

MANNING & FROGLIA,
1979

R. B. MANNING - C. FROGLIA

Description of a new *Allosquilla* with
notes on other adriatic Stomatopod
Crustacea

Estratto da:

Quaderni del Laboratorio di Tecnologia della Pesca

JOHN S. GARTH
Allan Hancock Foundation
University of Southern California
Los Angeles, California 90007

JUL 8 - 1980

ANCONA 1979

VOL. II - N. 4

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

DESCRIPTION OF A NEW *ALLOSQUILLA* WITH
NOTES ON OTHER ADRIATIC STOMATOPOD
CRUSTACEA

Raymond B. Manning

Smithsonian Institution, Washington, D. C., U.S.A.

Carlo Froggia

Laboratorio di Tecnologia della Pesca, Ancona

INTRODUCTION

The collections of Stomatopoda in the Laboratorio di Tecnologia della Pesca, Ancona (LTP), accumulated as a result of exploratory fishing operations in Mediterranean waters, are relatively rich, especially in deep water species. The occurrence of the rare pseudo-squillaid, *Parasquilla ferussaci* (Roux, 1828), in 505-650 m in the Strait of Sicily, already has been recorded by ARENA and LI GRECI (1973: 166, pl. 2 figs. 2, 3). Examination of unreported collections at Ancona revealed the presence of small series of relatively large specimens of both Mediterranean species of *Meiosquilla*, *M. desmaresti* (Risso) and *M. pallida* (Giesbrecht), and demonstrate that the latter species, apparently not recorded in the Mediterranean since its description in 1910, frequents much deeper water than the former.

Of particular interest, however, is the presence of a single specimen of an undescribed species of *Allosquilla* from deep water in the Adriatic Sea. That genus has only recently been recognized (MANNING, 1977b), and until now included two eastern Atlantic species, *A. africana* (Manning, 1970) from the Gulf of Guinea and *A. lillyae* Manning, 1977(b) from the Azores. The occurrence of a previously undetected species in the well sampled waters of the Adriatic Sea is surprising and may indicate how well the « well known » fauna of the Mediterranean is actually known.

This new species brings the Mediterranean stomatopod fauna, impoverished in comparison with that of the adjacent eastern Atlantic, to nine.

The third unexpected result of this examination of Adriatic collections and literature records is that *Nannosquilloides occulta*

(Giesbrecht, 1910), not *Platysquilla eusebia* (Risso, 1816), is the only lysiosquillid, other than the *Allosquilla* described below, occurring in the Adriatic Sea. Apparently all records of *P. eusebia* from the Adriatic are based on *N. occulta*.

In this note we make no further mention of the commonest stomatopod in the Adriatic, the commercially important *Squilla mantis* (Linnaeus, 1758). It would be of interest to examine series of this species from various Adriatic localities to determine whether or not these populations exhibited the variation observed in material from Naples by one of us (MANNING, 1977a). PICCINETTI and MANFRIN (1970a, b, 1971), and MANFRIN and PICCINETTI (1970) have published several contributions on the biology of *S. mantis* from the Adriatic.

Descriptive accounts for all of the Mediterranean Stomatopoda, other than the new *Allosquilla* described herein, can be found in MANNING (1977b).

In addition to the collections of the Laboratorio di Tecnologia della Pesca we have also examined several specimens from the collection of the Laboratorio di Biologia Marina e Pesca, Fano (LBMP); these latter specimens were made available to us by C. Piccinetti and G. Piccinetti Manfrin. Their cooperation is gratefully acknowledged.

The illustrations were prepared by Lilly King Mannig and Maria Emilia Gramitto.

All measurements are in millimeters (mm.). The measurement given in the lists of material is total length, measured from the anterior margin of the rostral plate to a line between the apices of the submedian teeth of the telson.

FAMILY LYSIOSQUILLIDAE GIESBRECHT, 1910

Allosquilla adriatica, new species - Figure 1

Material: Central Adriatic Sea, W of Pomo island, [approx. Lat. 43°10' N, Long. 14°40' E] 130-150 m; trawled; C. Frogliã, leg.; 1972: holotype: 1 ♀, total length 67 mm (USNM 170571).

Description. - Eye (Figure 1 *a*) large, cornea strongly bilobed, set obliquely on stalk. Ocular scales erect, fused into indistinctly bilobed plate. Eyes extending slightly beyond end of first segment of antennular peduncle.

Antennal scale small, about one-third as long as carapace. Basal segment of antenna with 1 mesial and 2 ventral papillae (1 very small).

Antennular peduncle short but slightly more than half as long as carapace. Antennular processes spiniform, directed anteriorly, each visible lateral to rostral plate, extending beyond base of eye.

Rostral plate (Figure 1 *a*) cordiform, very slightly longer than broad, not carinate. Rounded anterolateral angles converge on slender apical spine.

Claw (Figure 1 *b*) slender elongate, propodus about as long as carapace, with 4 movable teeth proximally on inner margin. Dactylus with 10 teeth, outer margin flattened, faintly notched basally. Carpus with distal dorsal spine. Ischium elongate but shorter than merus, unarmed distally.

Mandibular palp absent. 4 epipods present.

Lateral process of fifth thoracic somite rounded, inconspicuous. Lateral processes of sixth and seventh thoracic somites broad, flattened laterally, truncate posteriorly. Posterior margin of basal segment of each walking leg with outer spine and inner obtuse prominence, spines increasing in size from first to third leg. Eighth thoracic somite with minute median ventral tubercle.

Anterior 5 abdominal somites smooth dorsally, unarmed. Sixth somite, (Figure 1 *c*) with posterolateral spine dorsally and with slender ventrolateral spine on each side overhanging articulation of each uropod. Ventral surface of sixth somite smooth, unarmed.

Telson, (Figure 1 *c, d*) broader than long, with blunt, rounded, upraised median projection dorsally and with low rounded prominence anteriorly mesial to lateral carina. Marginal armature consisting of, on either side of midline, 9 submedian denticles in transverse row, 1 movable submedian tooth, 4 intermediate denticles, first and third triangular, much larger than spiniform second and fourth, 1 intermediate tooth, 1 sharp lateral denticle, and 1 lateral tooth. Ventral surface of telson smooth.

Basal segment of uropod (Figure 1 *c*) with sharp inner and outer carina, inner terminating in slender dorsal spine. Proximal segment of uropodal exopod with 3-4 spatulate, deeply grooved spines distally, distalmost not extending to midlength of distal segment. Inner margin of proximal segment of exopod with prominent rounded, setose lobe distally. Distal segment of exopod longer than proximal. Endopod triangular, with proximal fold on outer margin.

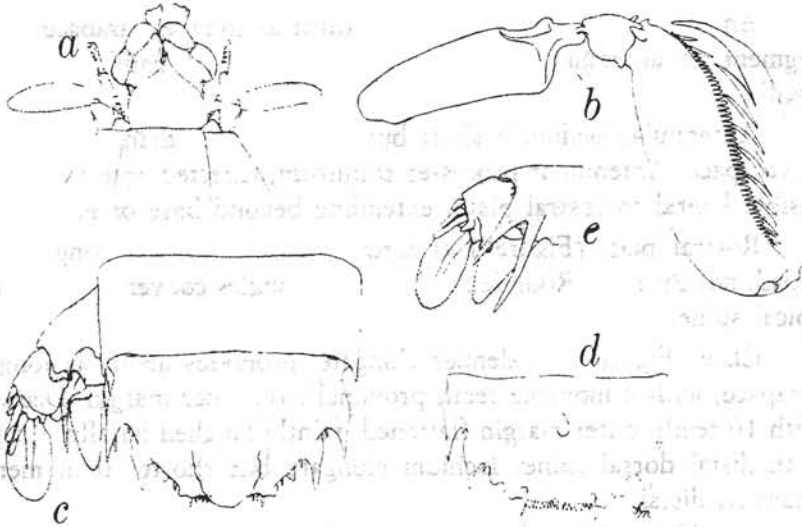


FIGURE 1 - *Allosquilla adriatica*, new species. Female holotype. 67 mm.: a, anterior part of body; b, claw; c, sixth abdominal somite, telson, and uropod; d, telson, ventral view; e, uropod, ventral view.

Spines of basal prolongation (Figure 1 e) triangular in cross section, inner much the longer.

Color completely faded in holotype.

Measurements. - Female holotype, only specimen examined, total length 67 mm. Other measurements, in mm: carapace length 12.3; cornea width 3.2; rostral plate length 3.4, width 3.5; antennular peduncle length 6.5; antennal scale length 3.8; raptorial propodus length 12.4; fifth abdominal somite width 13.1; telson length 7.4, width 10.8.

Remarks. - *Allosquilla adriatica* is very similar to *A. africana* (Manning) from off the Niger delta, Gulf of Guinea, differing primarily in the configuration of the marginal armature of the telson. In *A. adriatica* the submedian denticles are set in a transverse row whereas they are in two convex rows in *A. africana*, and the first and third intermediate denticles in *A. adriatica* are bluntly triangular and much larger than the spiniform second and fourth denticles. In the African species the first and third intermediate denticles are blunter but not much larger than the second and fourth denticles. Also, in *A. adriatica* the anterior prominences on the telson are low and rounded, whereas in *A. africana* they are more distinctly tuberculate. In *A. adriatica* each walking leg is provided with an outer

sharp spine and an inner obtuse prominence; there is a single spine on this segment of the walking legs in *A. africana*.

Finally, *A. adriatica* has one mesial and two ventral papillae on the antennal protopod whereas *A. africana* has but one mesial and one ventral papillae.

Allosquilla adriatica differs from the only other species of the genus, *A. lillyae*, known from two incomplete specimens taken off Azores, as follows. The rostral plate is cordiform, longer than broad; in *A. lillyae* the rostral plate is rectangular and distinctly broader than long. In *A. adriatica*, as noted above, the posterior margin of the basal segment of each walking leg is provided with an outer spine and an inner obtuse prominence whereas in *A. lillyae* there are two posterior spines on that segment of each leg.

All three species of *Allosquilla* occur in relatively deep water: *A. africana* is known from one incomplete specimen taken in 148 to 174 m in the Gulf of Guinea; *A. lillyae* is known from parts of two specimens taken in 225 to 260 and 345 m off the Azores; and *A. adriatica* is known from the unique holotype taken in 130 to 150 m in the Central Adriatic. Thus the genus is known from four specimens, three of them incomplete; this must be a reflection of their habitat and the problems associated with collecting burrowing animals at such depths.

Allosquilla adriatica is the first species of the genus for which the structure of the raptorial claw is known; all of the previously collected specimens lack claws.

Etymology. - The specific epithet is derived from the type-locality, the Adriatic Sea.

Repository. - The unique holotype has been deposited in the National Museum of Natural History, Smithsonian Institution, Washington, D. C., under catalog number USNM 170571.

Nannosquilloides occulta (Giesbrecht, 1910) Figure 2

Squilla eusebia. - Nardo, 1847, p. 7 [off Venice]. - Nardo, 1869, p. 328 [Adriatic]. - Stalio, 1877, p. 985 [Adriatic; listed]. - Stossich, 1881, p. 218 [rare in Adriatic; listed]. - Steuer, 1911, p. 732, fig. on p. 739 [on separate: p. 2, fig. on p. 9] [listed]. [not *Squilla eusebia* Risso, 1816].

Cancer mantissillus. - Nardo, 1847, p. 7. - Nardo, 1869, p. 328,

pl. 14 fig. 7 (both *nomina nuda*, published in synonymy, based on Chierighin manuscript name).

Lysiosquilla occulta. - Vatova, 1929, p. 227 [Rovinj; listed]. - Steuer, 1933, p. 3, figs. 1-9 [off Rovinj, 32 m.]. - Vatova, 1935, p. 13, 14, 22, tabs. 1, 2, 6 [Gulf of Rovinj, 31 to 42 m.]. - Vatova, 1949, p. 26, 67, 70, tabs. 7, 15, 21, 26 [Middle and upper Adriatic, 14 to 140 m.].

Cancer mantissellus. - Giordani Soika, 1946, p. 958 [erroneous spelling, in synonymy].

Lysiosquilla eusebia. - Giordani Soika, 1946, p. 958 [Adriatic]. - Riedl, 1963, p. 262, fig. on pl. 86 [Adriatic].

Material: 34 miles off Fano, Italy [44°18' N, 13°30' E]; depth 60 m.; 16 April 1969; 1 ♂, 48 mm. (LBMP).

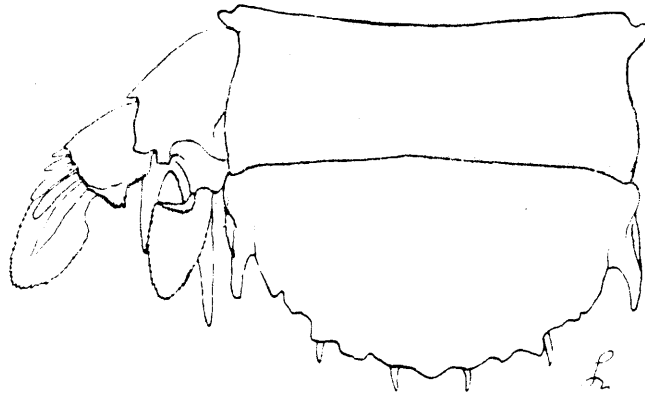


FIGURE 2 - *Nannosquilloides occulta* (Giesbrecht, 1910). Male. 48 mm., off Fano: sixth abdominal somite, telson, and uropod.

Remarks. - This specimen agrees well with the recent account of this species based on West African specimens given by MANNING (1977b, p. 91, fig. 27). There are 9-10 teeth on the claw, two mesial and two ventral papillae on the antennal protopod, four to five outer spines and seven stiff inner distal setae on the proximal segment of the uropodal exopod, and four submedian, four intermediate, and one lateral denticles. The mandibular palp is absent.

West African specimens of this species have 8-9 teeth on the claw, and that reported by STEUER (1933) from off Rovinj also had 9.

According to NARDO (1869, p. 329) Chierighin's specimen had 10 teeth on the claw, and thus his record is based on *N. occulta* rather than on *P. eusebia* in which there are 12-15 teeth on the claw (MANNING, 1977b).

Most references to *P. eusebia* from the Adriatic are based on Nardo's 1847 record. Riedl's (1963) record of *L. eusebia* from the Adriatic appears to be based on *N. occulta*; only 10 teeth are shown on the claw.

In the synonymy given above we have tried to compile all Adriatic records for this species.

We have provided a sketch of the telson and left uropod of *N. occulta* in Figure 2 to aid in distinguishing it from the only other lysiosquillid known from the Adriatic, *Allosquilla adriatica*, described above.

Meiosquilla desmaresti (Risso, 1816) Figure 3 c, e

Material: Northern Adriatic sea, Gulf of Venice, shot: Lat. 45°16',3 N Long. 12°40',7 E, hauled: Lat. 45°14',5 N Long. 12°39',1 E; 27 m. offshore sands covered by a layer of « red-mud » from Alluminium plant; C. Frogliá, leg.; 17 Maj 1975: 1 ♂, 73 mm.

Central Adriatic sea, 25 miles SE of Conero, approx. Lat. 43°22' N Long. 14°07' E; 70 m.; C. Frogliá, leg.; 2 August 1971: 1 ♀, 78 mm.

Central Adriatic sea, 25 miles NE of Ancona, shot: Lat. 43°59' N Long. 13°49',7 E, hauled: Lat. 43°58',8 N Long. 13°55',3 E; 73 m. muddy sands with *Cellaria* sp.; C. Frogliá, leg.; 11 October 1973: 1 ♀, 80 mm.

Central Adriatic sea, 25 miles NE of Conero, approx. Lat. 43°46' N Long. 14°11' E; 75-80 m.; C. Frogliá leg.; 27 June 1970: 1 ♀, 72 mm.

Central Adriatic sea, 14 miles NE of Fano, shot: Lat. 44°00' N Long. 13°19',8 E, hauled: Lat. 44°05',5 N Long. 13°14',8 E; 52 m. sandy muds; C. Frogliá & A. Piersimoni, leg.; 25 August 1977: 1 ♂, 74 mm., 1 ♀, 72 mm.

Central Adriatic sea, 25 miles NE of Ancona, shot: Lat. 43°59' N Long. 13°20',5 E, hauled: Lat. 44°04' N Long. 13°15' E; 54 m.; C. Fogliá & A. Piersimoni, leg.; 3 August 1977: 2 ♂ 80-89 mm., 1 ♀, 74 mm.

Meiosquilla pallida (Giesbrecht, 1910) Figure 3 a-b, d

Squilla desmaresti. - Forest and Guinot, 1956, p. 42 [off Tunisia, 170 and 200 m.] [not *Squilla desmaresti* Risso, 1816].

Material: Central Adriatic sea, about 25 miles NW of Pomo, approx. Lat. 43°15' N Long. 15°00' E; 115-132 m.; C. Piccinetti, leg.; 24 April 1969: 1 ♀, 56,5 mm. (LBMP).

Central Adriatic sea, « Banco » NW of Pomo, approx. Lat. 43°22' N Long. 15°00' E; 115-125 m.; C. Piccinetti, leg.; 24 April 1969: 1 ♀, 66 mm. (LBMP).

Central Adriatic sea, about 30 miles from Incoronata Island, approx. Lat. 43°22' N Long. 15°00' E; 125 m.; C. Piccinetti, leg.; 25 April 1969: 1 ♂ 66 mm. (LBMP).

Central Adriatic sea, about 15 miles from Pomo, approx. Lat. 42°55' N Long. 15°12' E; 215 m.; C. Piccinetti, leg.; 25 April 1969: 2 ♂, 52-65 mm., 1 ♀ 57 mm. (LBMP).

Central Adriatic sea, about 16 miles N of Pomo, approx. Lat. 43°28' N Long. 15°10' E; 200 m.; C. Piccinetti, leg.; 28 October 1975: 3 ♂, 60-63,5 mm. (one broken), 1 ♀ 66 mm. (LBMP).

Central Adriatic sea, about 20 miles SW of Lucietta, shot: Lat. 43°26',7 N Long. 15°11' E, hauled: Lat. 43°28',7 N Long. 15°14',4 E; 133 m., offshore coarse sands with nearly no mud; C. Froglià, leg.; 12 April 1973: 3 ♀, 52, 57.5 and 68 mm.

Central Adriatic sea, western Pomo pit, approx. Lat. 43°05' N Long. 15°05' E; 220 m., epibathial muds; C. Froglià, leg.; 22 July 1970: 1 ♂, 47 mm.

Central Adriatic sea, western Pomo pit, approx. Lat. 43°05' N Long. 15°05' E; 220 m., epibathial muds; C. Froglià & A. Pier-simoni, leg.; 20 July 1977: 2 ♀, 62-64 mm.

Central Adriatic sea, 10 miles NW of Isole Tremiti, shot: Lat. 42°09',3 N. Long. 15°25',9 E, hauled: Lat. 42°11',1 N Long. 15°18' E; 104 m., sandy muds with empty shells of *Picnodonta coclear*; C. Froglià, leg.; 24 February 1973: 1 ♀, 65 mm.

Southern Adriatic sea, 17 miles SE of Lagosta, shot: Lat. 42°27',8 N Long. 17°04' E, hauled: Lat. 42°29',5 N Long. 17°11',2 E; 285 m., muddy sands; C. Froglià, leg.; 4 July 1973: 1 ♂ (damaged), 1 ♀, 52 mm.

Southern Tyrrhenian sea, Sicily, Golfo di Patti; ca. 500 m.; G. Bombace, leg.; 17 June 1970: 1 ♂, 57 mm., 1 ♀, 67 mm.

DISCUSSION OF ADRIATIC *MEIOSQUILLA*

We have found it simpler to discuss in one section the differences we observed in Adriatic specimens of *M. desmaresti* and *M. pallida* rather than to try to discuss them individually under the species accounts.

First of all, the collections from the laboratories at Ancona and Fano indicate that both Mediterranean species of *Meiosquilla* are found in the Adriatic and there appears to be a distinct ecological separation between the species by depth. *Meiosquilla desmaresti* is the shallower of the two species. Our depth records for it include 30 m., 53 m., 70 m., 73 m., and 75-80 m. In contrast, our Adriatic specimens of *M. pallida* were taken at 104 m., 115-132 m., 133 m., 200 m., 215 m., 220 m., and 285 m., and one lot, from the Golfo di Patti, Sicily, was taken at 500 m. Thus it seems likely that any deep records for *M. desmaresti* from the Mediterranean actually will be based on *M. pallida*. We were able to check this for one record in the literature, that of *M. desmaresti* from 170 and 200 m. off Tunisia (FOREST and GUINOT, 1956). These specimens were examined by one of us (R.B.M.) at the Muséum National d'Histoire Naturelle, Paris, and they proved to be *M. pallida*. Off West Africa, *M. pallida* occurs in depths of 100-109 m., 155 m., 160 m., and 200-400 m. (MANNING, 1977a); *M. desmaresti* does not occur off West Africa.

The close morphological resemblance of the two species probably has led to much confusion between them. As noted above, *M. pallida* does not appear to have been reported from the Mediterranean since its original description in 1910. We suspect that many of the records of *M. desmaresti*, and probably all records from depths beyond 100 m., are based on *M. pallida*.

The major morphological differences between the two species are shown in Figure 3. In *M. desmaresti* the lateral process of the fifth thoracic somite (Figure 3 c) is a rounded lobe, oblique to the body line, flattened anteroposteriorly; in *M. pallida* that process (Figure 3 a, b) is sharp laterally and is flattened dorsoventrally. We have shown the lateral process of two specimens of *M. pallida* of different size to indicate differences in shape with size. In *M. pallida* the lateral carinae of the fourth abdominal somite are each armed with a posterior spine; in *M. desmaresti* the lateral carinae of the fourth abdominal somite are unarmed posteriorly. There is a distinct

postanal keel present in *M. pallida*; *M. desmaresti* lacks this keel and the ventral surface of the telson is perfectly smooth. Finally, *M. pallida* has a series of spinules on the inner margin of the basal prolongation of the uropod (Figure 3 d); the basal prolongation is unarmed in *M. desmaresti* (Figure 3 c).

We determined the corneal indices for as many of our specimens of each species as possible (Table 1), but, although the data suggest that the eyes of *M. pallida* may be somewhat smaller than those of *M. desmaresti*, the size range of our samples barely overlaps. Our data proves to be insufficient to draw any conclusions about differences in eye size between the two species. MANNING (1977b, Table 3) listed corneal indices for eastern Atlantic species of *Meiosquilla*, and that data, like ours based on too few specimens, also suggested that the eyes of *M. pallida* are smaller than those of *M. desmaresti*.

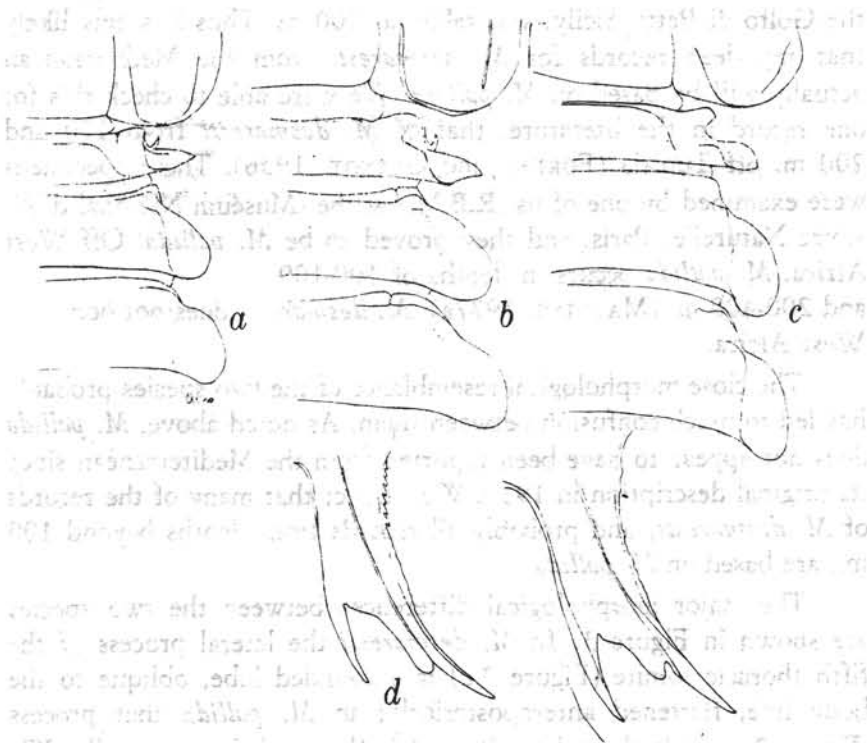


FIGURE 3 - Diagnostic features of Mediterranean species of *Meiosquilla*. Lateral processes of fifth, sixth, and seventh thoracic somites of: a, *M. pallida* (Giesbrecht, 1910), female, 52 mm, South Adriatic; b, *M. pallida*, female, 67 mm., Golfo di Patti; c, *M. desmaresti* (Risso, 1816), female, 72 mm., NE of Conero. Basal prolongation of uropod of: d, *M. pallida*, (same specimen as in b); e, *M. desmaresti* (same specimen as in c).

MANNING (1977b: p. 121) noted that the tropical eastern Atlantic *Meiosquilla africana* differed from the other eastern Atlantic species in having the raptorial claw deepest distally rather than at his mid-length. We examined this feature in our two species to determine if this might be another way to distinguish them. In *M. pallida*, particularly in specimens larger than total length 60 mm., the propodus of the claw is deepest at midlength in females, deepest distally in males; in a male 47 mm. long the claw is slender, deepest at mid-length, whereas in four other males ranging in size from 57 to 66 mm. the propodus resembles that of *M. africana*, being deepest distally. All of our specimens of *M. desmaresti* are quite large, ranging in length from 72 to 80 mm., and in them, too, the claw appears to be stout in males, slender in females. In these two species, then, the shape of the claw may be a function of sex and size.

Table 1. Summary of corneal indices for *Meiosquilla* specimens reported herein.

Carapace length, in mm.		<i>M. desmaresti</i>	<i>M. pallida</i>
11.0-12.5	range	—	456-545
	mean (no.)		506 (4)
12.6-14.5	range	—	470-630
	mean (no.)		535 (10)
14.6-16.5	range	471-523	532-600
	mean (no.)	496 (4)	558 (3)
16.6-18.5	range	471-503	—
	mean (no.)	487 (3)	
19.7		547 (1)	—

The relative length of the antennular peduncle to the carapace length also has been used as a distinguishing feature in *Meiosquilla* (see MANNING, 1977b, p. 111, key). In general, the antennular peduncle in *M. desmaresti* has been reported as being shorter than the carapace, whereas that of *M. pallida* has been reported as longer than the carapace and rostral plate combined. We measured the antennular peduncle in our specimens with the following results:

Antennular peduncle	Total length	
	<i>M. desmaresti</i>	<i>M. pallida</i>
Shorter than carapace and rostral plate combined	♂ 73 mm., 74 mm., 80 mm., 89 mm.	♂ 65 mm.
Subequal to carapace and rostral plate combined	♂ 66 mm. ♀ 72 mm., 74 mm.	♂ 52 mm., 66 mm., ♀ 52 mm., 56.5 mm.,
Longer than carapace and rostral plate combined	♀ 72 mm., 78 mm., 80 mm.	♂ 47 mm., 57 mm., ♀ 52 mm., 57 mm., 57.5 mm., 62 mm., 64 mm., 65 mm., 66 mm., 67 mm., 68 mm.

Our data, based on very large specimens of *M. desmaresti*, is incomplete for that species; smaller specimens may well have shorter antennular peduncles. In the case of *M. pallida*, the antennular peduncle length appears to be very variable for males at all sizes examined, whereas it tends to be quite long in females. Again, this character has little value for the differentiation of these species.

The color pattern in preserved material of the two species is basically very similar with the thoracic and anterior five abdominal somites marked with paired submedian dark patches dorsally on or near posterior margin. These patches are much larger and more prominent in our material of *M. desmaresti* in which color pattern is visible. Our material of *M. desmaresti* also has more dark pigment on the posterior margin of the telson; in *M. pallida* dark pigment on the telson is restricted to a patch at the posterior end of the median carina, also present in *M. desmaresti*, and smaller patches as short lines indicating the position of the carinae of the marginal teeth. The color pattern of our specimens of *M. desmaresti* appears to differ from that of *M. pallida* in being more intense (as suggested by the epithet *pallida*) and in the presence of quadrangular dark patches on the abdominal somites, largest and darkest on the fifth,

between the intermediate and lateral carinae; on the fifth somite that spot is usually black.

If pigment is there in *M. pallida* it is in a smaller patch, set more anteriorly on the somite, U-shaped in some specimens, with the largest branch of the U along the intermediate carina.

RIASSUNTO

Viene descritta *Allosquilla adriatica* sp. nov., catturata nel Medio Adriatico a profondità di 130 - 150 m.

Sulla base del materiale a disposizione e di una rassegna della letteratura adriatica si avanza l'ipotesi che *Nannosquilloides occulta* sia l'unica altra specie di Lisiosquillide presente in Adriatico.

Infine vengono messe in evidenza le differenze morfologiche e di habitat tra *Meiosquilla desmaresti* e *M. pallida*.

ABSTRACT

A new Lysiosquillid Stomatopod *Allosquilla adriatica* sp. nov. is described from Adriatic trawling grounds.

The possibility that all previous adriatic records of *P. eusebia* actually refer to *Nannosquilloides occulta* is discussed.

Morphological as well as ecological differences between *Meiosquilla desmaresti* and *M. pallida* are pointed out.

LITERATURE CITED

- ARENA P., LI GRECI F., 1973 - Indagine sulle condizioni faunistiche e sui rendimenti di pesca dei fondali batiali della Sicilia occidentale e della bordura settentrionale dei banchi della soglia Siculo-Tunisina. *Quad. Lab. Tecnol. Pesca Ancona* 1 (5): 157-201.

- FOREST J., GUINOT D., 1956 - Sur une collection de Crustacés Décapodes Stomatopodes des mers tunisiennes. *Bull. Sta. Océanogr. Salammbó* 53: 24-43.
- GIORDANI SOIKA A., 1946 - I Crostacei Adriatici descritti dall'Abate Stefano Chierighin. *Atti Ist. Veneto Sci. Lett. Art.* 104 (2): 925-966.
- MANFRIN G., PICCINETTI C., 1970 - Osservazioni etologiche su *Squilla mantis* L. *Note Lab. Biol. Mar. e Pesca, Fano* 3 (5): 93-104.
- MANNING R.B., 1977a - Stomatopod Crustacea in the Muséum d'Histoire naturelle, Geneva. *Rev. Suisse Zool.* 84 (2): 279-295.
- MANNING R.B., 1977b - A Monograph of the West African Stomatopod Crustacea. *Atlantide Rep.* No. 12: 25-181.
- NARDO G.D., 1847 - Sinonimia moderna delle specie registrate nell'Opera intitolata: Descrizione de' Crostacei, de' Testacei e de' Pesci che abitano le lagune e Golfo Veneto rappresentati in figure, a chiaro-scuro ed a colori, dall'abate Stefano Chierighini Ven. Clodiense, pp. vii, 1-123.
- NARDO G.D., 1869 - Annotazioni illustranti cinquantaquattro specie di crostacei podotalmi, endotalmi e succhiatori del Mare Adriatico, alcune delle quali nuove o male conosciute, accompagnate da trentatre figure litografate, e precedute dalla storia della carcinologia Adriatica antica e recente. *Mem. R. Ist. Veneto Sci.* 14: 217-343.
- PICCINETTI C., PICCINETTI MANFRIN G., 1970a - Prime osservazioni sull'alimentazione di *Squilla mantis* L. *Note Lab. Biol. Mar. e Pesca, Fano* 3 (10): 249-263.
- PICCINETTI C., PICCINETTI MANFRIN G., 1970b - Osservazioni su alcuni aspetti della biologia di *Squilla mantis* L. *Pubbl. Staz. Zool. Napoli* 38 suppl.: 119-124.
- PICCINETTI C., PICCINETTI MANFRIN G., 1971 - Osservazioni sulla pesca di *Squilla mantis* L. *Note Lab. Biol. Mar. e Pesca, Fano* 4 (2): 25-40.
- RIEDL R., 1963 - Fauna und Flora der Adria, 640 pages. Verlag Paul Parey, Hamburg and Berlin.
- STALIO L., 1877 - Catalogo metodico e descrittivo dei crostacei podotalmi e edriotalmi dell'Adriatico. *Atti Ist. Veneto Sci.* 5 (3): 1-274.
- STEUER A., 1911 - Adriatische Stomatopoden und deren Larven. *Sber. Akad. Wiss. Wien* 120 (1): 731-742.
- STEUER A., 1933 - Ueber das Vorkommen von *Lysiosquilla occulta* in der Adria. *Note Ist. italo-germ. Biol. mar. Rovigno* 11: 1-12.
- STOSSICH M., 1881 - Prospetto della fauna del Mare Adriatico. *Boll. Soc. adriat. sci. nat.* 6 (1): 178-271.
- VATOVA A., 1929 - Compendio della Flora e Fauna del Mare Adriatico presso Rovigno con la distribuzione geografica delle specie bentoniche. *R. Com. Talass. ital. Mem.* 143: 1-614.
- VATOVA A., 1935 - Ricerche preliminari sulle biocenosi del Golfo di Rovigno. *Thalassia* 2 (2): 1-30, tables 1-9.
- VATOVA A., 1949 - La fauna bentonica dell'Alto e Medio Adriatico. *Nova Thalassia* 1 (3): 1-110, tabs 7-37.