XI. *Report on the Crustacea Mysidacea.* *By* W. M. Tattersall, *D.Sc.*, *Professor of Zoology, University College, Cardiff.*

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(Text-figures 46–48.)

THE collection of Mysids made by the Cambridge Expedition to the Suez Canal, 1924, is a small one comprising only thirteen species, for the most part well-known forms. Two species, however, are new to science: one from Port Said, which has been made the type of an interesting new genus, *Kainommatomysis*, with some unusual features, and the other a distinctive species of the genus *Heteromysis*, from Lake Timsah.

As far as the Mysidacea are concerned, practically no collecting has been done in this region hitherto.

The Mediterranean Mysidæ are well known, and formed the subject of a memoir by Sars (1877), to which later authors have added new records and new species, so that to-day our knowledge of the occurrence and distribution of species in this area is very extensive.

Much less is known of the Mysidacea of the Red Sea. Paulson (1875) and Kossmann (1880) are the only authors who have recorded species from the Red Sea, with the exception of a single specimen collected at Suez by Dr. Mortensen and described by Hansen in his 'Siboga' report. As far as I can make out, the following list comprises all the species known from the Red Sea:—

Siriella brevicaudata Paulson.
,, *paulsoni* Kossmann.
,, *similis* Czerniavsky.
,, *serrata* Hansen.
Gastrosaccus erythræus (Kossmann).
Heteromysis harpax (Hilgendorf).

From the point of view of the source of the fauna of the Suez Canal this collection offers a certain amount of conclusive evidence.

The species collected at Port Said were nine in number, all, with the exception of the new species, *Kainommatomysis foxi*, common and widely distributed Mediterranean forms. The full list is as follows:—

Siriella jaltensis Czerniavsky.
Gastrosaccus sanctus (van Ben.).
Leptomysis mediterranea G. O. Sars.
Paramysis (*Paramysis*) *arenosa* (G. O. Sars).
Paramysis (*Schistomysis*) *assimilis* (G. O. Sars).
Mesopodopsis slabberi (van Ben.).
Neomysis longicornis (M.-Ed.).
Diamysis bahirensis (G. O. Sars).
Kainommatomysis foxi, gen. et sp. n.

Two of these species, *Mesopodopsis slabberi* and *Diamysis bahirensis*, have penetrated to Lake Menzaleh, where the low salinity conditions are favourable to their existence.

The collection contained no specimens from the Canal between Port Said and Lake Timsah, which suggests that the Mysidacea have not been able to immigrate into the Canal from the Mediterranean side.

From Lake Timsah to Suez four species were collected:—

Siriella brevicaudata Paulson.
Siriella serrata Hansen.
Pseudanchialina inermis (Illig).
Heteromysis digitata, sp. n.

Of these species the two *Siriella* are immigrants from the Red Sea, and *Pseudanchialina inermis*, while not hitherto known from the Red Sea, has been recorded from the Indian Ocean and the waters round the Dutch East Indies. There is thus, in this collection, a sharp line of demarcation between the Mediterranean and Red Sea elements of the Suez Canal fauna as far as the Mysidacea are concerned. Immigration from the Red Sea has reached Lake Timsah, but, except for Lake Menzaleh, there is no evidence of an immigration from the Mediterranean beyond Port Said itself.

As to the means by which this immigration has been accomplished it is difficult, in the present state of our knowledge of the bionomics of Mysidæ, to give an opinion.

Mr. Fox tells me that for about ten months in the year there is an extremely slow current from S. to N. between the Bitter Lakes and Port Said, and for the remaining two months, August and September, the current is reversed. The average speed of this current is 0·09–0·25 metres per second, and it is frequently changed in direction by winds. On the other hand, between Suez and the Little Bitter Lake there is a rapid tidal current changing twice daily, with an average speed of 0·71–0·93 metres per second and a maximum speed of 1·40 metres per second.

Adult Mysids in the littoral region are bottom haunting in habit, living among weeds or in the sand at the bottom of the water. The young are hatched practically in the adult state, except for size, and pass through no distinctive planktonic larval phases which could be more easily and readily distributed by currents. On the other hand, both adult and young Mysids in the littoral waters leave their bottom haunts at night and become planktonic. In the adult state they are moderately powerful swimmers, and I imagine that their powers of locomotion are sufficiently strong to render them independent of the action of currents, and, if necessary, to overcome them. On the other hand, it is conceivable that strong currents at least would materially affect and influence the movements of the young forms when planktonic. We have no precise information on this point.

In the Suez Canal I should say that the currents from the Bitter Lakes to Port Said are too slow and variable to have affected seriously the immigration of Mysids up the

Canal. On the contrary, the relatively rapid currents from Suez to the Bitter Lakes have probably had considerable influence in extending the range of species from the Red Sea up the Canal, particularly in their effect on the young during their planktonic phases. It is at least significant that the extent of immigration into the Canal is greatest in the region of most rapid currents.

I desire to express my thanks to Miss E. M. Sheppard for her valuable assistance in the preparation of serial sections of the eyes of *Kainommatomysis*, and to my wife for the drawings which illustrate this report.

Order **MYSIDACEA.**

Suborder **MYSIDA.**

Family MYSIDÆ.

Subfamily SIRIELLINÆ.

Genus SIRIELLA Dana.

1. SIRIELLA JALTENSIS Czerniavsky.

Siriella crassipes G. O. Sars, 1877, p. 97, tab. 32.

Locality.—Port Said, P. 1, twenty-four specimens, 3–11 mm., mostly immature.

Distribution.—Widely distributed in the Mediterranean area and on the shores of Western Europe to the British Isles.

2. SIRIELLA BREVICAUDATA Paulson.

Siriella brevicaudata Paulson, 1875 (1), p. 30, pl. i. figs. 15–16.
„ „ „ 1875 (2), p. 123, pl. xx. figs. 1 A–M.
„ „ Czerniavsky, 1882, p. 109.
„ „ „ 1883, p. 32.
„ „ Tattersall, 1922, p. 450, text-figs. 3 *a–h*, 4 *a–f*.

Localities.—Lake Timsah, T. 8, washing phanerogam, about 6 ft., fifty specimens. Great Bitter Lake, K. 3, one male. Kabret, K. 1, two males, two females, and one immature. K. 6, three males and seventeen females.

Remarks.—These specimens are in substantial agreement with those which I have recorded from Ceylon (1922). The description of the species which I then gave requires amplification in one or two points. The carapace is very definitely raised into a tuberculose process in the mid-dorsal line about midway between the cervical groove and the anterior margin of the rostral plate. As I mentioned in my earlier description, the cervical groove itself is well marked and the posterior margin in particular is well raised into a ridge, which in lateral view has the appearance of a mid-dorsal tubercle. In lateral view, therefore, the carapace of this species appears to be ornamented by two tubercles very much as in *S. nodosa* Hansen, but differing in the position of the posterior tubercle. These tubercles are present in both sexes, but are more definitely marked in the female than in the male

My figure of the outer uropod does not convey quite the right impression. The five spines at the distal end of the outer margin of the proximal joint of the exopod are not equal in size, but form a graded series, the distal spine being the longest.

Distribution.—Known only from the Red Sea and Ceylon.

3. SIRIELLA SERRATA Hansen.

Siriella serrata Hansen, 1910, p. 38.

Localities.—Ferry Post, Km. 76, two females and one male. Lake Timsah, T. 8, washing phanerogam, about 6 ft., seven immature. Kabret, K. 6, three immature, K. 4, one immature male.

Remarks.—The specimens agree in closest detail with Hansen's description. The species is distinguished from all the other species of the genus in having the outer margin of the antennal scale armed with small spines.

Distribution.—Only known from one specimen collected at Suez.

Subfamily GASTROSACCINÆ.

Genus GASTROSACCUS Norman.

4. GASTROSACCUS SANCTUS (van Ben.).

Gastrosaccus sanctus G. O. Sars, 1877, p. 64, tab. 21–23.

Locality.—Port Said: Beyond Western Jetty, deep, one immature specimen, 4 mm. P. 3, hand-net on sandy shore, one adult female.

Remarks.—The smaller specimen is very immature, but already possesses the pair of forwardly directed lappets on the free hinder dorsal margin of the carapace, characteristic of *G. sanctus*. The telson has five spines on each lateral margin, and there are only five spines on the outer margin of the outer uropod. The sixth joint of the endopod of the posterior thoracic limbs is subdivided into only four joints, but this, again, is a character of immaturity. The identity of this specimen must of necessity be doubtful, but the characters of the lobes of the carapace and of the telson point with a considerable degree of certainty to its being an immature specimen of *G. sanctus*.

Distribution.—Widely distributed in the littoral waters of the whole of the Mediterranean and of Western Europe as far north as Great Britain and Belgium.

Genus PSEUDANCHIALINA Hansen.

5. PSEUDANCHIALINA INERMIS (Illig).

Chlamydopleon inerme Illig, 1906, p. 209, fig. 16.
Pseudanchialina inermis Hansen, 1910, p. 61, pl. ix. figs. 2 *a–d*.

Localities.—Lake Timsah: T. 9, two females and one male. T. 15, Weed washings, two females. Kabret: K. 0, night plankton, four, very immature. K. 6, one female and two males.

Remarks.—The adult specimens measure about 3 mm. in total length, and appear to be mature and fully grown. All the females possess fully developed brood lamellæ, and in the males the third pair of pleopods are completely formed. They agree very closely with Hansen's description and figures save in one particular. There are only three spines on the lateral margins of the telson (excluding the large terminal spine) instead of five as in both Hansen's and Illig's specimens.

Of the eight full-grown specimens in this collection six have the telson entire and undamaged, and in all six there are only three lateral spines on the margins. In all other characters, as far as I can see, the specimens are in the closest agreement with Hansen's description, and I can seize on no other point to add to the different spinulation of the telson, which could suggest that the Suez Canal specimens belong to a new species. I do not feel that the small difference in the telson can be regarded as of specific value.

Distribution.—East of Ceylon and Mentaweibecken (Illig, 1906); Bay of Bengal and off Timor (Hansen, 1910).

Subfamily MYSINÆ.

Tribe **Leptomysini.**

Genus LEPTOMYSIS G. O. Sars.

6. LEPTOMYSIS MEDITERRANEA G. O. Sars.

Leptomysis mediterranea G. O. Sars, 1877, p. 45, tab. 14–16.

Locality.—Port Said: P.1, two adult females, 11 mm.

Distribution.—Widely distributed in the Mediterranean area, the coasts of the British Isles, and the shores of the English Channel.

Tribe **Mysini.**

Genus PARAMYSIS Czerniavsky.

7. PARAMYSIS (PARAMYSIS) ARENOSA (G. O. Sars).

Mysis arenosa G. O. Sars, 1877, p. 24, tab. 5–6.
Schistomysis arenosa Norman, 1892, p. 258.
Paramysis (Paramysis) arenosa Zimmer, 1915 (1), p. 213.

Localities.—Port Said: P. 1, West Jetty, one immature, 4 mm. P. 2, two males, 7 mm. P. 3, hand-net on sandy shore, one female.

Remarks.—These specimens agree in all details with Sars's original description and belong to the subgenus *Paramysis* according to Zimmer's latest revision.

Distribution.—Widely distributed in the Mediterranean area and off the South and West coasts of the British Isles.

8. PARAMYSIS (SCHISTOMYSIS) ASSIMILIS (G. O. Sars).

Mysis assimilis G. O. Sars, 1877, p. 21, tab. 3–4.
Synmysis assimilis Czerniavsky, 1882, p, 27.
" " " 1883, p. 56.
Paramysis (*Synmysis*) *assimilis* Zimmer, 1915, p. 213.

Locality.—Port Said: P. 3, hand-net on sandy shore, one adult male and one adult female.

Remarks.—These specimens agree very closely with Sars's original description and figures except in one small point, the spines arming the inner uropod. These spines are arranged in series as in Sars's figure, but the series are more numerous, there being not more than four or five smaller spines between each of the larger spines. The agreement between the number and position of the chromatophores on the abdomen is particularly striking.

The fifth pleopod of the male is, however, only one-jointed, and this character would remove the species from the subgenus *Synmysis*, where it has been placed by Zimmer, and require its transfer to the subgenus *Schistomysis*, as a species closely related to *S. ornata*. This appears to be its natural position, for the species agrees much more nearly with *S. ornata* than with any other species that I have examined, and Sars, in his original account of the species, lays stress on this similarity.

Distribution.—This species was recorded originally from Goletta on the coast of Tunis. I cannot trace any further records in literature, so that the capture of additional specimens after an interval of nearly fifty years is a matter of some interest.

Genus MESOPODOPSIS Czerniavsky.

9. MESOPODOPSIS SLABBERI (van Ben.).

Macropsis slabberi G. O. Sars, 1877, p. 36, tab. 11–13.

Localities.—Port Said: Jetty, East Side, one. P. 1, two immature. P. 0, seven males and five females. P. 4, three. Inner Harbour, two. Lake Menzaleh: Lock, eighty-seven.

Remarks.—The low salinity conditions obtaining in Lake Menzaleh are apparently suitable for this species, and account for its relative abundance there.

Distribution.—Widely distributed in suitable environment throughout the Mediterranean region and the coasts of Western Europe as far north as Sweden; S.W. Africa (Zimmer).

Genus NEOMYSIS Czerniavsky.

10. NEOMYSIS LONGICORNIS (M.-Ed.).

Mysis longicornis G. O. Sars, 1877, p. 30, tab. 9–10.

Localities.—Port Said: Beyond Western Jetty, deep, three adult males and one immature female, 4–7 mm. Jetty, East side, four females, 5–7 mm. P. 1, one immature,

6 mm. P. 2, three adult females, three males, and three immature females, 4–7 mm. P. 3, tow-net in 1 fathom, a large number of specimens, mostly immature.

Distribution.—Widely distributed in the Mediterranean region and on the shores of Western Europe as far north as the British Isles.

Genus DIAMYSIS Czerniavsky.

11. DIAMYSIS BAHIRENSIS (G. O. Sars).

Mysis bahirensis G. O. Sars, 1877, p. 27, tab. 7–8.
Diamysis bahirensis Czerniavsky, 1883, p, 84.

Localities.—Palestine: Haifa, Kishon River, thirty-two. Port Said: P. 1, one immature female. P. 4, four males, two females, and one immature. Lake Menzaleh: Island 10 km. S.W. of Loch, seven immature.

Distribution.—Not known outside the Mediterranean area, where it is apparently not uncommon under conditions of low salinity.

Genus KAINOMMATOMYSIS, gen. n.

Eyes with an enlarged corneal lens, facing backwards, on the upper posterior face of the cornea.

Antennal scale narrowly lanceolate, setose all round, with a distal transverse suture separating off a small terminal joint.

Mouth-parts and thoracic appendages not exhibiting any very marked features. The terminal joint of the palp of the maxilla is not expanded. The first thoracic limbs have a well-developed gnathobasic lobe on the inside margin of the second joint, but not, so far as I can see, on the third or fourth joints. The sixth joint of the third to the eighth thoracic limbs is divided into three subjoints by transverse sutures, and the nail is well developed.

Telson moderately short, armed with spines throughout the entire length of the outer margin. Apex deeply cleft by a wide opening with smooth margins except for a single pair of spines at the base of the cleft and a pair of long plumose setæ as long as the cleft itself.

Uropods with a row of spines on the inner branch extending along the entire inner margin.

Pleopods 1, 2, 3, and 5 of the male consisting of simple unjointed plates narrowly lanceolate in shape armed with several plumose setæ and possessing a well-marked side lobe.

Pleopod 4 (fig. 46, E) of the male with the endopod as on the other pairs, exopod long, composed of four joints, terminating in a single long powerful plumose seta.

Type: *Kainommatomysis foxi*, sp. n.

Remarks.—The precise position of this genus in the accepted classification of the group is a matter which has puzzled me very much. It must be confessed that, were only female specimens known, they could be referred to the genus *Dioptromysis* Zimmer (1915(2)) without question. The form of the telson is practically identical, and even the peculiar formation of the eye is very similar in both. When instituting the genus *Dioptromysis* Zimmer had only a single female at his disposal, and, while therefore not able to describe the pleopods of the male, he surmised that the genus must find a place in the tribe Leptomysini as defined by Hansen. In 1923 I referred specimens found in Southern India and the Andaman Isles, I think correctly, to Zimmer's species, and, having male specimens at my disposal, I confirmed Zimmer's surmise as to the position of the genus. The pleopods of the male were typical of the subfamily Leptomysini.

In the specimens from the Suez Canal dealt with here, the pleopods of the male are completely different from those of the Leptomysini and conform to those of certain of the Mysini, approaching most nearly to those of the genus *Diamysis*. The first, second, third, and fifth are rudimentary as in the female, but the fourth has an elongated exopod terminating in a single stout seta. They only differ from those of *Diamysis* in having four joints to the exopod instead of two.

On the structure of the pleopods the position of these specimens is clearly among the Mysini, but the telson is more Leptomysini than Mysini in character. No member of the Mysini, as far as I can remember, has a pair of plumose setæ at the apex of the telson. This feature, on the other hand, is characteristic of the Erythropini and of the Leptomysini.

The resemblance of these specimens to *Dioptromysis* is most striking, yet on the evidence of the pleopods of the male they must be placed in quite a separate subfamily if we are to accept the view that the form of the male pleopods is fundamental for classificatory purposes. An abandonment of this view would mean an entirely new scheme of classification for the group, which I am not prepared at the moment either to advocate or formulate.

12. KAINOMMATOMYSIS FOXI, sp. n. (Fig. 46, A–G ; fig. 48, P.)

Locality.—Port Said : P. 4, fourteen.

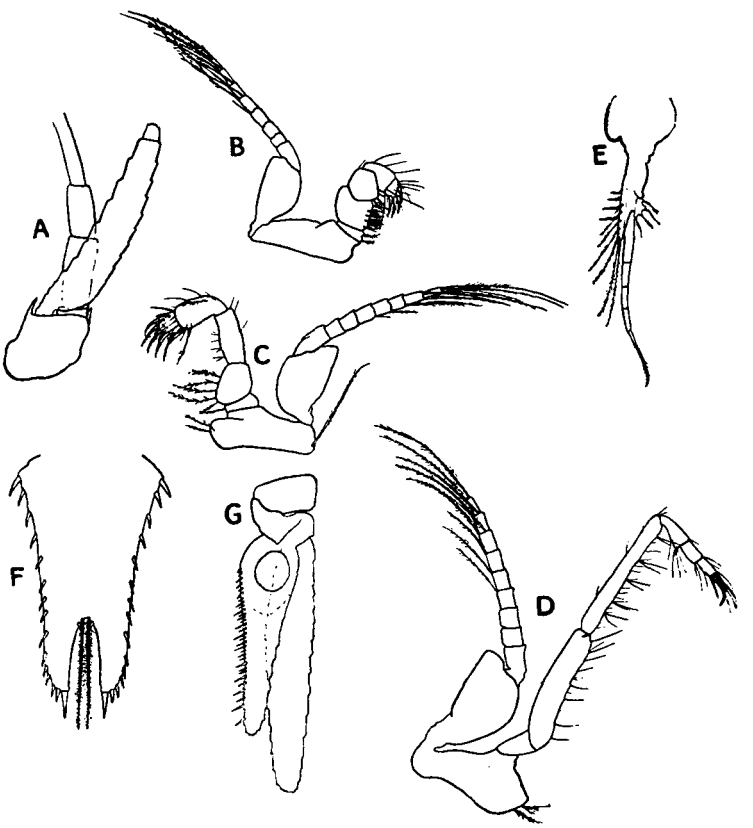
Description.—Body moderately slender ; carapace short, leaving the last thoracic somite and a portion of the penultimate somite entirely exposed, produced in front into a short, acute but bluntly pointed rostral plate (fig. 48, P) extending forwards as far as the eye-stalks, anterolateral angles rounded.

Eyes (fig. 48, P) large and well developed, on stout stalks, projecting laterally at right angles ; pigment of the cornea black ; on the upper posterior face of the eye is a

single enlarged lens elevated on a protuberance so as to stand out from the rest of the eye and facing backwards.

I am indebted to my assistant, Miss E. M. Sheppard, for the preparation of microtome sections of the eyes of this species. The material had, unfortunately, not been specially preserved for histological study, and details, therefore, cannot be elucidated

Fig. 46.



Kainommatomysis foxi, gen. et sp. n.

B, antennal scale, × 39; B, first thoracic limb, × 39; C, second thoracic limb, × 39; D, third thoracic limb, × 39; E, fourth pleopod of the male, × 39; F, telson, × 50; G, uropods, × 39.

very satisfactorily. It is, however, possible to make out that the single enlarged corneal lens visible externally represents a complete ommatidium in which the retinal cone is likewise considerably enlarged, about twice as big as the other cones in the eye. The proximal end of the enlarged crystalline cone appears to be embedded in or surrounded by a dense mass of pigment, and the whole ommatidium is supplied by a special branch of the optic nerve. Attached to the large corneal lens there are two

bundles of striated muscle fibres which suggest from their position that the lens is capable of a certain degree of independent movement.

Antennular peduncle with the male lobe well developed and densely hirsute.

Antennal peduncle (fig. 48, P) slightly shorter than the antennular, third joint about two-thirds of the length of the second; scale (fig. 46, A) narrowly lanceolate in shape, seven times as long as broad at its widest part, setose all round its margin, a distal transverse suture separating off a small second joint, a prominent spine on the basal joint from which the scale springs.

The essential features of the thoracic limbs can be seen from fig. 46, B–D, representing the first, second, and third pairs. The sixth joint of the posterior thoracic limbs (fig. 46, D) is divided into three subsidiary joints, and the nail is long and curved. The basal plate of the exopods of all the thoracic limbs is without a spiniform process on the free outer distal corner.

Pleopods (fig. 46, E) of the male as already described for the genus.

Sixth abdominal somite one-third longer than the fifth.

Telson (fig. 46, F) as long as or slightly longer than the sixth abdominal somite, one and two-third times as long as broad at the base, apex less than half as broad as the base and deeply cleft, cleft twice as deep as the width at the mouth and one quarter of the length of the telson, margin of the cleft smooth except for a pair of spinules and a pair of plumose setæ at its base, the setæ extending to the tips of the terminal spines, lateral margins of the telson armed throughout their entire length by about 15 spines more or less regularly arranged, the terminal spine the longest, being twice as long as the one next it.

Inner uropods (fig. 46, G) nearly one and a half times as long as the telson, inner margin armed with a row of about 30 spines extending along the whole margin from the statocyst to the apex, the spines of varying length and arranged in series, proximally with 2, 3, or 4 smaller spines between the larger ones, distally the larger and smaller spines alternating; statocyst large.

Outer uropods (fig. 46 G) one and three-quarter times as long as the telson and one-fifth longer than the inner.

Length of adult male and female, 6 mm.

Remarks.—The systematic position of this species has already been discussed under the genus. The characters of the eye, telson, and the male pleopods combine to distinguish it from all other species. The close resemblance between it and *Dioptromysis perspicillata* Zimmer has already been alluded to, and can only be regarded as a remarkable example of parallel evolution or convergence.

I have much pleasure in associating this remarkable species with the name of Mr. H. Munro Fox.

Tribe **Heteromysini.**

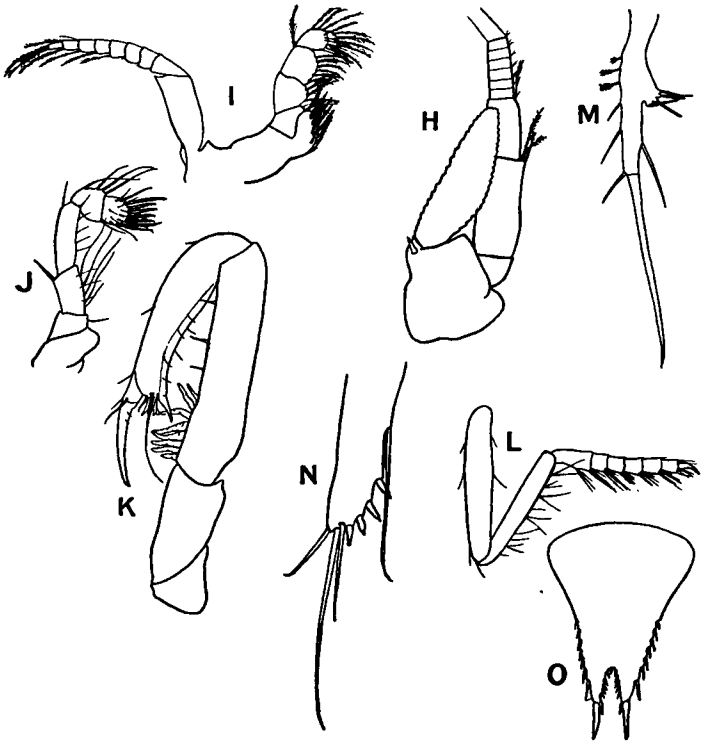
Genus HETEROMYSIS S. I. Smith.

13. HETEROMYSIS DIGITATA, sp. n. (Fig. 47, H–O; fig. 48, Q.)

Locality.—Kabret: K. 6, one male and two females.

Anterior margin (fig. 48, Q) of the carapace produced in front to an acutely pointed rostral plate extending forwards almost to the level of the anterior margin of the eyes.

Fig. 47.



Heteromysis digitata, sp. n.

H, antennal scale, × 50; I, first thoracic limb, × 50; J, endopod of the second thoracic limb, × 50; K, endopod of the third thoracic limb, × 50; L, endopod of the fourth thoracic limb, × 50; M, third pleopod of the male, × 50; N, extremity of the fourth pleopod of the male, × 160; O, telson, × 50.

Eyes (fig. 48, Q) small, only slightly longer than broad; cornea much smaller and slightly narrower than the stalk, latter with its anterior distal edge forming a prominent rim overhanging the cornea, giving almost the appearance in dorsal view of an anterior process or tooth.

Antennal scale (fig. 47, H) shorter than the antennular peduncle and equal in

length to its own peduncle, three and a half times as long as broad, without a distal joint, setose all round.

The endopods of the first four thoracic limbs are best described by reference to the accompanying figures (fig. 47, I–L). The first pair of thoracic legs (maxillipedes) has a very prominent lobe on the second joint but none on the third or fourth. The second pair (gnathopods) are remarkable for the extreme shortness of the sixth joint, which is only about equal in length to the seventh.

The third pair of thoracic legs (fig. 47, K) are the most distinctive feature of this species. They are identical in structure in both sexes, but larger in the male than in the female. The outstanding character of these limbs is the group of about eight finger-like processes on the inner margin of the fifth joint near the proximal end, just about the point where the elongate sixth joint impinges when closed down on to the fifth. The inner margin of the sixth joint terminates in a strong spine, between which and the dactylus is a group of smaller spines and a single very long seta. The whole limb is quite unlike that of any other species of the genus.

Sixth joint of the remaining thoracic limbs (fig. 47, L) divided into six subsidiary joints of which the first is the longest, the remainder subequal in length, nail short and curved, not longer than the last subjoint.

Pleopods of both sexes consisting of simple setose plates with the side lobe well developed, but those of the male show differences in armature from those of the female. Fig. 47, M, represents the third pleopod of the male. It differs from that of the female in having the terminal seta very long and stout, about half as long again as the plate, and extending about half-way along the sixth abdominal somite. In the first and second pleopods of the male the terminal seta is also enlarged, but not to the same extent as in the third. In the fourth pleopod of the male (fig. 47, N) the terminal seta is normal in size, but on the outer margin of the plate just proximal to the terminal seta is a row of four or five quite short blunt setæ, each with a fine terminal flagellum. The fifth pleopod of the male is normal.

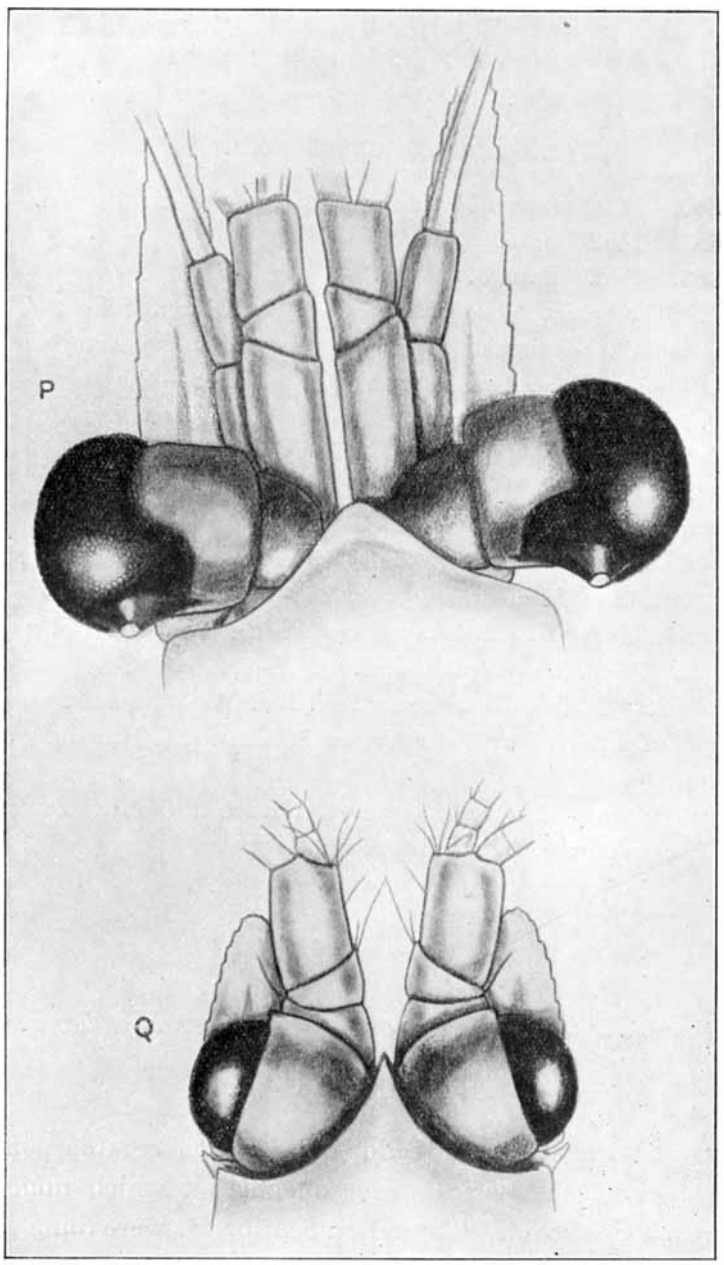
Telson (fig. 47, O) as long as the sixth abdominal somite, one-third longer than broad at the base, apex one-fourth of the breadth at the base, cleft for one-fifth of its length, each margin of the cleft armed with six teeth, each lobe of the apex armed with a pair of spines, the outer about one-fifth of the length of the telson, inner quite small, lateral margins armed with seven spines confined to the distal half of the margin.

Outer uropod half as long again as the telson; inner uropod extending about half-way between the terminal spines of the telson and the apex of the outer uropod, without spines on the inner lower margin.

Length of adults of both sexes, 4 mm.

Remarks.—This species is distinguished from all others hitherto described by the form of the enlarged third pair of thoracic limbs, more particularly by the digitate

Fig. 48.



P. Anterior end of *Kainommatomysis foxi*, gen. et sp. n. × 78.
Q. Anterior end of *Heteromysis digitata*, sp. n. × 78.

processes on the inner margin of the fifth joint. The rostral plate is longer and more acute than in any other species of the genus, while the absence of a terminal joint to

the antennal scale, the form of the endopod of the second thoracic limbs, the number of joints in the tarsus of the posterior thoracic limbs, the form and armature of the telson, and the absence of spines on the inner uropod combine to differentiate this species from all its congeners.

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Appendix to the Report on the Crustacea Mysidacea.

By H. Munro Fox.

The Mysid Report brings out the following facts as regards penetration into the Canal. Eight Mediterranean species were collected, of which none have penetrated into the Canal beyond Port Said. Three Red Sea species were found, all of which have penetrated into the Canal. In addition, two forms new to science were discovered, one of them in the Canal. The only occasion on which Mysids (*Neomysis longicornis*) were found to be remarkably abundant was on December 15th at P. 3, in 1 fathom of

water on a sandy bottom. The following table gives the distribution of Mysids found in the Canal itself:—

TABLE 21.—Distribution of Mysids within the Canal.

		Red Sea & Indian Ocean species.			New species.
		Siriella serrata.	*Pseudanchialina inermis.*	*Siriella brevicaudata.*	*Heteromysis digitata.*
Ferry Post, Km. 76.		+			
Lake Timsah.	T. 9.		+		
	T. 15.		+		
	T. 8.	+		+	
Great Bitter Lake, K. 3.				+	
Kabret.	K. 1.			+	
	K. 6.	+	+	+	+
	K. 0.		+		
	K. 4.	+			