FOLIA PARASITOLOGICA (PRAHA) 25: 281–283, 1978.

NOTES ON THE DISTRIBUTION OF MARINE CYMOTHOIDAE (ISOPODA, CRUSTACEA) IN THE AUSTRALIAN—NEW ZEALAND REGION

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Abstract. The paper contains information on parasitical habitat and geographical distribution of parasitic isopods of the genera *Meinertia*, *Lironeca* and *Cymothoa* found in the Australian and New Zealand regions. Problem of host specificity degree of parasitic isopods of these genera is briefly discussed.

A large material of parasitic isopods from different fish species of the Australian-New Zealand region was collected during the years 1966—1973. Parasitic isopods belonging to three subfamilies of the family Cymothoidae, Ceratothoinae, Lironecinae and Cymothoinae, were recovered after examination of part of the material.

The subfamily Ceratothoinae in our collection is represented by the following species:

Meinertia trigonocephala (Leach, 1818) was found in the mouth cavity of *Trachurus declivis* Jenyns (Carangidae), *Pristiophorus nudipinnis**) Gunther (Pristiophoridae), *Dasyatis brevicaudata**) (Hutton) (Dasyatidae), *Scomber australasicus**) Cuvier et Valenciennes (Scombridae), *Seriolella maculata**) Forster (Centrolophidae), *Thyrsites atun**) (Euphrasen) (Gempylidae), *Coridodax pullus**) (Forster) (Odacidae) in the Tasman Sea; and in the mouth cavity of *Trachurus maccullochi**) Nichols and *Ulua mandibularis**) (Macleay) (Carangidae), *Upeneus parosus**) Cuvier et Valenciennes (Mullidae), *Emmelichthys nitidus**) Richardson and *Plagiogeneion macrolepis**) McCulloch (Emmelichthyidae), *Nemadactylus macropterus**) (Bloch et Schneider) (Cheilodactylidae) from the Great Australian bight.

M. lineata (Miers, 1876) from the mouth cavity of *Seriolella brama**) (Gunther) (Nomeidae), and *Pagrosomus* sp.*) (Sparidae) was found off north-west coast of Australia.

The subfamily Lironecinae in our collection is represented by the following species:

Lironeca raynaudii Edwards, 1840 from the branchial cavity of *Notothenia macrocephala**) Gunther, *N. microlepidota**) Hutton, *Notothenia* sp. and *Notacanthus sexpinis**) Richardson (Nototheniidae), *Cyttus novaezealandiae** (Arthur) and *C. australis**) Richardson (Zeidae), and *Chelidonichthys kumu* (Lesson et Garnot) (Triglidae) was found off New Zealand.

*L. indica***) Edwards, 1840 from the branchial cavity of *Rastreliger kanagurta* (Cuvier) (Scombridae) and *Atule malam* (Bleeker) (Carangidae) was found off north-west coast of Australia.

*L. caudata***) Schioedte et Meinert, 1884 from the branchial cavity of *Genypterus blacodes* (Bloch et Schneider) (Ophidiidae) was found off New Zealand.

The subfamily Cymothoinae in our collection is represented by the following species:

*Cymothoa pulchra***) Lanchester, 1902 from the mouth cavity of *Tetraodon stellatus* (Bloch et Schneider) (Tetraodontidae) was found off north-west coast of Australia.

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*) — a new host

**) The first registration in the Australian—New Zealand region.

*C. frontalis***) Edwards, 1840 was found off west coast of Australia, host undetermined.

*C. plebeia***) Schioedte et Meinert, 1884 from the mouth cavity of *Pagrosomus* sp. (Sparidae) was found off west coast of Australia.

*C. curta***) Schioedte et Meinert, 1884 from the mouth cavity of *Velifer hypselopterus** Bleeker (Veliferidae) was found in the Arafura Sea.

Another information on species of the genera *Meinertia*, *Lironeca* and *Cymothoa* in the Australian-New Zealand region was published in papers of preceding authors:

Hale (1926) recorded the following species in the Australian region: *Meinertia trigonocephala* from *Pagrosomus auratus* (Sparidae), *Chelidonichthys kumu* (Triglidae), *Girella tricuspidata* (Girellidae), *Caranx georgianus* (Carangidae), *Mugil* sp. (Mugilidae), *Lironeca raynaudii* from *Zeus faber* (Zeidae), *L. turgidula* from unknown host, *Cymothoa indica* from *Mugil* sp. (Mugilidae) and *C. vicina* from unknown host.

Hewitt and Hine (1971) recorded the following species in the New Zealand region: *Meinertia lineata* from *Coridodax pullus* (Odacidae) and *Reporhamphus ihi* (Exocoetidae), *M. imbricata* from *Arripis trutta* (Arripidae), *Trachurus novaezealandiae* (Carangidae), and *Lironeca raynaudii* from *Genypterus blacodes* (Ophidiidae), *Rhombosolea* sp. (Pleuronectidae), *Physiculus bachus* (Moridae), and *Notothenia colbecki* (Nototheniidae).

Table 1. Degree of host specificity of Cymothoids

Parasites		Hosts		
Subfamily	Species	Number of species	Number of genera	Number of families
Ceratothoinae	*Meinertia trigonocephala*	18	17	14
	M. lineata	4	4	4
	M. imbricata	4	3	3
Lironecinae	*Lironeca raynaudii*	12	8	6
	L. indica	2	2	2
	L. caudata	1	1	1
	L. turgidula		Host unknown	
Cymothoinae	*Cymothoa pulchra*	1	1	1
	C. plebeia	1	1	1
	C. curta	1	1	1
	C. indica	1	1	1
	C. frontalis		Host unknown	
	C. vicina		Host unknown	

M. imbricata is also known from *Trachurus picturatus* (Carangidae) (Chilton 1911a, Trilles 1972) and *Scorpis aequipinnis* (Scorpidae) (Chilton 1911b, Trilles 1972).

Different degree of host specificity is characteristic for the cymothoids as for all other parasites. The host-parasite relationship is discussed on the basis of our results and literary data. The following table shows that species of the genera *Meinertia* and *Lironeca*, with the exception of *L. caudata* possess a wide host-specificity, especially *M. trigonocephala* and *L. raynaudii*, but species of the genus *Cymothoa* have a strict host specificity.

As a result of our investigation of the cymothoid fauna of the Australian-New Zealand regions, some species new for this region have been found and host-list of known species has considerably increased.

ЗАМЕЧАНИЯ О РАСПРОСТРАНЕНИИ МОРСКИХ CYMOTHOIDAE (ISOPODA, CRUSTACEA) АВСТРАЛО-НОВОЗЕЛАНДСКОГО РАЙОНА

В. В. Авдеев

Резюме. В работе обсуждается место обнаружения и географическое распространение паразитических изопод родов *Meinertia*, *Lironeca* и *Cymothoa* от рыб Австрало-Новозеландской области. Обсуждается проблема степени хозяинной специфичности паразитических изопод этих родов.

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Received 27 July 1977.

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FOLIA PARASITOLOGICA (PRAHA) 25: 283–284, 1978.

I. G. Galuzo (8. 4. 1899—10. 10. 1977)

The Soviet biologists mourn the loss of an outstanding Soviet parasitologist, Member of the Kazakh SSR Academy of Sciences, Honoured Scientist of the Kazakh SSR, Professor Illarion Grigoryevich Galuzo, who died on October 10, 1977 at the age of 78 years.

I. G. Galuzo was born on April 8, 1899 in Beylorussia. In 1926 he graduated from the Leningrad Veterinary Institute and from 1930 to 1933 completed his post-graduate studies at the Institute of Zoology, USSR Academy of Sciences, under the guidance of Academician E. N. Pavlovsky. Since 1937 his scientific and social career was passed in Kazakhstan. As Director of the Institute of Zoology, the Kazakh SSR Academy of Sciences for 17 years he devoted great efforts to the development of zoology in the Republic. Under his direction new research lines were developed, many new laboratories were opened, an experimental base was established and a Natural Museum was organized. On his initiative the Society of Parasitologists of Kazakhstan was founded, presided by him till his last days.

I. G. Galuzo's professional interests and experience were very broad. He studied the fauna and ecology of ixodid ticks and the role of these blood-sucking parasites as vectors of transmissive