The sexual morphs of the endemic Svalbard aphid *Acyrthosiphon calvulus* (Ossiannilsson), with notes on species biology.

Ian D. Hodkinson, Jeremy M. Bird, Elisabeth J. Cooper & Stephen J. Coulson

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The endemic Svalbard aphid *Acyrthosiphon calvulus* was previously known only from 14 apterous females and one nymph. Male and apterous oviparae are described and illustrated from samples collected off *Salix polaris*, *Pedicularis hirsuta* and *Poa arctica* in Adventdalen, West Spitsbergen. The probable true host plant and the life cycle are discussed. High population densities occurred in open top chambers (OTC s) used to examine the ecological effects of climate warming.

Key words: Acyrthosiphon calvulus, Oviparae, male, viviparae, Salix polaris, Pedicularis hirsuta, Poa arctica, open top chamber, climate warming.

Ian D. Hodkinson, Jeremy M. Bird and Stephen J. Coulson, School of Biological and Earth Sciences, Liverpool John Moores University, Byrom St., Liverpool L3 3AF, UK. [Contact: Prof. Ian D. Hodkinson E-mail i.d.hodkinson@livjm.ac.uk]

Elisabeth J. Cooper, The University Centre on Svalbard, P.O. Box 156, N-9171 Longyearbyen, Norway.