

RECORDS OF BREVIPALPUS SPECIES (ACARI : TENUIPALPIDAE) FROM NEW ZEALAND AND THE PACIFIC AREA

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SUMMARY

New records of *Brevipalpus obovatus* Donn., *B. phoenicis* (Geijskes) and *B. californicus* (Banks) are given.

INTRODUCTION

In their catalogue of mites recorded from the New Zealand subregion Spain & Luxton (1971) list three species *Brevipalpus obovatus* Donn., *B. phoenicis* (Geijskes) and *B. californicus* (Banks). Manson (1967) had included the same three species intercepted on plant material entering New Zealand. A key to all stages of *Brevipalpus* spp. is given by Pritchard & Baker (1958).

These mites are plant feeding and are capable of rapid reproduction, so that damage to the host plant can occur rapidly, often before the infestation is noted as the mites are very small. They can cause severe damage particularly under glasshouse conditions and on house plants, also on shrubs in sheltered conditions.

1. *Brevipalpus obovatus* Donn. (= *B. inornatus* (Banks)).

This species was recorded by Collyer (1964) occurring on fruit trees, and more abundantly on other plants. Manson (1967) found it on several host plants entering the country from Cook Islands, Norfolk Island and Fiji; also on several hosts in New Zealand, all in the North Island. Further records are from apple (*Pyrus malus* L.) orchards in the Auckland and Nelson areas, and on fig (*Ficus*) north of Auckland on the seashore; *Pomaderris* spp. and *Cotoneaster* spp. in Auckland and more northern areas, *Luculia* sp. and *Forsythia* sp. in Nelson; plantain (*Plantago* sp.) in Auckland by the seashore; *Convolvulus* sp., *Senecio* sp., *Geranium* sp., *Hymen-anthera* sp., *Muehlenbeckia* sp., *Dichondra* sp., *Coprosma repens* A., Rich. on the Boulder Bank, Nelson; ferns on the Whangamoia Saddle, Nelson Province, *Senecio hectori* Buchan, on Takaka Hill and *Hebe* sp. in Nelson; *Pimelea prostrata* (J. R. & G. Forst.) Willd. in paddock near Kaihoka Lake, Nelson Province; it is common on various glasshouse plants, and on pot plants indoors; on pawpaw (*Asimina triloba*) on Castaway Island, Fiji. This species has a wide host plant range from deciduous and evergreens trees, shrubs and herbaceous plants. It is often found in exposed situations near the sea coast as well as in sheltered situations, and so far has not been found south of Nelson.

2. **Brevipalpus phoenicis** (Geijskes).

This was intercepted on many plants entering New Zealand (Manson, 1967) mostly from the Pacific Islands, also from South Africa. It is less common in New Zealand than **B. obovatus**, and has been reported by Manson only on orchids and grass in the North Island. Further material has been identified from sweet orange (**Citrus**), Rarotonga (W. Cottier); and **Eucalyptus deglupta**, Bulolo, Morobe District, New Guinea (B. C. Peters).

3. **Brevipalpus californicus** (Banks) (= **B. australis** Tucker).

This was commonly intercepted on plants, often orchids, entering the country from Samoa, Fiji, Australia and India, and has been found on orchids in Tauranga (Manson, 1967). Further records are from cactus, Nelson (E. Gourlay), and castor oil plant (**Ricinus communis**), Nelson. This species is obviously not common in New Zealand.

REFERENCES

- COLLYER, E., 1964: Phytophagous mites and their predators in New Zealand orchards. **New Zealand Journal of Agricultural Research** 7: 551-568.
- MANSON, D. C. M., 1967: Mites of the families Tenuipalpidae and Tetranychidae intercepted entering New Zealand from overseas. **New Zealand Journal of Science** 10: 664-674.
- PRITCHARD, A. E. and BAKER, E. W., 1958: The False Spider Mites (Acarina : Tenuipalpidae). **University of California Publications in Entomology** 14: 175-274.
- SPAIN, A. V. and LUXTON, M., 1971: Catalog and Bibliography of the Acari of the New Zealand subregion. **Pacific Insects Monograph** 25: 179-226.