

16. NEW RECORDS OF APHIDS (HOMOPTERA: APHIDIDAE) FROM SIKKIM, NORTH EAST INDIA

Raychaudhuri (1980) reported 404 aphid species under 155 genera from northeast India. Out of these Sikkim, the smallest state in the region, had 134 species under 71 genera. Further exploration of the state has revealed the occurrence of another 27 species under 26 genera reported here as new records from Sikkim.

As a result of this study the aphid fauna of Sikkim is now known to be 161 species under 84 genera. These include 24 endemic species. Specimens of the reported species are presently in the collection of Entomology Laboratory, Department of Zoology, University of Calcutta.

Subfamily APHIDINAE

Tribe APHIDINI

Aphis paraverbasci Chakrabarti

Aphis paraverbasci Chakrabarti, 1976. *Entomon* 1(2): 171-174.

Material examined: 4 apterae and 1 alata from an indet. plant, Lachung (c. 300 m), 6.vi.1975.

Distribution: INDIA: Himachal Pradesh, Sikkim.

Schizaphis graminum (Rondani)

Aphis graminum Rondani, 1852. *Nuova Ann. Sci. Nat. Bologna* (Ser 3), 6: 10.

Material examined: 1 alata and 2 nymphs from an indet. grass, Singtam (c. 541 m), 24.xii.1970.

Distribution: Cosmopolitan.

Schizaphis rotundiventris (Signoret)

Schizaphis rotundiventris (Signoret): Eastop, 1966. *Aust. J. Zool.* 14: 498.

Material examined: 2 apterae and 2 nymphs from *Cyperus exaltans*, Singtam (c. 541 m), 27.v.1970.

Distribution: INDIA: Meghalaya, Sikkim, South India, Uttar Pradesh, West Bengal; and virtually cosmopolitan.

Tribe MACROSIPHINI

Acyrtosiphon pisum (Harris)

Aphis pisum Harris, 1776. *Exposit. English Insects*, London, 66.

Material examined: Many apterae and nymphs from *Pisum sativum*, Namchi (c. 1666 m), 21.iv.1978.

Distribution: Cosmopolitan.

Brevicoryne brassicae (Linnaeus)

Aphis brassicae Linnaeus, 1758. *Systema Nature* 1 (10th ed.): 452.

Material examined: 1 aptera, 2 alatae and 2 nymphs from *Brassica* sp., Tsungthang (c. 1666 m), 9.vi.1975.

Distribution: INDIA: Himachal Pradesh, Sikkim, South India, West Bengal; and virtually cosmopolitan.

Cavariella nigra Basu

Cavariella nigra Basu, 1964. *J. Linn. Soc. (Zool)*, 45: 240.

Material examined: 5 apterae, 21 alatae and 6 nymphs from an indet. plant, Lachung (c. 3000 m), 6.vi.1975.

Distribution: INDIA: Sikkim, West Bengal.

Capitophorus polygoni Ghosh, Ghosh and Raychaudhuri

Capitophorus polygoni Ghosh, Ghosh and Raychaudhuri, 1971. *Orient. Insects* 5: 326.

Material examined: 1 aptera and 1 nymph from *Polygonum* sp., Lachung (c. 3000 m), 10.vii.1977.

Distribution: INDIA: Sikkim, West Bengal.

Indomegoura indica (van der Goot)

Rhopalosiphum indica van der Goot, 1916.

Rec. Indian Mus. 12(1): 1-4.

Material examined: 1 alata from an indet. plant, Gangtok (c. 1675 m), 19.v.1975.

Distribution: INDIA: Sikkim, West Bengal.

Indumasonaphis inulae (Ghosh and Raychaudhuri)

Masonaphis (*Neomasonaphis*) *inulae* Ghosh and Raychaudhuri, 1972.

Orient. Insects 6: 377.

Material examined: 3 apterae and 22 nymphs from an indet. plant of Ericaceae, Phodang (c. 1900 m), 15.xi.1974.

Distribution: INDIA: Meghalaya, Sikkim.

Liosomaphis himalayensis Basu

Liosomaphis himalayensis Basu, 1964. *J. Linn. Soc. (Zool.)* 45: 231.

Material examined: 4 apterae and 3 nymphs from *Berberis* sp., Lachung (c. 3000 m), 7.vi.1976.

Distribution: INDIA: Himachal Pradesh, Meghalaya, Sikkim, Uttar Pradesh, West Bengal.

Macromyzus (Anthracosiphoniella) maculatum (Basu)

Anthracosiphoniella maculatum Basu, 1969.

Orient. Insects 3: 169.

Material examined: Many apterae and nymphs from indet. ferns, Mangan (c. 1500 m), 23.v.1975; Paksyak (c. 1666 m), 1.vi.1975.

Distribution: INDIA: Meghalaya, Sikkim and West Bengal.

Myzus brevisiphon Basu

Myzus brevisiphon Basu, 1969. *Orient. Insects* 3: 180.

Material examined: 5 apterae and 10 nymphs from *Polygonum alatum*, Tsungthang (c. 1666 m), 14.xi.1974.

Distribution: INDIA: Meghalaya, Sikkim, Uttar Pradesh, West Bengal.

Oedisiphum soureni Basu

Oedisiphum soureni Basu, 1964. *J. Linn. Soc. (Zool.)* 45: 238.

Material examined: 2 apterae and 3 nymphs from *Anaphalis* sp., Esungthang (c. 1666 m), 14.xi.1974.

Distribution: INDIA: Sikkim, Uttar Pradesh, West Bengal; Nepal.

Semiaphis heraclei (Takahashi)

Semiaphis heraclei (Takahashi): Takahashi, 1965. *Insecta matsum.* 28:53.

Material examined: 4 apterae, 2 alatae and 5 nymphs from *Schizium* sp., Paksyak (c. 1666 m), 4.vi.1975.

Distribution: INDIA: Meghalaya, Sikkim, West Bengal; China, Hawaii, Japan; Korea; Sumatra; Taiwan.

Micromyzus kalimpongensis Basu

Micromyzus kalimpongensis Basu, 1967. *Bull. Ent.* 8: 152.

Material examined: 21 apterae, 10 alatae and 15 nymphs from *Elettaria cardamomum*, Ringon (c. 1600 m), 9.xi.74.

Distribution: INDIA: Meghalaya, Sikkim, West Bengal.

Trichisiphonaphis gerberae Ghosh and Raychaudhuri

Trichisiphonaphis gerberae Ghosh and Raychaudhuri, 1972. *Orient. Insects* 6: 381.

Material examined: 4 apterae and 12 nymphs from *Polygonum* sp., Gangtok (c. 1675 m), 15.xi.1974.

Distribution: INDIA: Meghalaya, Sikkim, West Bengal.

Vesiculaphis pieridis Basu

Vesiculaphis pieridis Basu, 1964. *J. Linn. Soc. (Zool.)* 45: 237.

Material examined: 19 apterae and 8 nymphs from *Pieris ovalifolia*, Lachung (c. 3000 m), 6.vi.1975.

Distribution: INDIA: Meghalaya, Sikkim, Uttar Pradesh, West Bengal.

Subfamily GREENIDEINAE

Tribe CERVAPHIDINI

Sumatraphis celti Takahashi

Sumatraphis celti Takahashi, 1935. *Misc. Zool. Summatrana* 97: 3.

Material examined: 35 apterae and 15 nymphs from *Quercus* sp., Lingdong (c. 1666 m), 24.v.1975.

Distribution: INDIA: Meghalaya, Sikkim, South India, West Bengal; Indonesia.

Tribe GREENIDEINI

Eutrichosiphum arunachali Basu, Ghosh and Raychaudhuri

Eutrichosiphum arunachali Basu, Ghosh and Raychaudhuri, 1972. *Sci. Cult.* 38: 494.

Material examined: 35 apterae, 6 alatae and 4 nymphs from *Quercus* sp. Gangtok (c. 1666 m), 22.iv.1975.

Distribution: INDIA: Arunachal Pradesh, Sikkim.

Eutrichosiphum takahashii Basu, Ghosh and Raychaudhuri

Eutrichosiphum takahashii Basu, Ghosh and Raychaudhuri, 1973. *Proc. zool. Soc., Calcutta* 26: 95.

Material examined: 13 apterae and many nymphs from *Quercus* sp., Dongu Lik (c. 1166 m), 6.xi.1974.

Distribution: INDIA: Meghalaya, Sikkim.

Greenideoida (Pentatrichosiphum) luteum (Basu)

Pentatrichosiphum luteum Basu, 1969. *Orient. Insects* 3: 183.

Material examined: 3 apterae, 4 alatae and 2 nymphs from *Quercus* sp., Deorali (c. 1670 m), 16.xi.1974.

Distribution: INDIA: Meghalaya, Sikkim and West Bengal.

Mollitrichosiphum shinji Raychaudhuri, Ghosh, Banerjee and Ghosh

Mollitrichosiphum shinji Raychaudhuri et al. 1973. *Kontyu* 41: 70.

Material examined: 8 apterae and 11 nymphs from *Quercus rubra*, Sanklang (c. 1000 m), 3.xi.1974.

Distribution: INDIA: Sikkim, West Bengal.

Subfamily: HORMAPHIDINAE

Aleurodaphis blumeae van der Goot

Aleurodaphis blumeae van der Goot, 1917.

Contrib. Faune Ind. neerl. 1: 240.

Material examined: 14 apterae and many nymphs from an indet. plant of Combretaceae, Sanklang (c. 1000 m), 3.xi.1974.

Distribution: INDIA: Arunachal Pradesh, Meghalaya, Sikkim, West Bengal; China; Indonesia; Japan; Korea; Taiwan.

Ceratovacuna indica Ghosh, Pal and Raychaudhuri

Ceratovacuna indica Ghosh, Pal and Raychaudhuri, 1974. *Proc. zool. Soc., Calcutta* 27: 96.

Material examined: 17 apterae and many nymphs from an indet. bamboo plant, Ringon (c. 1600 m), 26.v.1975.

Distribution: INDIA: Sikkim, West Bengal.

Subfamily LACHNINAE

Tribe CINARINI

Cinara atrotibialis David and Rajasingh

Cinara atrotibialis David and Rajasingh, 1968. *Orient. Insects* 2: 103.

Material examined: 6 apterae and many nymphs from *Pinus* sp., Namchi (c. 1666 m), 22.x.1975.

Distribution: INDIA: Himachal Pradesh, Meghalaya, Sikkim; Thailand; Phillipines.

Tribe LACHNINI

Nippolachnus piri Matsumura

Nippolachnus piri Matsumura, 1917. *T. Coll. Agric. Taihoku Imp.* 7: 382.

Material examined: 4 apterae and 16 nymphs from *Pyrus communis*, Pelling (c. 2080 m), 15.x.1974.

Distribution: INDIA: Meghalaya, Sikkim, West Bengal; Bhutan; Japan; Korea; Taiwan.

Subfamily PEMPHIGINAE

Asiphoniella cynodonti (Das)

Pemphigus cynodonti Das, 1918. *Mem. Ind. Mus.* 6: 153.

Material examined: 4 apterae and 16 nymphs from *Abies* sp., Lachung (c. 3000 m), 14.v.1978.

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Distribution: INDIA: Sikkim, West Bengal; Pakistan.

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REFERENCE

RAYCHAUDHURI, D. N. (1980): (ed. by) Aphids of Northeast India and Bhutan. The Zoological Society, Calcutta. 621 pp.

17. FIRST RECORD OF *DIPLACODES LEFEBVREI* (RAMBUR)
(ODONATA: LIBELLULIDAE: SYMPETRINAE) FROM NW. INDIA

While working on the un-named Odonata collections of this Regional Station, I came across some specimens which on examination proved to be *Diplacodes lefebvrei* (Rambur). These agree practically in all characters with Fraser's description (1936) of the species. In India, the species has hitherto been known only from the west coast (Fraserpet, Coorg) and is now being recorded for the first time from Rajasthan and Gujarat, thus extending its range further westwards.

Material examined:

Gujarat: 2 ♂♂ Khari river, Bhuj, 22.10.1964, coll. B. C. Agrawal. Rajasthan: 1 ♂ Kailana, Jodhpur, 24.4.1962, coll. Survey party, Desert Regional Station; 2 ♂♂ Akhai-raj ji ka talab, Jodhpur, 17.9.1963, coll. Moti Lal; 1 ♂ Kuri village, Jodhpur, 25.5.1964, coll. V. C. Agarwal; 1 ♂ Agolai, Jodhpur, 18.9.1964, coll. R. N. Bhargava, 1 ♂ Agolai, Jodhpur, 19.8.1965, coll. V. C. Agarwal; 3 ♂♂ 1 ♀ Bada talab, Pali, 3.11.1964,



Agarwala, Basant K. and Raychaudhuri, D N. 1984. "New records of aphids (Homoptera: Aphididae) from Sikkim, north east India." *The journal of the Bombay Natural History Society* 80, 431–434.

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