THE TAXONOMY AND ECOLOGY OF THE ENDOPARASITES OF THE BLACK BREAM *ACANTHOPAGRUS AUSTRALIS* (GÜNTHER, 1859) FROM THE NORTHERN COAST OF NEW SOUTH WALES

by

ACHMAD SADELI BAHRUDIN

A thesis submitted for the degree of Master of Science of the Department of Zoology, University of New England, NSW, 2351 Australia.

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ABSTRACT

The endoparasite community of the black bream, *Acanthopagrus australis* (GÜnther, 1859) from the northern coast of New South Wales is described on the basis of 449 fish dissections. Eleven species of Digenea, 5 larval Cestoda, 4 larval and 8 adult Nematoda and 4 species of Acanthocephala are recorded. A new species of Digenea is *Erilepturus acanthopagri*. *Coitocaecum gymnophallum* Nicoll, 1915 is redescribed. New hosts and geographical locations are recorded for *Opecoelus lobatus* Ozaki, 1925, *O. sphaericus* Ozaki, 1925, *Monorchis* sp. (Monticelli, 1893) Looss, 1902, *Uterovesiculurus yamagutii* Ahmad, 1980, and *Lecithocladium* sp.

A new host is recorded for *Sterrhurus* sp. . *Austrocreadium* sp. and *Derogenoides* sp. are probably new species but left unnamed since only one specimen is available of each species. All cestode larvae, i.e. *Nippotaenia* sp., *Gymnorhynchus* sp., Type 1 Form 1, Type 1 Form 2, and Type 2 and *Proteocephalus* sp. are recorded for the first time in *A. australis*. New species of nematodes are *Cucullanus acanthopagri*, *Cucullanellus acanthopagri*, *Neocucullanellus australis* and *Philometroides roubali*. Four nematode larvae, i.e. *Terranova* sp. Type 1 and Type 2 (of Cannon, 1977), *Contracaecum* sp. and *Hysterothylacium* sp. (synonym *Thynnascaris* sp.) are redescribed. *Spirocamallanus* sp. and *Indocucullanus* sp. are probably new species but no names are proposed, since only a single specimen of the first species and no male specimen of the second species were found. *Echinocephalus uncinatus* Molin, 1858 is redescribed and is recorded for the first time in *A. australis*. *Philometra* sp. is very likely a new species. A new species of Acanthocephala is *Longicollum australis*. *Longicollum pagrosomi* (Yamaguti, 1935) Johnston and Edmonds, 1951 and *Neoechinorhynchus* sp. are described. The latter species is possibly new as is *Hexaspiron* sp. Species diversity, host specificity and zoogeographical affinities of the endoparasites are discussed. Seasonal fluctuations in intensities and

prevalences of infections of five common trematode species from Red Rock Estuary, are discussed, i.e. of *Coitocaecum gymnophallum*, two species of *Opecoelus*, *Dactylostomum gracile* and *Erilepturus acanthopagri*. Allometric growth of *Coitocaecum gymnophallum* is described.

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TABLE OF CONTENTS

Contents (Cont'd)

LIST OF FIGURES

(cont'd)

LIST OF PLATES

(cont'd)

LIST OF TABLES

Cont'd

Cont'd