiricum*

7. *Andropogon hallii* (Poaceae)

- *Tetraneura (Tetraneurella) nigriabdominalis*

8. *Andropogon* sp. (Poaceae)

- *Forda orientalis*
- *Forda* sp.
- *Geoica* sp.

9. *Apluda mutica* L. (Poaceae)

- *Tetraneura (Indotetraneura) utpali*

10. *Arundinaria* sp. (Poaceae)

- *Forda marginata*

11. *Axonopus compressus* (Poaceae)

- *Tetraneura (Tetraneurella) nigriabdominalis*

12. *Bothriochloa insculpta* (Poaceae)

- *Forda orientalis*

13. *Bothriochloa pertusa* (Poaceae)

- *Forda orientalis*
- *Forda riccobonii*
- *Tetraneura (Tetraneurella) nigriabdominalis*

14. *Bothriochloa* sp. (Poaceae)

- *Forda orientalis*
- *Forda riccobonii*
- *Geoica lucifuga*

15. *Brachiara ramosa* (Poaceae)

- *Tetraneura (Tetraneurella) nigriabdominalis*
- *Tetraneura (Tetraneura) radicolica*

16. *Brachiara* sp. (Poaceae)

- *Forda orientalis*
- *Tetraneura (Tetraneurella) nigriabdominalis*

17. *Brachypodium* sp. (Poaceae)

- *Tetraneura (Tetraneurella) nigriabdominalis*

18. *Buchanania latifolia* (Anacardiaceae)

- *Formosaphis micheliae*

19. *Capillipedium parviflorum* (Poaceae)

- *Chaetogeoica graminiphaga*
- *Tetraneura (Tetraneura) multisetosa*
- *Tetraneura (Tetraneurella) nigriabdominalis*

20. *Capillipedium* sp. (Poaceae)

- *Tetraneura (Tetraneurella) nigriabdominalis*
- *Tetraneura (Tetraneura) radicolica*
- *Tetraneura (Indotetraneura) javensis*
- *Chaetogeoica polychaeta*
- *Tetraneura (Indotetraneura) basui*

21. *Carex* sp. (Cyperaceae)

- *Geoica lucifuga*

22. *Carpinus* sp. (Corylaceae)

- *Kaltenbachiella carpinicola*

23. *Cenchrus ciliaris* (Poaceae)

- *Tetraneura (Tetraneurella) nigriabdominalis*

24. *Cestrum nocturnum* (Solanaceae)

- *Eriosoma lanigerum*

25. *Chionachne semiteres* (Poaceae)

- *Tetraneura (Tetraneurella) nigriabdominalis*

26. *Chrysanthemum* sp. (Asteraceae)

- *Tetraneura (Indotetraneura) basui*
- *Tetraneura (Tetraneurella) nigriabdominalis*

27. *Chrysopogon aciculatus* (Poaceae)

- *Tetraneura (Tetraneurella) nigriabdominalis*

28. *Cornus* sp. (Cornaceae)

- *Prociphilus (Prociphilus) cornifoliae*

29. *Cotoneaster aitchisoni* (Rosaceae)

- *Eriosoma* sp.

30. *Cotoneaster* sp. (Rosaceae)

- *Eriosoma lanigerum*

31. *Crataegus songarica* (Rosaceae)

- *Prociphilus* sp.

32. *Croton* sp. (Euphorbiaceae)

- *Prociphilus (Prociphilus) osmanthae*

33. *Cymbopogon martini* (Poaceae)

- *Tetraneura (Tetraneurella) nigriabdominalis*

34. *Cynodon dactylon* (Poaceae)

- *Asiphonella cynodonti*
- *Chaetogeoica polychaeta*
- *Geoica lucifuga*
- *Smynthurodes betae*
- *Smynthurodes* sp.

- *Tetraneura (Tetraneurella) nigriabdominalis*
- 35. *Cynodon* sp. (Poaceae)**
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 36. *Cyperus rotundus* (Cyperaceae)**
 - *Geoica lucifuga*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 37. *Dactyloctenium aegypticum* (Poaceae)**
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 38. *Dichanthium annulatum* (Poaceae)**
 - *Forda riccobonii*
 - *Geoica lucifuga*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 39. *Dichanthium* sp. (Poaceae)**
 - *Forda orientalis*
 - *Forda riccobonii*
 - *Geoica lucifuga*
- 40. *Digitaria* sp. (Poaceae)**
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 41. *Echinochloa colona* (Poaceae)**
 - *Tetraneura (Indotetraneura) basui*
 - *Tetraneura (Indotetraneura) javensis*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 42. *Echinochloa crus-galli* (Poaceae)**
 - *Tetraneura (Tetraneura) radiculicola*
- 43. *Echinochloa* sp. (Poaceae)**
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 44. *Eleusine coracana* (Poaceae)**
 - *Geoica lucifuga*
 - *Tetraneura (Indotetraneura) basui*
 - *Tetraneura (Indotetraneura) javensis*
 - *Tetraneura (Tetraneura) radiculicola*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 45. *Eleusine indica* (Poaceae)**
 - *Chaetogeoica folioidentata*
 - *Chaetogeoica graminiphaga*
 - *Geoica lucifuga*
 - *Tetraneura (Indotetraneura) basui*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 46. *Eleusine* sp. (Poaceae)**
 - *Tetraneura (Tetraneura) radiculicola*
- 47. *Eragrostis amabilis* (Poaceae)**
 - *Tetraneura (Indotetraneura) basui*
- 48. *Eragrostis gangetica* (Poaceae)**
 - *Tetraneura (Tetraneura) radiculicola*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 49. *Eragrostis interrupta* (Poaceae)**
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 50. *Eragrostis nigra* (Poaceae)**
 - *Forda marginata*
 - *Geoica lucifuga*
 - *Tetraneura (Tetraneura) sikkimensis*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 51. *Eragrostis tenella* (Poaceae)**
 - *Tetraneura (Tetraneura) radiculicola*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 52. *Eragrostis uniloides* (Poaceae)**
 - *Forda marginata*
- 53. *Erianthus* sp. (Poaceae)**
 - *Tetraneura (Tetraneura) radiculicola*
- 54. *Ficus* sp. (Moraceae)**
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 55. *Fraxinus floribunda* (Oleaceae)**
 - *Prociphilus* sp.
 - *Prociphilus* sp. A
 - *Prociphilus* sp. B
- 56. *Galinsoga parviflora* (Asteraceae)**
 - *Smynthuodes betae*
- 57. *Geranium* sp. (Geraniaceae)**
 - *Thecabius (Thecabius) affinis*
- 58. *Gnaphalium* sp. (Asteraceae)**
 - *Pemphigus (Pemphigus) matsumurai*
- 59. *Gossypium* sp. (Malvaceae)**
 - *Smynthuodes betae*
- 60. Grass root (Poaceae)**
 - *Geoica indica*
- 61. *Impatiens falcifer* (Balsaminaceae)**
 - *Epipemphigus marginalis*
- 62. *Imperata cylindrica* (Poaceae)**
 - *Forda marginata*
 - *Geoica lucifuga*
 - *Tetraneura (Tetraneura) multisetosa*
 - *Tetraneura (Tetraneura) radiculicola*
 - *Tetraneura (Tetraneura) radiculicola*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 63. *Imperata* sp. (Poaceae)**
 - *Tetraneura (Tetraneura) radiculicola*
- 64. *Inula cappa* (Asteraceae)**
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 65. *Ischaemum* sp. (Poaceae)**
 - *Chaetogeoica folioidentata*
- 66. *Iseilema laxum* Hack. (Poaceae)**
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 67. *Lonicera quinquelocularis* (Caprifoliaceae)**
 - *Forda* sp.

- *Prociphilus (Prociphilus) caryae fitchii*
 - *Prociphilus (Stagona) himalayensis*
 - *Prociphilus* sp.
- 68. *Lonicera* sp. (Caprifoliaceae)**
- *Eriosoma* sp.
- 69. *Magnolia campbelli* (Magnoliaceae)**
- *Formosaphis micheliae*
- 70. *Magnolia champaka* (Magnoliaceae)**
- *Formosaphis micheliae*
 - *Prociphilus (Prociphilus) micheliae*
 - *Prociphilus (Prociphilus) osmanthae*
- 71. *Magnolia stellata* (Magnoliaceae)**
- *Formosaphis micheliae*
- 72. *Malus baccata* (Rosaceae)**
- *Eriosoma lanigerum*
- 73. *Malus domestica* (Rosaceae)**
- *Baizongia pistaciae*
 - *Epipemphigus imaicus*
 - *Eriosoma lanigerum*
- 74. *Malus pumila* (Rosaceae)**
- *Schizoneurella indica*
- 75. *Malus sylvestris* (Rosaceae)**
- *Eriosoma lanigerum*
- 76. *Malus* sp. (Rosaceae)**
- *Eriosoma lanigerum*
- 77. *Michelia* sp. (Magnoliaceae)**
- *Prociphilus (Prociphilus) micheliae*
- 78. *Morus alba* (Moraceae)**
- *Pemphigus* sp.
- 79. *Musa paradisiaca* (Musaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 80. *Nicotiana* sp. (Solanaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 81. *Olea* sp. (Oleaceae)**
- *Formosaphis micheliae*
- 82. *Oplismenus burmannii* (Poaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 83. *Oryza sativa* (Poaceae)**
- *Chaetogeioica polychaeta*
 - *Forda orientalis*
 - *Geoica lucifuga*
 - *Tetraneura (Indotetraneura) basui*
 - *Tetraneura (Indotetraneura) javensis*
 - *Tetraneura (Tetraneura) radicolica*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 84. *Panicum javanicum* (Poaceae)**
- *Tetraneura (Indotetraneura) javensis*
- 85. *Panicum maximum* (Poaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 86. *Panicum miliaceum* (Poaceae)**
- *Tetraneura (Indotetraneura) javensis*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 87. *Paspalidium flavidum* (Poaceae)**
- *Geoica lucifuga*
- 88. *Paspalum conjugatum* (Poaceae)**
- *Tetraneura (Indotetraneura) basui*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 89. *Paspalum dialatum* (Poaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 90. *Paspalum scrobiculatum* (Poaceae)**
- *Geoica lucifuga*
 - *Tetraneura (Indotetraneura) basui*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 91. *Paspalum* sp. (Poaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 92. *Pennisetum glaucum* (Poaceae)**
- *Forda hirsuta*
 - *Forda orientalis*
 - *Tetraneura (Indotetraneura) basui*
 - *Tetraneura (Tetraneura) radicolica*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 93. *Pennisetum purpureum* (Poaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 94. *Pennisetum setigerum* (Poaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 95. *Pennisetum* sp. (Poaceae)**
- *Tetraneura (Tetraneura) kalimpongensis*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 96. *Phaseolus vulgaris* (Fabaceae)**
- *Smynthurodes betae*
- 97. *Photinia notoniana* (Rosaceae)**
- *Prociphilus* sp.
 - *Prociphilus* sp. A
 - *Prociphilus* sp. B
- 98. *Pinus* sp. (Pinaceae)**
- *Prociphilus (Stagona) himalayensis*
- 99. *Pinus wallichiana* (Pinaceae)**
- *Prociphilus (Stagona) himalayensis*
- 100. *Pistacia fastula*? (Anacardiaceae)**
- *Baizongia pistaciae*
- 101. *Pistacia integerrima* (Anacardiaceae)**
- *Forda marginata*
- 102. *Pistacia integerrima* (Anacardiaceae)**
- *Baizongia pistaciae*

- *Forda riccobonii*
- *Geoica utricularia utricularia*
- 103. *Pistacia terebinthus* (Anacardiaceae)**
 - *Baizongia pistaciae*
- 104. *Pistacia* sp. (Anacardiaceae)**
 - *Baizongia pistaciae*
 - *Forda marginata*
- 105. *Pisum sativum* (Fabaceae)**
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 106. *Poa annua* (Poaceae)**
 - *Forda marginata*
 - *Geoica lucifuga*
- 107. *Poa* sp. (Poaceae)**
 - *Forda orientalis*
 - *Forda riccobonii*
 - *Geoica lucifuga*
 - *Tetraneura (Tetraneura) radicolica*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 108. *Pogonatherum paniceum* (Poaceae)**
 - *Tetraneura (Tetraneurella) nigriabdominalis*
 - *Tetraneura (Indotetraneura) basui*
 - *Tetraneura (Tetraneura) radicolica*
- 109. *Polygonum alatum* (Polygonaceae)**
 - *Epipemphigus imaicus*
- 110. *Polypogon fugax* Nees ex Steud. (Poaceae)**
 - *Chaetogeoica folioidentata*
 - *Chaetogeoica graminiphaga*
 - *Geoica sikkimensis*
 - *Tetraneura (Tetraneura) radicolica*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 111. *Polypogon monspeliensis* (Poaceae)**
 - *Tetraneura (Indotetraneura) basui*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 112. *Populus alba* (Salicaceae)**
 - *Pemphigus (Pemphigus) immunis*
 - *Pemphigus (Pemphigus) napaeus*
 - *Pemphigus* sp.
 - *Tetraneura* sp.
- 113. *Populus caspica* (Salicaceae)**
 - *Pemphigus (Pemphigus) immunis*
 - *Pemphigus (Pemphigus) mordwilkoii*
- 114. *Populus ciliata* (Salicaceae)**
 - *Epipemphigus imaicus*
 - *Epipemphigus marginalis*
 - *Pemphigus (Pemphigus) dorocolica*
 - *Pemphigus (Pemphigus) eastopi*
 - *Pemphigus (Pemphigus) immunis*
 - *Pemphigus (Pemphigus) matsumurai*
 - *Pemphigus (Pemphigus) mordwilkoii*
 - *Pemphigus* sp.
- 115. *Populus deltoides* (Salicaceae)**
 - *Epipemphigus imaicus*
 - *Eriosoma lanuginosum*
 - *Pachypappa populi*
 - *Pemphigus (Pemphigus) bursarius*
 - *Pemphigus (Pemphigus) immunis*
- 116. *Populus euphratica* (Salicaceae)**
 - *Pemphigus (Pemphigus) napaeus*
- 117. *Populus nigra* (Salicaceae)**
 - *Pemphigus (Pemphigus) spyrotheceae spyrotheceae*
 - *Pemphigus (Pemphigus) immunis*
- 118. *Populus nigra* var. *italica* (Salicaceae)**
 - *Pemphigus (Pemphigus) bursarius*
- 119. *Populus tremula* (Salicaceae)**
 - *Pemphigus (Pemphigus) immunis*
- 120. *Populus* sp. (Salicaceae)**
 - *Epipemphigus imaicus*
 - *Eriosoma lanuginosum*
 - *Pemphigus (Pemphigus) vesicarius*
 - *Pemphigus (Pemphigus) bursarius*
 - *Pemphigus (Pemphigus) immunis*
 - *Pemphigus (Pemphigus) mordwilkoii*
 - *Pemphigus (Pemphigus) nainitalensis*
 - *Pemphigus (Pemphigus) napaeus*
 - *Pemphigus* sp.
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 121. *Prunus cerasus* (Rosaceae)**
 - *Pemphigus* sp.
- 122. *Prunus* sp. (Rosaceae)**
 - *Forda* sp.
- 123. *Pteris* sp. (Pteridaceae)**
 - *Eriosoma longipilosum*
- 124. *Pyrus communis* (Rosaceae)**
 - *Eriosoma lanigerum*
- 125. *Pyrus polycarpa* Hook.f. (Rosaceae)**
 - *Eriosoma lanigerum*
- 126. *Pyrus* sp. (Rosaceae)**
 - *Epipemphigus imaicus*
 - *Eriosoma lanigerum*
- 127. *Quercus* sp. (Fagaceae)**
 - *Pemphigus (Pemphigus) bursarius*
- 128. *Ranunculus hirtellus* (Ranunculaceae)**
 - *Thecabius (Thecabius) affinis*
- 129. *Rootus onii* ? (Poaceae)**
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 130. *Saccharum officinarum* (Poaceae)**
 - *Geoica lucifuga*
 - *Tetraneura (Indotetraneura) javensis*

- *Tetraneura (Tetraneura) kalimpongensis*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 131. *Schima nervosum?* (Theaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 132. *Setaria intermedia* (Poaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 133. *Setaria italica* (Poaceae)**
- *Tetraneura (Indotetraneura) javensis*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 134. *Setaria palmifolia* (Poaceae)**
- *Smynthuroides betae*
- 135. *Setaria pumila* ssp. *pallidifusca* (Poaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 136. *Setaria* sp. (Poaceae)**
- *Prociphilus* sp.
- 137. *Solanum tuberosum* (Solanaceae)**
- *Geoica lucifuga*
- 138. *Sorghum bicolor* (Poaceae)**
- *Forda hirsuta*
 - *Forda orientalis*
 - *Forda* sp.
 - *Geoica lucifuga*
 - *Geoica* sp.
 - *Tetraneura (Indotetraneura) javensis*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 139. *Sorghum halepense* (Poaceae)**
- *Geoica lucifuga*
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 140. *Sporobolus* sp. (Poaceae)**
- *Geoica lucifuga*
- 141. *Synedrella nodiflora* (Asteraceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 142. *Syringa emodi* (Oleaceae)**
- *Prociphilus (Stagona) xylostei*
- 143. *Taxus baccata* (Taxaceae)**
- *Prociphilus (Prociphilus) taxus*
- 144. *Taxus* sp. (Taxaceae)**
- *Prociphilus (Prociphilus) taxus*
- 145. *Toona ciliata* (Meliaceae)**
- *Forda orientalis*
- 146. *Triticum aestivum* (Poaceae)**
- *Forda* sp.
 - *Tetraneura (Tetraneurella) nigriabdominalis*
- 147. *Triticum aestivum* ssp. *aestivum* (Poaceae)**
- *Forda marginata*
 - *Geoica lucifuga*
 - *Pemphigus (Pemphigus) vulgaris*
- *Smynthuroides betae*
 - *Tetraneura (Tetraneura) radiccicola*
- 148. *Tsuga dumosa* (Pinaceae)**
- *Prociphilus* sp.
- 149. *Ulmus montana* (Ulmaceae)**
- *Eriosoma phaenax*
- 150. *Ulmus villosa* (Ulmaceae)**
- *Eriosoma kashmiricum*
 - *Eriosoma ulmi*
 - *Tetraneura (Indotetraneura) javensis*
 - *Schizoneurella indica*
- 151. *Ulmus wallichiana* (Ulmaceae)**
- *Eriosoma phaenax*
 - *Eriosoma ulmi*
 - *Schizoneurella indica*
 - *Tetraneura (Tetraneura) ulmi*
- 152. *Ulmus* sp. (Ulmaceae)**
- *Eriosoma kashmiricum*
 - *Kaltenbachiella pallida*
 - *Schizoneurella indica*
 - *Tetraneura (Tetraneura) ulmi*
- 153. *Urochloa panicoides* (Poaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 154. *Vicia faba* (Fabaceae)**
- *Chaetogeoica folioidentata*
- 155. *Vigna radiata* var. *radiata* (Fabaceae)**
- *Smynthuroides betae*
- 156. *Zea mays* (Poaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 157. Unidentified plant (Asteraceae)**
- *Baizongia pistaciae*
- 158. Unidentified plants (Brassicaceae)**
- *Tetraneura (Tetraneurella) nigriabdominalis*
- 159. Unidentified plants (Cyperaceae)**
- *Geoica lucifuga*
- 160. Unidentified plants (Poaceae)**
- *Chaetogeoica folioidentata*
 - *Chaetogeoica graminiphaga*
 - *Chaetogeoica polychaeta*
 - *Chaetogeoica* sp.
 - *Forda marginata*
 - *Geoica lucifuga*
 - *Pemphigus (Pemphigus) vulgaris*
 - *Pemphigus* sp.
 - *Smynthuroides betae*
 - *Tetraneura (Indotetraneura) basui*
 - *Tetraneura (Indotetraneura) lambersi*
 - *Tetraneura (Tetraneura) multisetosa*
 - *Tetraneura (Tetraneurella) nigriabdominalis*

161. Unidentified plants (Rosaceae)

- *Eriosoma lanigerum*

162. Unidentified plants (Solanaceae)

- *Tetraneura (Tetraneurella) nigriabdominalis*

163. Unidentified plants

- *Epipemphigus imaicus*
- *Hemipodaphis monstrasa*
- *Pemphigus (Pemphigus) immunsis*
- *Pemphigus (Pemphigus) indicus*
- *Prociphilus (Prociphilus) oriens*
- *Prociphilus (Prociphilus) osmanthae*
- *Tetraneura (Indotetraneura) javensis*

164. On light trap

- *Ceratopemphigella delhiensis*

Conclusion

In India, 19 genera and 64 species of aphids belonging to the subfamily Eriosomatinae are recorded so far, out of which 22 species are endemic. These aphids feed on 130 valid plant species belonging to 30 plant families. *Tetraneura (Tetraneurella) nigriabdominalis* is highly polyphagous infesting 64 plant species followed by *Geoica lucifuga* (22 plant species), *Tetraneura (Tetraneura) radicecola* (17 plant species), *Tetraneura (Indotetraneura) basui* (13 plant species), and *Forda orientalis* (12 plant species). The most preferred plants for eriosomatine aphids belong to family Poaceae (76 species), followed by family Rosaceae (17 species), Saliaceae (9 species), Anacardiaceae (6 species) and Asteraceae (6 species). Among them, several plant species are crops of agricultural and horticultural importance. The host plant of *Ceratopemphigella delhiensis* is still not known as it was only light trapped. Thus the present checklist contributes to existing literature on Indian Eriosomatinae (Aphididae: Hemiptera) and their food plants that will help to identify hosts for several aphids' species from India.

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