

QUEENSLAND DEPARTMENT OF PRIMARY INDUSTRIES  
DIVISION OF PLANT INDUSTRY BULLETIN No. 428

**STUDIES OF QUEENSLAND TETRANYCHIDAE. 5.  
RECORDS OF THE GENUS PANONYCHUS FROM  
QUEENSLAND, WITH A NOTE ON THE OCCURRENCE  
OF PANONYCHUS CITRI (McGREGOR) IN  
NEW GUINEA**

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**SUMMARY**

*Panonychus elongatus* Manson and *Panonychus ulmi* (Koch) are recorded from Queensland and *Panonychus citri* (McGregor) from New Guinea. Previous records of *P. citri* in Queensland are regarded as referring to *P. elongatus*.

**Introduction**

Citrus red mite (*Panonychus citri* (McGregor) ) is an important and widely distributed pest of citrus. A comprehensive representation of its world distribution was published by the Commonwealth Institute of Entomology (Anon. 1964), with the inclusion of Queensland based on a record under the name *Panonychus mori* Yokoyama (Anon. 1959, p. 48) and on some later records (in litt.).

A related species, *Panonychus elongatus* Manson, recently described from one male found on citrus in Burma (Manson 1963) has a very close affinity with *P. citri* but differs in one seemingly important feature, the longer and more slender aedeagus (Figure 1). The female has not yet been described.

Recent collections in Queensland have established the occurrence of *P. elongatus* in this State. The specimens from these collections are the only ones known of the species apart from the type.

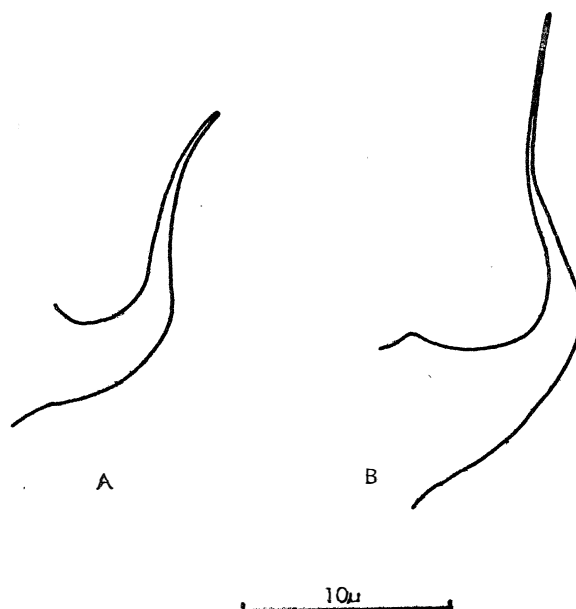


Fig. 1.—Aedeagus of *Panonychus citri* (A) and *P. elongatus* (B).

Some earlier collections on which were based the published reports of the occurrence in Queensland of *P. citri* have been re-examined. Specimens from two such collections, Wongabel 1956 and Kalunga 1961, have now been determined as *P. elongatus*. Others of these collections consisted of females only.

The occurrence of *P. citri* in Queensland therefore has not been confirmed. It is possible that all the records of this species were actually of specimens of *P. elongatus* because the latter has now been identified in other collections from North Queensland where *P. citri* was reported to occur (Anon. 1964), while no mites definitely referable to *P. citri* have yet been found in this State.

The morphological distinction between the males of *P. citri* and of *P. elongatus* is well marked, but what differences there may be in biology, host preferences or importance as pests are not known. *P. elongatus* is not a significant pest in Queensland at the present time. Although in one instance this species was found heavily infesting *Poncirus trifoliata* near Nambour, only occasional specimens were found on nearby commercial citrus varieties, on which the mite did not appear to breed. *P. elongatus* occurs on citrus in the far north of the State, and is suspected of causing fruit blemish, but its real pest status has not been determined.

A new locality record for *P. citri* is here based on a collection from New Guinea.

European red mite (*Panonychus ulmi* (Koch)) is a pest of deciduous fruits in several countries. Knowledge of its occurrence in Queensland is based on the work reported by Bengston (1960, 1965).

## RECORDS

***Panonychus citri* (McGregor)**

TERRITORY OF NEW GUINEA: *Rosa multiflora* Thunb., rose, Aiyura 14.v.1958 (J. H. Barrett).

***Panonychus elongatus* Manson**

QUEENSLAND: *Cedrela odorata* L., Spanish cedar, Wongabel, 3.i.1956, A. R. Brimblecombe. *Cedrela toona* Roxb. var. *australis* (F. Muell.) C.D.C., red cedar, Danbulla, 13.xi.1964, G. W. Saunders. *Centrosema plumieri* Benth., Kairi Research Station, near Atherton, 4.viii.1966, R. J. Elder. *Citrus limon* (L.) Burm.f.cv. Meyer, Meyer lemon, Atherton, 23.vi.1966, G. W. Saunders. *Citrus sinensis* Osbeck, orange, Kalunga, 15.vi.1961, G. W. Saunders. *Passiflora edulis* Sims, passion-vine, Nambour, 28.ix.1964, D. A. Ironside. *Passiflora edulis* Sims forma *flavicarpa* Degener, golden passion-vine, Montville, 14.iv.1966, D. A. Ironside. *Poncirus trifoliata* (L.) Raf., trifoliolate orange, Maroochy Horticultural Research Station, Nambour, August, 1964, J. J. Davis. *Pueraria phaseoloides* Benth., and *Teramnus uncinatus* (L.) Sw., Kairi Research Station, near Atherton, 4.viii.1966, R. J. Elder.

***Panonychus ulmi* (Koch)**

QUEENSLAND: *Malus sylvestris* Mill., apple, and *Prunus domestica* L., plum, but also found on all commercially grown deciduous fruits in the Stanthorpe district, where it was first noted in 1957 (Bengston 1965).

**Acknowledgements**

The author is indebted to Mr. D. C. M. Manson for examining specimens, to Dr. E. W. Baker for comparing Queensland material with the type of *P. elongatus* in the U.S. National Museum, and to the Director, Commonwealth Institute of Entomology, for making material in the British Museum available for examination.

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(Received for publication May 24, 1967)

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