i the Zoea larvae of *Ethusa mascarone* (Herbst, 1782) (Brachyura, Decapoda) in the Aegean Sea Distribution of the Zoea larvae of Ethusa

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The family Dorripidae is represented in the Aegean Sea by <u>Medorippe lanata</u> (Linné, 1766) and <u>Ethusa mascarone</u> (Herbst, 1782), (Kocataş, 1981). The zoea larvae of them are similar, but they are easily distinguishable from one another by the dorsal spine-rostrum length and the presence or absence of a pair of spines on carapace. Descriptions of the larval stages of E. mascarone have been made by Kurian (1956), Bourdillon-Casanova (1960) and Heegaard (1963). However, the zoea larvae of only E. mascarone have been found in the plankton samples collected in the Aegean Sea. These larvae have also, previously been reported from several localities in the Mediterranean Sea: abundantly from the SW coast of Portuguese between June and September (Paula, 1987); from the Catalonia coast of Spain, only in June (Fuste, 1987); in the bay of Algeria, rarely in June-July (Seridji, 1970); in the Gulf of Marseille, from the begining of summer to the end of autumn (Bourdillon-Casanova, 1960) and in the vicinity of Mljet in the Adriatic Sea, common from May to November with maximum in May (Kurian, 1956).

This study has been based on the zooplankton samples, collected with two conical nets, mesh size 0.569 mm and 0.330 mm by surface and vertical hauls in the Aegean Sea in April and June, 1977 and in the Gulf of Izmir in 1987.

Totally, 287 specimens have been found in the samples which were hauled generally in surface waters from April to November. Mean Total lengths of the specimens are in accordance with Bourdillon-Casanova's (1960) measurements, except that in our material, Rostrum lengths are nearly equal to or longer than Dorsal spine lengths. And also, the average lengths at the stage IV are greater than her values (Tab. 1).

Table 1.- Mean values (mm) of Dorsal Spine (DS), Rostrum (R) and Total Lengths (TL).

		ł	Aegean Sea			Marseille (B.C., 1960)		
		DS	R	TL	DS	R	TL	
Zoea	I	2.060	2.104	4.758	2,15	2.00	4.80	
Zoea	11	2.933	3.147	6.808	3.50	2.50-2.75	6-8.00	
Zoea	ш	3,792	4.054	8.787	4.00	3.00	8.50	
Zoea	١V	4,960	5,108	11.275	4.00	3.60	9.20	

Table 2.- Distribution of E. mascarone larvae and investigated parameters of the research stations (The last five stations are situated in the Gulf of Izmir).

Geographic location	Stages	N.Ind.	Depths	Temp. ^O C	Sal.%o	Date
39 ⁰ 34'00" N	Zoea I	1	24m	21.3	38.05	13.6.1977
26 ⁰ 54'30" E						
39 ⁰ 30'30" N	Zoea I	2	66m	21.3	37.95	13.6.1977
26 ⁰ 36'00" E	Zoea III	1				
39 ⁰ 27'00" N	Zoea IV	-	110m	22.3	37.92	12.6.1977
26 ⁰ 25'00" N	Zoea I Zoea II	13 11	110m	22.5	37.92	12.0.1777
26-25-00" E						
	Zoea III	1				
39 ⁰ 02'30" N	Zoea I	187	40m	21.5	37.85	11.6.1977
26 ⁰ 46'00" E	Zoea II	42				
	Zoea III	13				
	Zoea IV	1 -				
38 ⁰ 44'00" N	Zoea I	1	70 m	19.4	38.70	11.6.1977
26 ⁰ 40'30" E	bocu i	-				
					38.72	19.4.1977
38 ⁰ 43'00" N	Zoea II	1	110 m	15.0	38.72	19.4.1977
26 ⁰ 29'00" E						
30 ⁰ 40'00" N	Zoea I	1	70 m	21.0	38.70	28.6.1987
26 ⁰ 37'00" E	Zoea III	3				
	Zoea IV	2				
38 ⁰ 28'30" N	Zoea 1	1	38 m	22.8	37.88	27.7.1987
26 ⁰ 51'30" E	boea 1	-	5011			
						10.10.1987
38 ⁰ 27'30" N	Zoea I	1	47 m	20.1	37.60	
26 ⁰ 47'30" E	Zoea II	1	47 m	23.5	38.40	7.7.1987
38 ⁰ 25'30" N	Zoea I	1	29 m	21.5	38.70	28.6.1987
26 ⁰ 39'00" E	Zoea II	1	29 m	24.0	38.74	27.7.1987
	Zoea I	1	29m	23.5	38,76	25.8.1987
38 ⁰ 25'30" N	Zoea I	1	29	22.6	37.64	27.7.1987
26 ⁰ 48'30" E	LUCA I	1	-/			
20 40 50 E						

BOURDILLON-CASANOVA, L., 1960. Rec. Trav. Sta. mar. Endoume, Fasc. 30, Bull. 18, 286p. FUSTE, X., 1987. Inv. Pesq. 51 (Supl. 1): 277-284. HEEGAARD, P.E., 1963. Vidensk. Medd. fra Danks naturh. Foren., bd.125: 450-493. KOCATAS, A., 1981. Rapp. Comm. int. Mer Médit., 27, 2: 161-162. KURIAN, C.V., 1956. Inst. Ocenogr. Riborstvo, Split VI(3): 1-106. PAULA, J., 1987. Inv. Pesq. 51 (Supl. 1): 267-275. SARIDJI, R., 1970. Fac. Sci. L. Univ. Alger (Ph Thesis): 1-131.

Rapp. Comm. int. Mer Médit., 32, 1 (1990).