

Keys to the Families and Genera of Psocoptera (Arthropoda: Insecta)

C.N. SMITHERS

Research Associate, Australian Museum,
College St, Sydney, N.S.W. 2000, Australia

ABSTRACT. An illustrated key to the families and genera of the insect order Psocoptera is given. A conspectus of the families and genera expresses the classification of the order.

SMITHERS, C.N., 1990. Keys to the families and genera of Psocoptera (Arthropoda: Insecta). Technical Reports of the Australian Museum 2: 1-82.

Contents

Introduction	2
Classification of the Psocoptera	2
Notes on the Keys	2
Using the Keys	3
Special Problems	3
Conspectus of Families and Genera of the Psocoptera	3
Key to the Families of Psocoptera	8
Keys to the Genera of Psocoptera	22
Lepidopsocidae	22
Trogidae	24
Psoquillidae	24
Psyllipsocidae	25
Prionoglarididae	25
Amphientomidae	26
Musapsocidae	27
Troctopsocidae	27
Manicapsocidae	28
Compsocidae	28
Liposcelidae	28
Pachytroctidae	29

Sphaeropsocidae 30
 Epipsocidae 30
 Dolabellapsocidae 31
 Cladiopsocidae 32
 Ptiloneuridae 32
 Asiopsocidae 32
 Caeciliidae 33
 Stenopsocidae 34
 Amphipsocidae 34
 Lachesillidae 37
 Ectopsocidae 39
 Peripsocidae 39
 Calopsocidae 39
 Trichopsocidae 40
 Archipsocidae 40
 Pseudocaeciliidae 41
 Bryopsocidae 42
 Philotarsidae 43
 Elipsocidae 43
 Mesopsocidae 46
 Hemipsocidae 46
 Psocidae 47
 Psilopsocidae 53
 Myopsocidae 53
 Acknowledgements 54
 References 54
 Illustrations 59

Introduction

The most recent comprehensive key to the genera of the order Psocoptera is that of Roesler (1944). This dealt with over 150 genera arranged in 17 families. Roesler's work, so useful for so long, and still so, has gradually become out of date as more genera have been defined. It has been apparent for some time that a more up to date key, even if not completely satisfactory, would be useful, especially to those workers not very familiar with the group. This paper is an attempt to provide such a key. The keys include nearly 300 genera arranged in 36 families.

General introductions to the anatomy of the Psocoptera describing characters used in the keys can be found in Badonnel (1951), Weidner (1972), Smithers (1970,1972), Günther (1974) and New (1974). Routine study techniques are given in Smithers (1978a). There is a list of publications on the order to 1964 (Smithers, 1965) and a list of species to 1965 (Smithers, 1967).

Classification of the Psocoptera

A summary of the history of the classification of the Psocoptera has been published (Smithers, 1972). Most authors now use a classification which is essentially that of Badonnel (1951) which is a modification and combination of those of Pearman (1936) and Roesler (1944), together with recent subsequent contributions by many authors in

various families. It should be noted that the suprafamily groups are not comparable with the superfamilies of other insect orders and that it is best to regard them as convenient categories until the many genera requiring further study have been assessed. This applies especially to the Homilopsocidea. A start has been made towards bringing the nomenclature of suprafamily groups into line with those of other orders. For example, Mockford & Garcia Aldrete (1976) have grouped the families of Pearman's Caecilietae into two superfamilies. Smithers (1972) suggested a phylogenetic classification of the order but pointed out that it would be preferable to retain the earlier arrangement for practical purposes until the phylogenetic hypotheses could be widely tested. This recommendation is followed here.

Notes on the Keys

The keys presented here are practical tools to help in recognising families and genera and nothing further is claimed for them. The first is a key to families; this is followed by keys to the genera of each family. While this work was being prepared New (1987) published a key to families. This has been extensively modified and revised to form the basis of the present family key. Mockford (1987) published a key to nymphs which, although based on North American forms, is of wide application. Living genera only are included in the present keys but the conspectus of families includes genera known from amber. The literature