

PSILOPSOCIDAE AND MYOPSOCIDAE (INSECTA : PSOCOPTERA) OF THE BISMARCK ARCHIPELAGO, SOLOMON ISLANDS AND NEW HEBRIDES

C. N. SMITHERS

The Australian Museum, Sydney

and

I. W. B. THORNTON

La Trobe University, Bundoora, Victoria

SUMMARY

This paper is part of a study of the Psocoptera of the Melanesian arcs; *Psilopsocus manus* sp. n. (Psilopsocidae), *Lophopterygella spilota* sp. n., *Mouldsia marmorata* sp. n., *Phlotodes brunneigena* sp. n. and *Ph. lineatus* sp. n. (Myopsocidae) are described from the Bismarck Archipelago and the male of *Myopsocus amplus* Smithers and Thornton is illustrated for the first time. From the Solomons are described *Phlotodes gregarius* sp. n., *Ph. megops* sp. n. and *Ph. anomalus* sp. n. and from the New Hebrides are described *Ph. platyvalvula* sp. n., *Ph. hoskinsi* sp. n. and *Ph. sagitta* sp. n. Additional records for described species are given from the Bismarcks and the Solomons and keys provided to the four genera of Myopsocidae and the species of *Phlotodes* Enderlein from each of the three island groups.

INTRODUCTION

This paper records psocopteran insects of the closely related families Psilopsocidae and Myopsocidae from the Bismarcks, the Solomons and the New Hebrides and is one of a series dealing with this order in the Melanesian arcs (see Smithers and Thornton 1974). Species from New Guinea and New Caledonia have already been dealt with (Smithers and Thornton 1973, 1974).

Psilopsocus Enderlein is the only genus at present placed in the Psilopsocidae, of which five species have been described, namely, *Ps. marmoratus* Smithers and Thornton, *Ps. nigricornis* Enderlein, *Ps. pulchripennis* Smithers and Thornton (all from New Guinea), *Ps. mimulus* Smithers (from Australia) and *Ps. nebulosus* Mockford (from the Philippines). A sixth species, known only from nymphal material (Smithers 1963) occurs in Natal, South Africa. Psilopsocids do not seem to be common insects; extensive collecting in eastern Australia has yielded very few specimens of *Ps. mimulus*. The peculiar, sclerotized, apex of the abdomen of the nymph (Smithers 1963), figs. 8, 9) and the elongate form of the adult with its very long, narrow wings, suggest that this species may inhabit tunnels in wood. A seventh species has been taken in the Bismarcks and this is described below. Mockford (1961) has discussed the relationships of the Psilopsocidae indicating that the family is closely related to the Myopsocidae. From material so far available it seems that the family is best developed in the New Guinea-Bismarcks area with some extension to Australia, the Philippines and into Africa. It has not been taken in other archipelagos of the Melanesian arcs.

There are at present four genera in the Myopsocidae, *Myopsocus* Hagen, *Lophopterygella* Enderlein, *Phlotodes* Enderlein and *Mouldsia* Smithers. A key to these genera is given below. *Myopsocus*, with more than thirty species, has been recorded from all regions although some of the described species may, in fact, belong to