A COLLECTION OF FEATHER MITES (ACARI: ASTIGMATA) FROM GREATER (EASTERN) ANTARCTICA

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Abstract. The 4 feather mites Alloptes stercorarii, Zachvatkinia stercorarii, Z. hydrobatidii, and another, possibly new, species belonging to the genus Zachvatkinia are reported from 3 host species collected in Greater Antarctica.

Few collections of feather mites have been made from Antarctica (Gressitt 1967; Schaefer & Strandtmann 1971). However, it has been consistently reported from both the Antarctic (Atyeo & Peterson 1967) and subantarctic (Atyeo & Peterson 1970) that the hosts support typical associations of feather mites. Most records so far have been from the regions of the Antarctic Peninsula and subantarctic islands, with a collection from Haswell Island (66°30'S, 92°40'E) formerly the only one from Greater Antarctica (Atyeo & Peterson 1967).

Our collection was made during Australian National Antarctic Research Expeditions (ANARE) in 1973 (DR) and 1980–81 (PH). The mites were collected from both live and dead hosts. Three species of feather mites were collected at Davis Station (68°35'S, 77°58'E) in the Vestfold Hills, Princess Elizabeth Land. The 4th species was found from a host collected at sea off Mawson Station at approximately 66°S, 68°E. Unless stated otherwise, the specimens collected are held in the Australian National Insect Collection, Canberra.

Family Alloptidae
Subfamily Alloptinae

Alloptes stercorarii Dubinin, 1952

Numerous adults of both sexes and many nymphs were found on the primary feathers of 2 of the 3 South Polar Skuas, Stercorarius maccormicki, examined at Davis Station in December 1973 (DR) and in November 1980 (PH). One skua carried more than a thousand individuals of this species as well as many individuals of Z. stercorarii.

Family Avenzoaridae
Subfamily Bonnetellinae

Zachvatkinia stercorarii Dubinin, 1949

Numerous adults of both sexes and many nymphs were found on the primary feathers of 2 of the 3 S. maccormicki examined at Davis Station in December 1973 (DR) and on all 3 skuas examined there in November 1980 (PH).
Zachvatkinia hydrobatidii Dubinin, 1949

Approximately 50 individuals, including adults of both sexes and nymphs, were found on the primary feathers of 1 live Wilson’s Storm Petrel, Oceanites oceanicus, examined at Davis Station in December 1973 (DR). Two specimens of this host were found dead in the station area in November 1980 (PH) and approximately 50 individuals of Z. hydrobatidii of both sexes and nymphs were recovered.

Zachvatkinia sp., possibly undescribed

Six specimens of the Antarctic Petrel, Thalassoica antarctica, were collected in various locations at sea off the coast of Antarctica between Davis and Mawson Stations. These were frozen and later examined in Australia for ectoparasites (PH). About 20 specimens, all female, of this possibly new species of Zachvatkinia were recovered from the primary feathers of 1 bird. Most of these specimens were sent to Professor W. T. Atyeo, The University of Georgia, to identify and possibly describe. This record is the first of this genus on T. antarctica, as the only feather mites previously found on this host were Microspalax minicata Megnin & Trouessart (Atyeo & Peterson 1970).

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LITERATURE CITED


