

# PHORETIC MITES ASSOCIATED WITH INSECTS

GRAEME W. RAMSEY

Phoresy is a well known and common phenomenon among the hypopial nymphs of many acarid mites. The hypopus, a non-feeding deutonymph, is not always produced and will sometimes occur only under adverse conditions. It is not parasitic and becomes associated with insects as a means of dispersal. The mouth parts are undeveloped and, posteriorly, each has a complicated sucker-bearing plate on the ventral surface. Sedentary deutonymphs of uropodid mites sometimes occur in enormous numbers on dung-inhabiting Coleoptera and Diptera, and are also common on Chilopoda, Diplopoda, and Isopoda (Evans, Sheals and Macfarlane, 1961).

The beetle in Plate 1 is a hydrophilid *Cyloma altulum* Broun from the A. E. Brookes Collection, taken at a locality near Whangarei Heads prior to 1880. It is 2.75 mm long and has approximately 109 hypopi attached on the upper surface of the elytrae and pronotum, so abundantly, that little of the elytrae remains exposed. The hypopi are those of an anoetid mite, possibly *Histosoma feroniarum* (Dufour). In life they would be clear or translucent and not very conspicuous but in this dried out condition they are white and opaque.

The mite illustrated in Plate II is a deutonymph of a uropodid mite attached to the terminal abdominal tergite of a common grass grub beetle, *Costelytra zealandica* (White) from Opouri, Nelson, 25.11.65. The long stalk or pedicel by which it is attached is formed by the hardened secretion of glands in the anal region of the mite. The deutonymph is 0.65 mm long.

Although the occurrence of hypopi and other mites on insects is not rare there are few records of this in New Zealand and few specimens in collections. It would be much appreciated therefore, if persons finding examples of this phenomenon would send specimens and data to the author at Entomology Division, D.S.I.R., P.O. Box 223, Nelson.

## REFERENCE

- EVANS, G. Owen; SHEALS, J. G.; MACFARLANE, 1961: The Terrestrial Acari of the British Isles. Trustees of the British Museum, London, i-vii, 1-219.

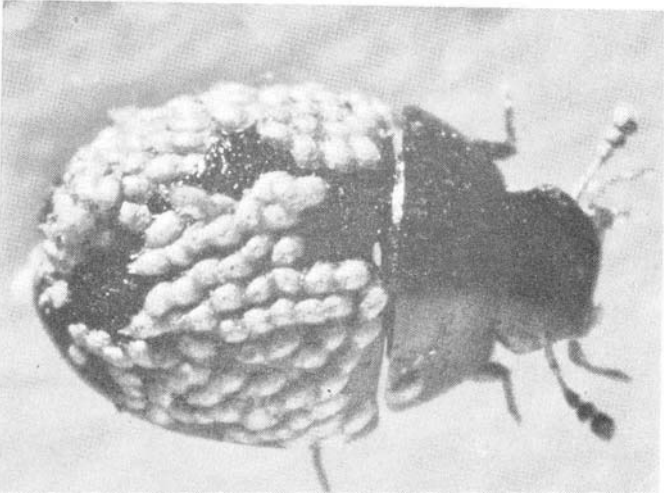


Plate I: Specimen of the hydrophilid beetle **Cyloma atulum** from the A. E. Brookes Collection carrying approximately 109 anoetid hypopi.  
-Photograph B. S. Eykel

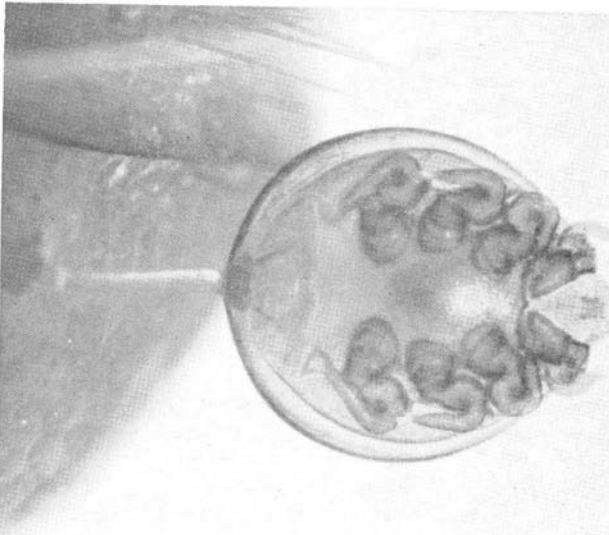


Plate II: A stalked sedentary deutonymph of a uropodid mite attached to the terminal abdominal tergite of a grass grub beetle **Costelytra zealandica** (White) from Opouri, Nelson.  
-Photograph B. S. Eykel