

NEW RECORDS OF PSEUDOCOCCIDAE FROM NEW ZEALAND (HOMOPTERA : COCCOIDEA)

J. A. de BOER

Entomology Division, D.S.I.R., Nelson.

SUMMARY

This paper deals with new host plants of **Pseudococcidae** in New Zealand, together with earlier records. **Chorizococcus lounsburyi** (Brain), **Rhizococcus falcifer** Künckel d'Herculeis and **Spilococcus cactearum** Mc Kenzie are reported from New Zealand for the first time.

Chorizococcus lounsburyi (Brain)

This is the first record of **C. lounsburyi** in New Zealand.

Host plant: On the roots of bulbs, Christchurch, 8.x.1949, Hume.

Phenacoccus graminosus Mc Kenzie

Host plant: **Pyrus malus** L. (apple), **P. communis** L. (pear), **Trifolium repens** L. (white clover), **Lolium** sp. (rye grass), **Bromus unioloides** H.B.K. (prairie grass), **Dactylis glomerata** L. (cocksfoot), **Agrostis tenuis** Sibth. (brown top), **Plantago lanceolata** L. (plantain), **Rumex acetosa** L. (sorrel), **Hypochaeris** sp. (cat's ear), **Malva** sp. (mallow), **Amaranthus retroflexus** L. (red root) (Van Geldermalsen 1962). **Prunus persica** Batsch (peach) (Ward 1966).

New Record: On the leaves and in the stipules of **Trifolium pratense** L. (red clover), collected in the city area with no fruit trees nearby, Nelson, 2.II.1965, de Boer.

Pseudococcus fragilis Brain

Earlier records under the name **P. gahani** Green.

Host plants: **Vitis vinifera** L. (grape), **Begonia** sp., **Pyrus malus** L., **Solanum tuberosum** L. (potato), (Miller 1934). **Pyrus communis** L. (Congdon & Morrison 1959).

New records: On **Daucus carota** L. (carrots) at ground level appeared to be causing constriction of root at point of feeding, Auckland, 16.XII.1941, Rabone; on the roots of **Trifolium** sp., Grafton, 12.II.1942, Rabone; on the leaves of **Fuchsia** sp. in unheated glasshouse, Palmerston North, 1.VIII.1934, Cottier; on the leaves and branches of **Coprosma australis** Robinson, Nelson, 25.XI.1965, Read; on the leaves and fruit of **Citrus** sp. (grapefruit) Richmond, 12.III.1966, deBoer; on **Arum** sp. (arum lily) in glasshouse, Christchurch, 21.VI.1949.

Pseudococcus glaucus (Maskell)

Host Plants: **Rubus australis** Forst. f., **Coprosma** sp., **Neopanax** sp., **Pittosporum eugenioides** A. Cunn., **Macropiper excelsum** (Forst. f.) Miq., (Maskell 1879, 1885, 1887).

New Records: On the leaves of **Nothofagus fusca** (Hook. f.) Oerst. (red beech), Motueka, 26.XII.1932, Brittin; on the leaves and branches of **Nothofagus menziesii** (Hook. f.) Oerst. (silver beech), Maruia, 3.II.1964, Read.

Pseudococcus longispinus (Targioni-Tozzetti)

Earlier records under the name **P. adonidum** (Linnaeus).

Host plants: **Citrus** sp., **Wistaria** sp., **Ficus carica** L. (fig), **Prunus domestica** L. (plum), **Vitis vinifera** L., **Nerium** sp. (oleander), **Phor-mium** sp., **Senicio** sp. (cineraria), **Begonia** sp., **Pyrus malus** L., **Passiflora** sp. (passion fruit), **Psidium** sp. (guava), palms and ferns, (Miller 1934). **Pyrus communis** L., **Gramineae** (grass), **Hedera helix** L. (ivy), **Rumex** sp. (dock), **Cytisus** sp. (broom), **Hebe** sp. (Ward 1966).

New records: On the leaves and stems of **Phaseolus** sp. (runner bean), Nelson, VI.1934; on the leaves and stems of **Cissus antartica** Vent., Nelson, 19.I.1965, Rout; on the leaves and stems of **Cyclamen** sp., Nelson, 15.II.1965, Given.

Pseudococcus obscurus Essig.

Earlier records in part under **P. maritimus** (Ehrhorn).

Host plants: **Pyrus communis** L., **P. malus** L., **Prunus persica** Batsch, **P. domestica** L., **Rumex** sp., **Vitis** sp., **Asclepias physocarpa** Schlect. (swanplant), **Mandevilla** sp. (Ward 1966).

New records: On **Solanum lycopersicum** L. (tomato) in insectary, Auckland, 2.I.1941, Rabone; on **Daucus carota** L., in insectary, Auckland, 15.XII.1941, Rabone; on the roots of **Dianthus** sp. (carnation), Auckland, 2.II.1942, Ford; on the roots of **Solanum tuberosum** L., Auckland, XII.1956, Clifford; on the roots of **Cynara scolymus** L. (artichoke), Auckland, 8.VI.1966, Read; under the bark of **Laburnum** sp. (golden chain), Riwaka, 31.VIII.1965, de Boer; on the branches and the leaves of **Cyphonmandra** sp. (tree tomato), Nelson, 22.IV.1965, Stanton.

Pseudococcus poae (Maskell)

Host plants: **Poa anceps** Forst., common tussock grass (Maskell 1879, 1887).

New Records: on the roots of **Agrostis canina** L., Palmerston North, 30.IX.1935, Cottier; on the roots of **Holcus lanatus** L. (yorkshire fog), Motupiko, 20.V.1966, Power.

Rhizoecus falcifer Künckel d'Herculeais

This is the first record of **R. falcifer** in New Zealand.

Host plant: On the roots of **Luculia grandifolia** Ghose, Nelson, 29.I.1965, Given.

Ripersiella rumicis (Maskell)

Host plant: **Rumex acetosella** L. (Maskell 1892).

New records: On the roots of **Lolium** sp. (ryegrass), Appleby, 11.X.1965, de Boer; on the roots of **Agrostis tenuis** Sibth. (brown top), Appleby, 4.V.1966, Power.

Spilococcus cactearum Mc Kenzie

This is the first record of **S. cactearum** in New Zealand.

Host plant: On cactus sp., labelled as: **Neoporteria crassisipina**, Nelson, 1.III.1966, de Boer.

Trionymus morrisoni Brittin

Host plant: **Alectryon excelsus** Gaertn. (Brittin 1938).

New records: On the leaves of **Laurelia novae-zelandiae** A. Cunn., Whanganui Inlet, 11.I.1966, de Boer; on leaves of **Hedycarya arborea** J.R. & G. Forst., Nelson, 4.XI.1962, Valentine; on the leaves of **Hoheria populnea** A. Cunn., Pelorus Bridge, 14.III.1966, Read; on **Rubus schmidelioides** A. Cunn., Fox Glacier, 29.IX.1963, Brown.

Trionymus podocarpi Brittin

Host plant: **Podocarpus dacrydioides** A. Rich. (Brittin 1938).

New record: On the leaves and branches of **Dacrydium colensoi** Hook, Wakefield, 26.I.1965, de Boer.

ACKNOWLEDGMENTS

The writer is indebted to Dr. Howard L. Mc Kenzie, Coccidologist, Agricultural Experiment Station, Department of Entomology, Davis, California, for confirmations and determinations of the species: **Rhizoecus falcifer** Künckel d'Herculais, **Spilococcus cactearum** Mc Kenzie, **Chorizococcus lounsburyi** (Brain) and **Pseudococcus fragilis** Brain on **Coprosma australis** and **Pyrus malus**.

Gratitude is also expressed to various members of the staff, Entomology Division, D.S.I.R., Nelson, for collecting mealybug material and discussing this matter.

REFERENCES

- BRITTIN, G., 1938: A systematic classification of **Pseudococcus** and some related genera. Part I. **Trans. Proc. R. Soc. N.Z.** **68** (3): 325-348.
- CONGDON, N. B.; Morrison, L. G., 1959: Mealybug resurgence in Hawke's Bay orchards. **N.Z. Jl. Agric.** **99** (5): 481-7.
- GELDERMALSEN, M. van, 1962: More information on Nelson mealybug. **Orchard N.Z.** **35** (8): 256-258.
- MASKELL, W. M., 1879: On some **Coccidae** in New Zealand. **Trans. Proc. N.Z. Inst.** **11**: 187-228.
- 1885: Further notes on **Coccidae** in New Zealand. **Trans. Proc. N.Z. Inst.** **17**: 20-31.
- 1887: "An account of the insects noxious to agriculture and plants in New Zealand. The Scale insects (**Coccididae**)." Wellington, Government Printer, State Forests and Agricultural Department: 1-116.
- 1892: Further coccid notes; with descriptions of new species, and remarks on **Coccids** from New Zealand, Australia, and elsewhere. **Trans. Proc. N.Z. Inst.** **24**: 1-64.
- MILLER, D., 1934: Mealybugs. Their life history and control. **Cawthron Inst. Bull.** **6**.
- WARD, A., 1966: Mealy bugs (**Hemiptera: Pseudococcidae**) in Hawke's Bay orchards. **N.Z. Jl. agric. Res.** **9** (2): 452-4.