### BENTHIC FORAMINIFERA OF EASTERN AEGEAN SEA (TURKEY) SYSTEMATICS AND AUTOECOLOGY

### **Engin MERIÇ**

Istanbul University, Institute of Marine Sciences & Management, 34470 Vefa, Istanbul, Turkey.

### Niyazi AVSAR

Cukurova University, Faculty of Engineering & Architecture, Department of Geology,
01330 Balcalı-Adana, Turkey.

### **Fulya BERGIN**

Bosphorus University, Museum of Cultural Heritage, 34342 Bebek- Istanbul, Turkey.

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: 0216 4240772

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E mail

: tudav@superonline.com

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: http://www.tudav.org

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#### INTRODUCTION

Benthic foraminifera from 304 bottom samples, all between depths of 0.50 and 631.00 m, were collected in various gulfs and localities in Eastern Aegean Sea. These are Gulf of Saros (80 samples) including the Harmantaşı locality (47 samples) (Fig. 1), Gökçeada Island (34 samples) (Fig. 2), Bozcaada Island (17 samples) (Fig. 3), Gökçeada-Bozcaada-Canakkale triangle (37 samples) (Fig. 4), Gulf of Edremit (18 samples) (Fig. 5), Dikili and Candarlı Bays (14 samples) (Fig. 6), Gulf of Izmir and the vicinity of Karaburun Peninsula (5 samples) (Fig. 7), Çeşme (12 samples), Gulf of Kuşadası and Güllük Bay (15 samples) (Fig. 8), Gulf of Gökova (8 samples) (Fig. 9), Gulf of Datça (9 samples) and Marmaris Bay (8 samples) (Fig. 10). Sampling depths differ greatly based on study localities. The depths are 12.30-631.00 m in the Gulf of Saros, 0.50-68.00 m in the vicinity of Gökçeada, 0.50-7.00 m in the vicinity of Bozcaada, 18.00-137.50 m between Gökçeada-Bozcaada-Çanakkale triangle, 15.00-334.50 m in the Gulf of Edremit, 16.00-80.00 m in the Dikili and Candarlı Bays, 26.50-63.50 m in the Gulf of Izmir and surroundings of Karaburun, 0.50 m in Cesme, 29.00-315.00 m in the Gulf of Kuşadası and Güllük Bay, 27.00-198.00 m in the Gulf of Gökova, 40.00-252.30 m in the Gulf of Datça, and 29.90-128.80 m in the Marmaris Bay. Several species of benthic foraminifers were identified in the samples. The distribution of species is as follows: 167 species in the Gulf of Saros, 104 species in the vicinity of Gökçeada, 58 species in the vicinity of Bozcaada, 157 species in the Gökçeada-Bozcaada-Canakkale triangle, 102 species in the Gulf of Edremit, 97 species in the Dikili and Candarh Bays, 79 species in the Gulf of Izmir and Karaburun region, 40 species in Çeşme, 118 species in the Gulf of Kuşadası and Güllük Bay, 109 species in the Gulf of Gökova, 108 species in the Gulf of Datça, and 93 species in the Marmaris Bay.

Table l. Bathimetric distribution of foraminifers is based on the following divisions (Sgarrella and Monchancharmont-Zei, 1993).

Zone	Upper limit (m)	Lower limit (m)
Infralittoral	0	40.00-50.00
Upper circalittoral	40.00-50.00	80.00-100.00
Lower circalittoral	80.00-100.00	150.00-200.00
Upper epibathyal	150.00-200.00	400.00-500.00
Lower epibathyal	400.00-500.00	1000.00

The Aegean Sea is composed of numerous islands and gulfs due to tectonism. Thus, many cold and warm water springs exist in the western shores of Turkey. Examples include cold water springs in various locations in the Gulf of Edremit, Bademli hot springs on Dikili-Çandarlı road, thermal springs in Aliağa Ilıcaburun, Çeşme-Ilıca, Seferhisar Doğanbey Cape, Gülbahçe and Ilıksu, thermal springs in Kuşadası and in the vicinity of Davutlar, Bodrum Karaada and Köyceğiz-Sultaniye (personal communication Assoc. Prof. Dr. Gültekin TARCAN, Dokuz Eylül Univ., and Dr. Levent ÇETINER, MTA Regional Directorate, June 2002)

thermal springs of Güre, Bostancı, Zeytinpınarı and Küçük Çetmi, north of the Gulf of Edremit. In addition, the shore environments of Lesbos, Milos and Kos Islands, outside of Turkey, could be given as other examples (Çağlar, 1950; Başkan ve Canik, 1983; Dotsika et al., 1995; Thiermann et al., 1997; Meriç and Avşar, 2000 and 2001; Meriç et al., 2002 a and b). Therefore, foraminifer populations displaying extraordinary variation have been reported from each of these locations.

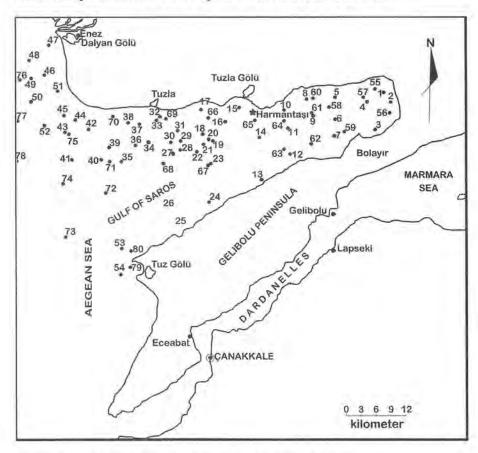


Figure 1. Location map of the Gulf of Saros and sampled localities.

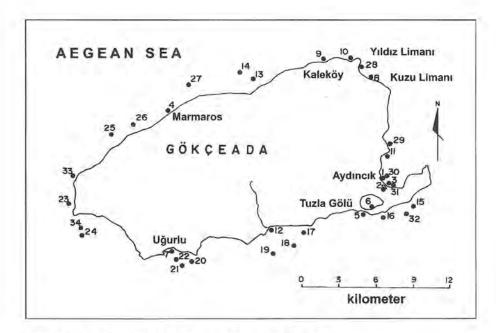


Figure 2. Location map of Gökçeada and sampled localities.



Figure 3. Location map of Bozcaada and sampled localities.

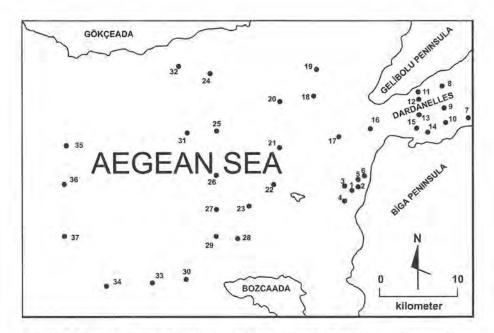


Figure 4. Location map of the Gökçeada, Bozcaada and Çanakkale triangle and sampled localities.

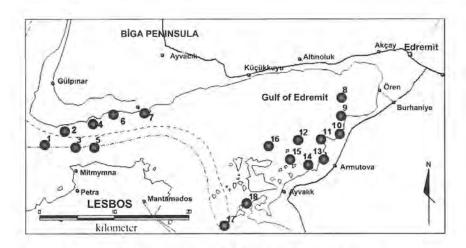


Figure 5. Location map of the Gulf of Edremit and sampled localities.

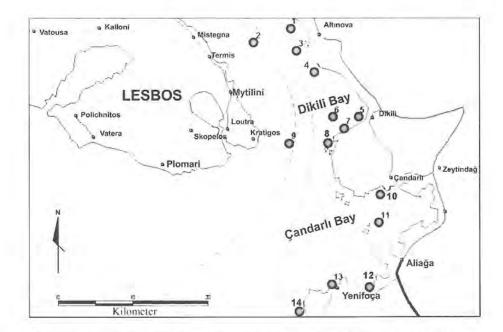


Figure 6. Location map of the Dikili and Çandarlı Bays and sampled localities.

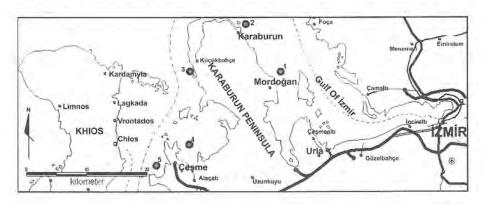


Figure 7. Location map of Gulf of Izmir and the vicinity of Karaburun Peninsula and sampled localities.

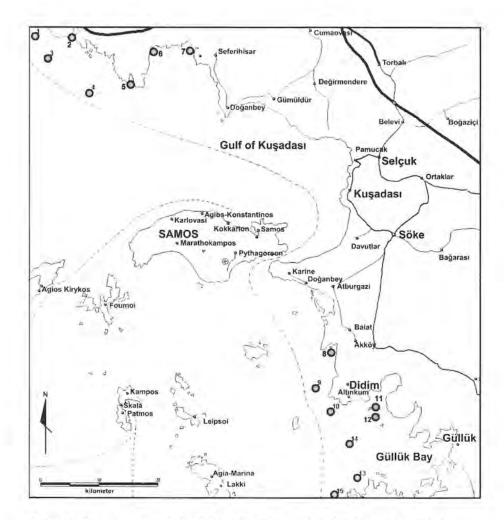


Figure 8. Location map of the Gulf of Kuşadası and Güllük Bay and sampled localities.

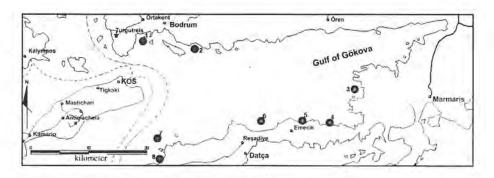


Figure 9. Location map of the Gulf of Gökova and sampled localities.

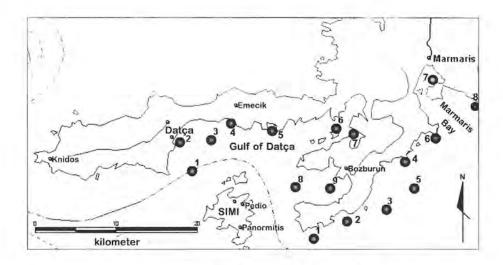


Figure 10. Location map of the Gulf of Datça and Marmaris Bay and sampled localities.

#### TEMPERATURE AND SALINITY

Bottom waters in the Gulf of Saros maintain a constant temperature around 14 °C throughout the year while the surface water temperatures change seasonaly. In spring time (April), surface water temperatures change between 12.50-14.00 °C. During summer (August) water temperatures climb up to 20.56-22.80 °C, later to be dropped in the fall (September) down to 16.00-21.00 °C range. In winter (January) water temperatures are between 9.80-10.96 °C. Primary reason for this seasonal change in surface water temperatures is the influx of colder Black Sea waters into the Aegean. In the Gulf of Saros, the salinity difference between the surface and deep waters rarely exceeds % 4-5 throughout the year. Seasonal maximum, mean and minimum salinity levels change with depth in the region. Thus, salinity levels gradually increase from surface to depth. For example, spring (April) surface salinity is % 34.93-38.78, while salinity at 50.00 m depth is % 38.63-38.84. Summer time (August) salinity is % 34.10-38.60 at the surface but % 38.86-38.98, at 50.00 m depth. Fall (September) surface salinity is reported to be % 35.86-38.69 and ‰ 38.65-38.84 at 50.00 m depth. Finally, winter time (January) salinity is % 34.47-36.95 at the surface but % 37.62-38.49 at 50.00 m depth (Meric et al., 2002 c). Based on the T. C. D. K. K. Hydrography and Oceanography Office records, fall (September) water temperatures in Dardanelles range between 19.30-19.53 °C while winter (February) temperatures are 9.49-14.70 °C. Salinity in the same time periods is % 38.54-38.97 and % 31.21-39.28 respectively. Similarly, in the Gulf of Edremit, fall (September) water temperatures are between 20.54-21.35 °C, winter water temperatures are between 13.07-13.59 °C, and salinity levels range between % 39.13-39.24 during summer and % 39.09-39.15 during winter. In Dikili, fall water temperature is 21.43-21.61°C and winter time (February) water temperature are between 13.93-14.14 °C. Salinity during summer is % 38.90-39.01 and during winter is % 39.04-39.27. In Çandarlı, summer time water temperature is 21.26 °C and winter time water temperature is between 13.51-13.70 °C. Salinity during summer period is ‰ 38.84 and between ‰ 39.04-39.23 respectively. In the Gulf of Izmir and vicinity of Karaburun Peninsula water temperatures are 21.28-21.56 °C in summer and 14.23-14.56 °C in winter. Similarly, salinity levels range between ‰ 38.51-39.26 and ‰ 39.14-39.24. respectively for winter and summer. In the vicinity of Güllük Bay, summer water temperature is 21.96 °C while in winter water temperature drops to 14.76 ° % 39.51 in summer and changes to % 38.35 in winter. Finally in the Gulf of Datça, water temperatures rarely exceed 16.01°C in winter when water salinity is around % 38.99.

#### SYSTEMATIC DESCRIPTIONS

In the region, a total number of 243 foraminiferal species blonging to 125 genera, 61 families and 58 subfamilies were identified (Table 2a, b, c, d, c). Taxonomic identifications of foraminifera were carried out by using the publications of the following researchers: Loeblich and Tappan, 1988; Meriç and Sakınç, 1990; Cimerman and Langer, 1991; Hatta and Ujiie, 1992; Hottinger et al., 1993; Sgarella and Moncharmont-Zei, 1993; Loeblich and Tappan, 1994; Avşar and Meriç, 1996, 2001 a and b; Avşar, 1997; Meriç and Avşar, 1997 and 2000; Avşar and Ergin, 1998; Meriç et al., 1995, 1996 a and b, 1998 a and b, 1999, 2000a, b and c, 2001 a and b, 2002 a, b and c; Hayward et al., 1999; and Avşar et al., 2001, 2002. The classification of Loeblich and Tappan, 1988 and 1994 were used for identification at the generic and suprageneric level.

Table 2a. Distribution of foraminiferal species in different localities of the Eastern Aegean Sea (Turkey).

FORAMINIFERA	STATIONS												
FORAWINIFERA	S	Ga	Ba	GBÇ	E	DC	1	С	KG	G	D	M	
Rhabdammina abyssorum	*		-					-	1	*	*		
Psammosphaera fusca	*									1			
Lagenammina atlantica	*				1								
Lagenammina fusiformis	*			*		*			*	*	*		
Hyperammina friabilis	*			100	10						1		
Ammodiscus planorbis	*			*					-	*	*		
Reophax dentaliniformis	*												
Reophax scorpiurus	*			*	*		*		*	*	*	*	
Haplophragmoides canariensis		*		1									
Labrospira subglobosa	*			*	=	*				*	*		
Ammoscalaria pseudospiralis	*			7		*			*	*	*		
Discammina compressa	*			*	*	*							
Alveophragmium scitulum				*									
Spiroplectinella sagittula	*	*		*	*	*	*		*	*	*	*	
Ammoglobigerina globigeriniformis		1		; —	1	*				1			
Trochammina inflata		1		*									
Eggerelloides advenus				*						*	7.		
Eggerelloides scabrus	*	*		*	*	*	*	-	*	*	*		
Bigenerina cylindrica	*	1			-								
Bigenerina nodosaria	*			*	*	*			*			1	
Textularia agglutinans				*								1	
Textularia bocki	*	*		*	*	*	*		*	*	*	*	
Textularia conica				*						100	*	*	
Textularia pseudorugosa	*			*	*		*		*	*	*	*	
Textularia truncata	*	1		*	*	*	*		*	*	*	*	
Siphotextularia concava	*	*		*	*		*		*	*	*	*	
Connemarella rudis	*			*	*	*	*		*	A T	*	*	
Pseudoclavulina crustata	*	-		*	*				*	*	*	*	
Spirillina limbata		100		*					*	*		*	
Spirillina vivipara	*	*		*					*			*	
Patellina corrugata		*		-									
Cornuspira foliacea	*			*	*	*			*	*			
Cornuspira involvens	*			*	-	*			*	*	*	*	
Trisegmentina compressa		*			=							1	
Vertebralina striata		*	*		*	*	*		*	*	*	*	

Table 2b. Distribution of foraminiferal species in different localities of the Eastern Aegean Sea (Turkey).

DE 20000012200		-					_	ONS				
FORAMINIFERA	S	Ga	Ba	GB Ç	E	DC	1	C	KG	G	D	N
Wiesnerella auriculata		*	-	-								
Nubecularia lucifuga					*	*	*		*	*		
Edentostomina cultrata												*
Adelosina carinata striata						*						
Adelosina cliarensis	*	*	*	*	*	*	*	*	*	*	*	*
Adelosina duthiersi	*			*	*	*	*		*	*	*	*
Adelosina elegans	*			*								
Adelosina intricata	-			*			1	*				
Adelosina italica	*		1			-	1	-		7.00	arn I	
Adelosina mediterranensis	*	*	*	*	*	*	*	*	*	*	*	*
Adelosina partschi	*	*	*	*	*	*	*		*	*	*	*
Adelosina pulchella Spiroloculina angulata	*	*	*	*	*	*	*	*	*	*	*	*
Spiroloculina angulosa	*	*		*	*	*	*	*	*	*	*	*
Spiroloculina antillarum						100		*			1	
Spiroloculina corrugata	4	1 -	1				*	*	*			
Spiroloculina depressa	*	*	1 -	*	*	*	-		*		*	
Spiroloculina dilatata	*			*		*						
Spiroloculina excavata	*			*	*	*	*		*	*		*
Spiroloculina ornata Spiroloculina pellucida	*	*		*	*	*	*	*	*	*	*	*
Spiroloculina pellucida Spiroloculina rostrata		×	-	*	_		-	-	-	_	-	-
Spiroloculina rostrata Spiroloculina tenuiseptata	*	-		*	*	*	*		*		*	*
Total Advantages and Control of Manager		*		*		*	*	*		*	*	*
Siphonaperta agglutinans	+			*			*	-				
Siphonaperta aspera	*	*		*	*	*	*	*	*	*	*	
Siphonaperta dilatata		*										
Siphonaperta irregularis		*		*								
Cycloforina colomi			*									
Cycloforina contorta	*	*		*	*	*	*		*	*	*	*
Cycloforina rugosa		*		*								
Cycloforina tenuicollis	-	*		*					+ -	-		
Cycloforina villafranca	*	*	1	*	*	*	*		*	*	*	*
Lachlanella bicomis	*			*	*	*	*		*	*	*	*
Lachlanella undulata	*	*		*	*	*	*	-	*	*	*	*
Lachlanella variolata	-	*		*	*	*	*	·*:	*	*	*	
Massilina gualtieriana	*	*		*		*	*	*		*		
Massilina secans		*	110	*	*		*	*	*		-1-1	
Quinqueloculina berthelotiana	*	*		*	*	*	*	*	*	*	*	*
Quinqueloculina bidentata	*	*		*	*	*	*	*	*	*	*	*
Quinqueloculina disparilis	*	- "	- 1		*	*			*	*		*
Quinqueloculina eburnea	-	*					-	-	1			
Quinqueloculina jugosa	*	*		*	*	*	*	*	*		*	
Quinqueloculina laevigata		-						- "	-			
Quinqueloculina lamarckiana Quinqueloculina limbata	*	*		*	*	*	*	*	*	*	*	*
	*	-			1					*		*
Quinqueloculina neapolitana	*	-		_				_				
Quinqueloculina poeyana	*	*		_	*			*	*	*		
Quinqueloculina seminula Quenqueloculina stalkeri	*	*		*	*	*	*	*	*	*	*	*
Quinqueloculina stelligera	4		100	*			24					
Quinqueloculina viennensis	*	*		*								
Quinqueloculina vulgans	*				-		-					
Biloculinella depressa	*			*			1		*	*		
Biloculinella elongata				*			-					

Table 2c. Distribution of foraminiferal species in different localities of the Eastern Aegean Sea (Turkey).

		-	-		_	STA	_	_	-			
FORAMINIFERA	S	Ga	Ba	GB Ç	E	DC	1	С	KG	G	D	M
Biloculinella globula	*			*	*				*			*
Biloculinella inflata	*		1	*								
Biloculinella labiata	*			*	*			100	*	*	*	*
Miliolinella elongata	*	*		*			*		*	*	*	*
Miliolinella labiosa				-	-							*
Miliolinella semicostata	*	*		*	*	*	*		*	*	11.11	
Miliolinella subrotunda	*	*	*	*	*	*	*		*	*	*	*
Miliolinella webbiana	*	*		*	*	*	*		*	*	*	*
Pseudotriloculina laevigata	*	*	*	*	*	*	*	*	*	*	*	*
Pseudotriloculina oblonga Pseudotriloculina rotunda	*	*	*	*	*	*	*	*	*	*	*	*
Pseudotriloculina sidebottomi	*	*	*	- 7	*	*	*	-	*	*	*	
Pseudotriloculina subgranulata	1	-	7.	*	*	2	-	-	- "	- 97	*	*
Pyrgo anomala	*	*	-	*	*	*		-	*	*	*	*
Pyrgo comata	*	-		-	-	-	-		-	- 2		-
Pyrgo elongata	*	*		*	*	*	-		*		*	-
Pyrgo inomata	*			*	2	*	-				*	*
Pyrgoella sphaera	*	1		*		1					-	1
Triloculina adriatica	*	1		TE		-						
Triloculina bermudezi	1		*			*			*	*	*	
Triloculina cf. fichteliana		1									*	
Triloculina marioni	*	*	*	*	*	*	*	*	*	*	*	*
Trilocalina cf. omata	*					5.13						
Triloculina plicata	*	*	-61	hij. i		*	*		*	*	*	*
Triloculina schreiberiana	*	*		*	*	*			*	*		
Triloculina serrulata				*								
Triloculina tricarinata	*	*		*	*	*			*			
Wellmanellinella striata		*		-		1-1						
Sigmoilina sigmoidea	*			-					*			
Sigmoilinita costata	*	*		*	*	*	*		*		*	*
Sigmoilinīta edwardsi	*	*	-	*	*	*	*	*	*	*	*	
Sigmoilinita tenuis	100	1		*	100							
Sigmoilopsis schlumbergeri	*			*	*	*			*	*	*	*
Articulina alticostata											*	
Articulina carinata		*		*		*	*		*	*	*	
Articulina tubulosa		-		*								
Parrina bradyi		*		*		*			*			
Coscinospira hemprichii								*				-
Laevipeneroplis karreri		*	*					*	*		*	
Peneroplis pertusus	111	*	*		*	*	*	*		*	*	*
Peneroplis planatus	*	*	*		*	*	*	*	*	*	*	*
Sorites orbiculus		*						*		*		*
Dentalina albatrossi									*			
Dentalina flintii	1			*	*				*	*	*	*
Dentalina inornata	*				*							
Dentalina mucronata		i) II										*
Laevidentalina inflexa				*								
Nodosaria raphanus	*								*	*	*	
Pseudonodosaria comatula	*			*								
Lenticulina calcar		1								*		
Lenticulina cultrata	*			*	*	*	*		*	*	*	*
Lenticulina gibba		*										
Lenticulina orbicularis					*				*	*	*	

Table 2d. Distribution of foraminiferal species in different localities of the Eastern Aegean Sea (Turkey).

						_		ONS				-	
FORAMINIFERA	S	Ga	Ba	GB Ç	E	DC	1	C	KG	G	D	M	
Amphicoryna scalaris	*	*		*					*	*	*	*	
Astacolus crepidulus	*	-1		*	*	1	-	1		*	*	*	
Astacolus insolitus	-									*			
Astacolus sublegumen					*	- 1				*			
Marginulina costata				+							*	*	
Lagena nebulosa				*									
Lagena semistriata				*									
Lagena striata	*			*					*	*	*	*	
Globulina myristiformis	*			*		= 1							
Globulina punctata		*											
Polymorphina sp. 1					*	*							
Polymorphina sp. 2		*							*	*		1	
Polymorphina sp. 3	*	*	*	*	*				*		*	*	
Polymorphina sp. 5	*	*	*	*	-			-	-	_			
Polymorphina sp. 7	*	1										1	
Favulina hexagona	-	1		*	*			-	-			1	
Favulina squamosa	-	+			*				-			-	
Fissurina lucida		-		*	-	-						-	
Fissurina neptunii		+		*		-		-				+	
	-	-		*		-		-				-	
Fissurina orbignyana Fissurina sidebottomi	*	-										-	
The state of the s	*	-		*								-	
Parafissurina lateralis	-	-			1							-	
Parafissurina stapyllearia				*									
Glandulina laevigata	*												
Hoeglundina elegans	*	-		*	*	1			*	*	*		
Brizalina alata	*			*									
Brizalina spathulata	*			*									
Brizalina striatula	1			*									
Cassidulina carinata	*			*	*		1						
Globocassidulina subglobosa			100	*						1 11 1			
Stainforthia complanata				*		III.							
Rectuvigerina phlegeri	*	-		*	1					1 -4			
Rectobolivina columeliaris	*					1							
Bulimina aculeata	1	100		*		111							
Bulimina costata	*					1 1/2					1		
Bulimina elongata	*	*		*					*				
Bulimina marginata	*			*	*				*				
Globobulimina affinis	*			*	*								
Globobulimina pseudospinescens	*			*									
Euuvigerina sp.	*												
Uvigerina mediterranea	*			*	*				*			1	
Uvigerina peregrina		1						-	*	*	*	1	
Angulogerina angulosa				*								1	
Reussella spinulosa	*	*		*		*	*				*	-	
Fursenkoina acuta	*	1		*	-		-		-		-	1	
Cancris sagra		-	-		*							+	
Valvulineria bradyana	*	*		*	*	*	*		*	*		*	
Eponides concameratus	*	*	*	*	*	*	*		*	*	*	*	
Planopulvinulina dispansa	*	-		-	-	-	-		-	-		+ -	
Stomatorbina concentrica	*	*		*	*		-		*	*	*	*	
Stomatorbina sp.	-	-		-	,	-						*	
Stomatoroma sp. Neoeponides bradyi	*	*	-	*	*	*	*	*	*		*		
Neoeponides bradyi Gavelinopsis praegeri	7.	8		*	*	*	*	*	*	*	*	*	
Neoconorbina terquemi	*	*	-	*		*	*	-	*	*		*	

Table 2c. Distribution of foraminiferal species in different localities of the Eastern Aegean Sea (Turkey).

E0044444	-	1	-			STA	_	_		-	120	
FORAMINIFERA	S	Ga	Ba	GB Ç	E	DC	1	С	KG	G	D	M
Biloculinella globula	*			*	*				*			*
Biloculinella inflata	*		1	*			1				TE T	
Biloculinella labiata	*			*	*				*	*	*	*
Miliolinella elongata	*	*		*			*		*	*	*	*
Miliolinella labiosa										- 1		*
Miliolinella semicostata	*	*	-	*	*	*	*		*	*		
Miliolinella subrotunda	*	*	*	*	*	*	*		*	*	*	*
Miliolinella webbiana	*	*		*	*	*	*		*	*	*	*
Pseudotriloculina laevigata	*	*	*	*	*	*	*	*	*	*	*	*
Pseudotriloculina oblonga	*	*	*	*	*	*	*	*	*	*	*	*
Pseudotriloculina rotunda	*	*	-	*	*	*	*		*	*	*	*
Pseudotriloculina sidebottomi	*	*	*		*	*	*		*	*	*	
Pseudotriloculina subgranulata				*	*						*	*
Pyrgo anomala	*	*		*	*	*	10		*	*	*	*
Pyrgo comata	*											
Pyrgo elongata	*	*		*	*	*			*		*	
Pyrgo inomata	*	-		*		*		-			*	*
Pyrgoella sphaera						-						-
Triloculina adriatica	*			-					-	-	-	
Triloculina bermudezi			*	1		*			*	*	*	
Triloculina cf. fichteliana	1	100			-	-	-	-			*	
Triloculina marioni Trilocalina cf. ornata	*	*	*	*	*	*	*	*	*	*	*	*
Triloculina plicata	*	*	-	-		*	*		*	*	*	*
Triloculina schreiberiana	*	*	-	*	*	*	-		*	*	,	
Triloculina serrulata	-	-	-	*	2	-	-	-	. "	(2)	_	$\vdash$
STORY TO STORY STORY	1	1	-	*	*	*		-	*			-
Triloculina tricarinata	*	*		*	.00	-		-				-
Wellmanellinella striata	-	*										4
Sigmoilina sigmoidea	*		-	-	-	*	-	-	*		*	-
Sigmoilinita costata	*	*		*	*		*		*		-	*
Sigmoilinita edwardsi	*	*		*	*	*	*	*	*	*	*	-
Sigmoilinita tenuis	1			*		-			1			-
Sigmoilopsis schlumbergeri	*			*	*	*			*	*	*	*
Articulina alticostata										100	*	
Articulina carinata		*		*		*	*		*	*	*	
Articulina tubulosa				*								
Parrina bradyi		*		*		*:			*			
Coscinospira hemprichii								*				
Laevipeneroplis karreri		*	*					*	*		*	
Peneroplis pertusus		*	*		*	*	*	*		*	*	*
Peneroplis planatus	*	*	*		*	*	*	*	*	*	*	*
Sorites orbiculus		.*:				-		*		*		*
Dentalina albatrossi									*			
Dentalina flintii		1		*	*				*	*	*	7
Dentalina inornata	*	1			*							
Dentalina mucronata				1								1
Laevidentalina inflexa				*						1 -		
Nodosaria raphanus	*								*	*	*	
Pseudonodosaría comatula	*	1		*								
Lenticulina calcar		T				1				*		
Lenticulina cultrata	*			*	*	*	*		*	*	*	-
Lenticulina gibba		*										
Lenticulina orbicularis					*		1		*	*	*	1
Saracenaria italica				1	1		1				*	1

Table 2e, Distribution of foraminiferal species in different localities of the Eastern Aegean Sea (Turkey).

FORAMINIFERA	STATIONS												
	S	Ga	Ba	GBÇ	E	DC	-1	C	KG	G	D	M	
Rosalina bradyi	*	*	*	*	*	*	*	*	*	*	*	*	
Rosalina floridensis	*	- 1	1, 1	*	*	*	11	100	*		*		
Rosalina globularis	*	*	*	*	*	*	*		*	*	*		
Rosalina macropora	*	-	*	*									
Rosalina obtusa			1		-						*	*	
Pararosalina dimorphiformis	*		*	77.7	121	*	*		*	*	*	*	
Tretomphalus bulloides		*											
Conorbella erecta	1			*									
Conorbella imperatoria	*	*		*	+		*		*	*		*	
Planoglabratella opercularis	*			*	-	*			*	*			
Siphonina reticulata	*			*					*				
Cibicidoides pachyderma	*		100	*	*			-	*	- 1	*	*	
Cibicidoides pseudoungerianus	*			*						*	*	*	
Discorbinella bertheloti	*	*		*	*	*	*		*	*	*	*	
Hyalinea balthica	*			*	*				*				
Planulina ariminensis	*			-	*				*	*			
Ciblcides advenum	*	*	*	*	*				*		*	*	
Cibicides refulgens	*		-				-			-	-	-	
Lobatula lobatula	*	*	*	*	*	*	*	*	*	*	*	*	
Cyclocibicides vermiculatus	*	*	-										
Planorbulina mediterranensis	*	*	*	*	*	*	*	*	*	*	*	*	
Cibicidella variabilis	*	*	*	*	*	*	*		*	*	*	*	
Cymbaloporetta sp.	1	+									*		
Acervulina inhaerens	*	*			*	*	*					*	
Planogypsina acervalis	*	-		-	-							1	
Planogypsina squamiformis	*	-			-	*			-		_	-	
Sphaerogypsina globula	*	*	*	*		*	*		*	*	*	*	
Asterigerinata adriatica	*	-	-	-	-	-	-		-	-	-	-	
Asterigerinata mamilla	*	*	-	*	*	*	*	*	*	*	*	*	
Amphistegina lobifera	1 "	*		- 0		-		,		*	*	*	
Nonion depressulum	*	*		*	*			-			-	- 0	
Nonionella turgida	*	1		*	-							+	
Astrononion stelligerum	*	*		*	*	*	*		*	*	*	*	
	*		-	*	*	*	*	-	*	*	*	*	
Melonis pompilioides			-	*	*	*	*						
Pullenia quinqueloba	-	+	-		-	-	-	-				+-	
Chilostomella mediterranensis	*	-		*		-			-	-	-		
Gyroidinoides soldanii	*	-		*	*	-	-		*	*	*	*	
Gyroidina umbonata		-		*	-	-		-				-	
Pararotalia spinigera	*	-		*	150							٠.	
Ammonia compacta	*	*	*	*	*	*	*		*	*	*	*	
Ammonia parkinsoniana	*	*	*	*	*	*	*	*	*	*	*	-	
Arnmonia tepida	*	*	*	*	*	*	*		*	*	*	*	
Challengerella bradyi	*	*	*	*	*	*	*	*	*		*	*	
Cribroelphidium poeyanum	*	*		*	*	*	*		*	*	*	*	
Porosononion subgranosum	*	*		*		*	*	*	*	*	*	*	
Elphidium aculeatum	*	*	*	*	*	*	*	*	*	*		-	
Elphidium advenum	*	*		*	*	*	*	1	*	*	*	*	
Elphidium complanatum	*	*	*	*	*	*	*	*	*	*	*	*	
Elphidium crispum	*	*	*	*	*	*	*	*	*	*	*	*	
Elphidium depressulum	*	*		*		*	*	*	*	*	*	*	
Elphidium jenseni	1			1.29		*		-	100				
Elphidium macellum	*	*	*	*	*				*			-	
Elphidium maioricense	*												

Class FORAMINIFEREA J. J. Lee, 1990 Order ASTRORHIZIDA Lankester, 1885 Superfamily ASTRORHIZACEA Brady, 1881 Family RHABDAMMINIDAE Brady, 1884 Subfamily RHABDAMMININAE Brady, 1884 Genus Rhabdammina M. Sars, 1869 Rhabdammina abyssorum Sars (Pl. 1, fig. 1)

1993, Rhabdammina abyssorum Sars, Sgarella and Moncharmont-Zei, p. 150, pl. 1, fig. 1.

Occurrence: Gulf of Saros, S. 16 (71.10 m), S. 21(97.40 m), S. 22 (118.50 m), S. 24 (386.00 m), S. 27 (144.80 m), S. 29 (92.00 m), S. 31, (83.80 m), S. 34 (82.00 m). S. 80 (98.00 m); Gulf of Gökova, S. 7 (198.00 m); Gulf of Datça, S. 1 (252.30 m): this species occurs from 70.00 m downwards. It is frequent in the circalittoral zone but rare in the upper epibathyal zone.

Family PSAMMOSPHAERIDAE Haeckel, 1894 Subfamily PSAMMOSPHAERINAE Haeckel, 1894 Genus Psammosphaera Schulze, 1875 Psammosphaera fusca Schulze (Pl. 1, fig. 2)

1993, Psammosphaera fusca Schulze, Sgarella and Moncharmont-Zei, p. 151, pl. 1, fig. 14.

Occurrence: Gulf of Saros, S. 28 (115.50 m), S. 31 (83.80 m): this species occurs only in the Gulf of Saros. It is rare in the lower circalittoral zone.

Family SACCAMINIDAE Brady, 1884 Subfamily SACCAMININAE Brady, 1884 Genus Lagenammina Rhumbler, 191 Lagenammina atlantica (Cushman)

1979 Reophax atlantica (Cushman), Blanc-Vernet et al., pl. 21, fig. 1.

1991 Lagenammina atlantica (Cushman), Cimerman and Langer, p. 15, pl. 1, figs. 1-3.

1993 Lagenammina atlantica (Cushman), Sgarella and Moncharmont-Zei, p. 152, pl. 1, fig. 13.

Occurrence: Gulf of Saros, S. 23 (383.00 m), S. 39 (37.70 m): this species occurs only in the Gulf of Saros. It is rare in the infralittoral and upper epibathyal zones.

\*Lagenammina fusiformis\* (Williamson)

- 1947 Proteonina fusiformis Williamson, Höglund, p. 52, pl. 4, fig. 21, text-figs. 20 20-21,
- 1960 Reophax fusiformis (Williamson), Barker, pl. 30, figs. 7-10.
- 1991 Lagenammina fusiformis (Williamson), Cimerman and Langer, p. 15, pl. 1, f figs. 4-5.
- 2001 Lagenammina fusiformis (Williamson), Avşar and Ergin, p. 767.

Occurrence: Gulf of Saros, S. 11 (79.60 m), S. 13 (156.00 m), S. 17 (33.90 m), S. 20 (92.00 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 34 (82.00 m), S. 38 (53.40 m), S. 62. (110 m), S. 68 (210.00 m), S. 76 (53.00 m), S. 79 (29.00 m), S. 80 (98.00 m). Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 14 (47.00 m), S. 15 (47.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 3 (18.50 m), S. 8 (35.80 m), S. 10 (22.50 m); Gulf of Kuşadası and Güllük Bay, S. 8 (29.00 m), S. 12 (62.10 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m), S. 5 (59.30 m); it is found from 18.00 to 210.00 m depth. It also occurs in the infralittoral, upper and lower circalittoral zones.

Superfamily HIPPOCREPINACEA Rhumbler, 1895 Family HIPPOCREPINIDAE Rhumbler, 1895 Subfamily HYPERAMMININAE Eimer and Fickert, 1899 Genus Hyperammina Brady, 1878 Hyperammina friabilis Haake

1884 Hyperammina friabilis, Brady, p. 258, pl. 23, figs. 1-3, 5, 6.
1918 Hyperammina friabilis Brady, Cushman, p. 75, pl. 29, figs. 1-3.
1928 Hyperammina friabilis Brady, Lacroix, p. 10, figs. 9 a-f.
1991 Hyperammina friabilis Brady, Cimerman and Langer, p. 15, pl. 2, fig. 1.

Occurrence: Gulf of Saros, Harmantaşı locality, Line-II, S. 7 (40.00 m): it occurs only in one sample collected from the infralittoral zone.

Order LITUOLIDA Lankester, 1885
Superfamily AMMODISCACEA Reuss, 1862
Family AMMODISCIDAE Reuss, 1862
Subfamily AMMODISCINAE Reuss, 1862
Genus Ammodiscus Reuss, 1862
Ammodiscus planorbis Höglund
(Pl. 1 figs. 5-7)

1947 Ammodiscus planorbis Höglund, p. 125, pl. 8, figs. 4, 9; pl. 28, figs. 13-16. 1991 Ammodiscus planorbis Höglund, Cimerman and Langer, p. 16, pl. 2, figs. 8-9

1993 Ammodiscus planorbis Höglund, Sgarella and Moncharmont-Zei, p. 154, pl.

1, fig. 9..

2001 Ammodiscus planorbis Höglund, Debenay et al., pl. 1, fig. 20.

Occurrence: Gulf of Saros, S. 19 (96.50 m), S. 21 (97.40 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (37.50 m), Gulf of Gökova, S. 5 (34.50 m), S. 7 (198.00 m); Gulf of Datça, S. 1 (252.30 m): it occurs between 34.50-252.30 m. This species is also reported from the infralittoral and upper epibathyal zones.

Superfamily HORMOSINACEA Haeckel, 1894
Family REOPHACIDAE Cushman, 1910
Subfamily REOPHACINAE Cushman, 1910
Genus Reophax de Montfort, 1808
Reophax dentaliniformis (Brady)

1881 Lituola (Reophax) dentaliniformis, Brady, p. 49.
1884 Lituola (Reophax) dentaliniformis Brady, Brady, pl. 30, figs. 21-22.
1993, Reophax dentaliniformis (Brady), Sgarella and Moncharmont-Zei, p. 155, pl. 2, fig. 2.

Occurrence: Gulf of Saros, S. 15 (39.50 m): it is recorded from only one sample. It occurs in the infralittoral zone.

## Reophax scorpiurus Montfort (Pl. 1, fig. 8)

- 1920 Reophax scorpiurus Montfort, Cushman, p. 6, pl. 1, figs. 5-7.
- 1971 Reophax scorpiurus Montfort, Murray, p. 19, pl.2, figs. 5-8.
- 1974 Reophax scorpiurus Montfort, Colom, p. 86, figs. 5k, 1.
- 1979 Reophax scorpiurus Montfort, Alfirevic, p. 59, pl. 1, fig. 4.
- 1988 Reophax scorpiurus Montfort, Loeblich and Tappan, p. 58, pl. 44, figs. 1-3.
- 1991 Reophax scorpiurus Montfort, Cimerman and Langer, p. 17, -18, pl. 4, figs. 1-4.
- 1993 Reophax scorpiurus Montfort, Sgarella and Moncharmont-Zei, p. 156, pl. 2, fig. 5.
- Figure 11 a. Distribution of *Rhabdammina abyssorum* Sars in the Eastern Aegean Sea, Turkish Coasts.
- Figure 11 b. Distribution of Psammosphaera fusca Schulze in the Eastern Aegean Sea, Turkish Coasts.
- Figure 11 c. Distribution of Lagenammina atlantica (Cushman) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 11 d. Distribution of Lagenammina fusiformis (Williamson) in the Eastern Aegean Sea, Turkish Coasts.





Ha







11 c

11 d

Occurrence: Gulf of Saros, S. 6 (70.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 20 (92.00 m), S. 21 (97.40 m), S. 29 (92.00 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 65 (61.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 21 (47.00 m); Gulf of Edremit, S. 6 (15.00 m), S. 18 (29.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 9 (67.00 m), S. 12 (62.00 m), S. 14 (82.00 m), S. 15 (83.70 m); Gulf of Gökova, S. 2 (27.00 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m); Marmaris Bay, S. 7 (28.90 m); it is mainly recorded in the depth-range of 15.00-252-320 m. This species is frequent in the infralittoral and circalittoral zones, and rare in the upper epibathyal zone.

### Superfamily LITUOLACEA de Blainville, 1827 Family HAPLOPHRAGMOIDIDAE Maync, 1952 Genus Haplophragmoides Cushman, 1910 Haplophragmoides canariensis (d'Orbigny)

1839b Nonionina canariensis, d'Orbigny, p. 128, pl. 2, figs. 33, 34.

1910 Haplophragmoides canariensis (d'Orbigny), Cushman, p. 101, fig. 149.

1960 Haplophragmoides canariensis (d'Orbigny), Barker, pl. 35, figs. 1-3, 5.

1988 Haplophragmoides canariensis (d'Orbigny), Loeblich and Tappan, p. 66, pl. 49, figs. 12-13.

1991 Haplophragmoides canariensis (d'Orbigny), Cimerman and Langer, p. 18, pl. 4, figs. 7-9.

2001 Haplophragmoides canariensis (d'Orbigny), Meriç and Avşar, p. 127.

Occurrence: Gökçeada, S. 25 (25.00 m): it occurs only in one sample and is found in the infralittoral zone.

Genus Labrospira Höglund, 1947 Labrospira subglobosa (Sars) (Pl. 1, figs. 9-10)

1910 Haplophragmoides subglobosum (Sars), Cushman, p. 105, figs. 162-164. 1920 Haplophragmoides subglobosum (Sars), Cushman, p. 45, pl. 8, fig. 5. 1974 Haplophragmoides subglobosum (Sars), Colom, p. 73, figs. 3 f, j. 1991 Labrospira subglobosa (Sars), Cimerman and Langer, p. 18, pl. 5, figs. 1-3.

- Figure 12 a. Distribution of *Hyperammina friabilis* Haake in the Eastern Aegean Sea, Turkish Coasts.
- Figure 12 b. Distribution of *Ammodiscus planorbis* Höglund in the Eastern Aegean Sea, Turkish Coasts.
- Figure 12 c, Distribution of *Reophax dentaliniformis* (Brady) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 12 d. Distribution of *Reophax scorpiurus* Montfort in the Eastern Aegean Sea, Turkish Coasts.





12 a







12 c

12 d

Occurrence: Gulf of Saros, S. 18 (88.10 m), S. 19 (96.50 m), S. 27 (144.80 m), S. 29 (92.00 m), S. 61 (70.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 13 (79.00 m), S. 15 (47.00 m), S. 21 (47.00 m), S. 31 (75.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m); Gulf of Gökova, S. 7 (198.00 m); Gulf of Datça, S. 6 (56.10 m), S. 7 (56.40 m): it occurs in the depth-range 16.00-198.00 m. It is rare in the infralittoral zone but frequent in the circalittoral zone.

Family DISCAMMINIDAE Mikhalevich, 1980 Genus Ammoscalaria Höglund, 1947 Ammoscalaria pseudospiralis (Williamson) (Pl. 1, fig. 11)

1858 Proteonina pseudospiralis, Williamson, p. 2, pl. 1, figs. 2, 3.

1910 Haplophragmium pseudospirale (Williamson), Sidebottom, p. 8, pl. 1, fig. 6.

1947 Ammoscalaria pseudospiralis (Williamson), Höglund, pl. 31, figs. 1 a-p.

1971 Ammoscalaria pseudospiralis (Williamson), Murray, p. 29, pl. 7, figs. 1-5.

1991 Ammoscalaria pseudospiralis (Williamson), Cimerman and langer, p. 18, pl. 5, figs. 4-6.

Occurrence: Gulf of Saros, S. 17 (33.90 m), S. 18 (88.10 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 38 (74.00 m), S. 39 (37.70 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 47 (24.50 m); Dikili and Çandarlı Bays, S. 10 (22.50 m), S. 12 (22.50 m); Gulf of Kuşadası and Güllük Bay, S. 15 (83.70 m); Gulf of Gökova, S. 2 (87.00 m), S. 5 (34.50 m); Gulf of Datça, S. 1 (252.30 m), S. 2 (45.00 m), S. 4 (40.00 m), S. 5 (59.30 m): the distribution range is between 22.50 m and 252.30 m. It is recorded from infralittoral and circalittoral zones.

Genus Discammina Lacroix, 1932 Discammina compressa (Goes) (Pl. 1, fig. 12)

1884 Haplophragmium emaciatum, Brady, p. 351, pl. 3, 7, figs. 8-16.

1960 Discammina compressa (Goes), Barker, pl. 33, figs. 26-28.

1993 Discammina compressa (Goes), Sgarella and Moncharmont-Zei, p. 158, pl. 2, fig. 12.

- Figure 13 a. Distribution of *Haplophragmoides canariensis* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 13 b. Distribution of *Labrospira subglobosa* (Sars) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 13 c. Distribution of Ammoscalaria pseudospiralis (Williamson) in the Eastern Aegean Sea, Turukish Coasts.
- Figure 13 d. Distribution of *Discammina compressa* (Goes) in the Eastern Aegean Sea, Turkish Coasts.





13 a







13 e

13 d

Occurrence: Gulf of Saros, S. 10 (68.50), S. 13 (156.00), S. 15 (39.50), S. 17 (33.90), S. 18 (88.10), S. 19 (96.50); Gökçeada-Bozcaada-Çanakkale triangle, S. 10 (57.00 m); Gulf of Edremit, S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 3 (18.50 m), S. 8 (35.80 m): this species occurs between 18.50 m and 156.00 m depths, and is frequent in infralittoral and circalittoral zones.

Family Cyclamminidae Marie, 1941 Subfamily Alveolophragmiinae Saidova, 1981 Genus Alveophragmium Shchedrina, 1936 Alveophragmium scitulum (Brady)

1884 Haplophragmium scitulum Brady, Brady, p. 308, pl. 34, figs. 11-13.
1993 Alveophragmium scitulum (Brady), Sgarella and Moncharmont-Zei, p. 158, pl. 2, fig. 14.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 13 (79.00 m): this species is poorly recorded. It is found in one sample coming from the lower circalittoral zone.

Superfamily SPIROPLECTAMMINACEA Cushman, 1927
Family Spiroplectamminidae Cushman, 1927
Subfamily Spiroplectammininae Cushman, 1927
Genus Spiroplectinella Kisel'man, 1972
Spiroplectinella sagittula (d'Orbigny)
(Pl. 1, fig. 13; pl. 2, figs. 1-2)

- 1839b Textularia sagittula, d'Orbigny, p. 138, pl. 1, figs. 19-21.
- 1933 Textularia sagittula Defrance, Lacroix, p. 1, text-figs. 1-8.
- 1958 Textularia sagittula d'Orbigny, Le Calvez, Y., p. 150.
- 1974 Textularia sagittula d'Orbigny, Le Calvez, Y., p. 82, pl. 21, figs. 1-5.
- 1988 Textularia sagittula Defrance, Loeblich and Tappan, p. 173, pl. 193, figs. 1, 2.
- 1991 Spiroplectinella sagittula (d'Orbigny), Cimerman and Langer, p. 19, pl. 6, figs. 5-6.
- 1995 Spiroplectammina sagittula (d'Orbigny), Meric et al., pl. 1, figs. 2 a, b, c.
- 2001 Spiroplectammina sagittula (d'Orbigny), Meriç and Avşar, p. 127, pl. 1, figs. 1 and 2.
- 2002 Spiroplectinella sagittula (d'Orbigny), Avşar, p. 63, pl. 1, fig. 1,

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 20 (92.00 m), S. 25 (188.00 m), S. 28 (115.50 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 38 (53.40 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 44 (26.20 m), S. 48 (40.00 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 52 (61.10 m), S. 53 (440.00 m), S. 54 (94.50 m), S. 60 (55.00 m), S. 63 (96.00 m), S. 70 (13.00 m), S. 72 (500.00 m), S. 80 (98.00 m); Gökçeada, S. 16 (4.00 m), S. 25 (25.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S.3 (59.60 m), S.5 (137.50 m), S.6 (92.00

m), S. 9 (72.00 m), S. 13 (79.00 m), S. 16 (47.00 m). S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m), S. 3 (230.00 m), S. 4 (76.30 m), S. 5 (125.00 m); Dikili and Candarlı Bays, S. 2 (39.50 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 11 (52.00 m); Gulf of Izmir and vicinity of Karaburun Peninisula, S. 2 (63.50 m), S. 3 (44.00 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 3 (113.00 m), S. 4 (226.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 13 (72.50 m); Gulf of Gökova, S. 3 (80.40 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m), S. 5 (59.30 m), S. 6 (56.10 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 3 (98.80 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 8 (69.00 m): it is shows very regularly found in the Eastern part of Aegean Sea. It occurs in infralittoral, circalittoral and upper epibathyal zones.

Order TROCHAMMINIDA Saidova, 1981
Superfamily TROCHAMMINACEA Schwager, 1877
Family Trochamminidae Schwager, 1877
Subfamily Trochammininae Schwager, 1877
Genus Ammoglobigerina Eimer and Fickert, 1899
Ammoglobigerina globigeriniformis (Parker and Jones)

- 1960 Ammoglobigerina globigeriniformis (Parker and Jones). Barker, pl. 35, figs. 10, 11.
- 1988 Ammoglobigerina globigeriniformis (Parker and Jones), Loeblich and Tappan, p. 120, pl. 128, figs. 9 and 10.
- 1991 Ammoglobigerina globigeriniformis (Parker and Jones), Cimerman and Langer, p. 20, pl. 7, figs. 4-6.
- 1993 Trochammina globigeriniformis (Parker and Jones), Sgarella and Moncharmont-Zei, p. 161, pl. 3, figs. 9-10.

Occurrence: Dikili and Çandarlı Bays, S. 8 (35.10 m): it is found in one sample collected from the infralittoral zone.

- Figure 14 a. Distribution of Alveophragmium scitulum (Brady) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 14 b. Distribution of Spiroplectinella sagittula (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 14 c. Distribution of *Ammoglobigerina globigeriniformis* (Parker and Jones) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 14 d. Distribution of *Trochammina inflata* (Montagu) in the Eastern Aegean Sea, Turkish Coasts.





14 a







14 c

14 d

### Genus Trochammina Parker and Jones, 1859 Trochammina inflata (Montagu)

- 1960 Trochammina inflata (Montagu), Barker, pl. 41, fig. 4.
- 1972 Trochammina inflata (Montagu), Rosset-Moulinier, p. 122, pl. 3, figs. 11 and 12.
- 1988 Trochammina inflata (Montagu), Loeblich and Tappan, p. 122, pl. 129, figs. 20-23.
- 1990 Trochammina inflata (Montagu), Debenay, pl. 3, figs. 11-12.
- 1991 Trochammina inflata (Montagu), Cimerman and Langer, 20, pl. 7, figs. 7-9.
- 1993 Trochammina inflata (Montagu), Sgarella and Moncharmont-Zei, p. 161, pl. 4, figs. 1-2.
- 2000 Trochammina inflata (Montagu), Cann et al., pl. 1, figs. k, l, m.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 9 (72.00 m), S. 14 (47.00 m), S. 15 (47.00 m): this species is poorly recorded in the depth range of 47.00 m - 72.00 m, corresponding to the upper circalittoral zone.

Order TEXTULARIIDA Lankester, 1885
Superfamily TEXTULARIACEA Ehrenberg, 1838
Family Eggerellidae Cushman, 1937
Subfamily Eggerellinae Cushman, 1937
Genus Eggerelloides Haynes, 1973
Eggerelloides advenus (Cushman)

- 1922 Verneuilina advena, Cushman, p. 57, pl. 9, figs. 7-9.
- 1974 Eggerella advena (Cushman), Colom, p. 93, fig. 10 a.
- 1975 Verneuilinulla advena (Cushman), Saidova. p. 102, pl. 29, fig. 1.
- 1991 Eggerelloides advenus (Cushman), Cimerman and Langer, p. 20-21, pl. 8, figs. 5-6.
- 1994 Verneuilinulla advena (Cushman), Loeblich and Tappan, p. 22, pl. 19, figs. 8 and 9.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (18.00 m), S. 10 (57.00 m), S. 26 (72.00 m), Gulf of Gökova, S. 2 (27.00 m): poorly recorded in the depthrange of 18.00-72.00 m. It occurs in infralittoral and upper circalittoral zones.

# Eggerelloides scabrus (Williamason) (Pl. 2, figs. 3-5)

- 1858 Bulimina scabra, Williamson, p. 65, pl. 5, figs. 136, 137.
- 1922 Verneuilina scabra (Williamson), Cushman, p. 55.
- 1937 Eggerella scabra (Williamson), Cushman, p. 50, pl. 5, fig. 10.
- 1960 Eggerella scabra (Williamson), Barker, pl. 47, figs. 15-17.
- 1987 Eggerella scabra (Williamson), Yanko and Troitskaja, pl. 1, figs. 5-6.
- 1988 Eggerelloides scabrus (Williamson), Loeblich and Tappan, p. 170, pl. 189,

figs. 5-7.

- 1991 Eggerelloides scabrus (Williamson), Cimerman and Langer, p. 21, pl. 8, fig. 7.
- 1993 Eggerella scabra (Williamson), Sgarella and Moncharmont-Zei, p. 162, pl. 4, fig. 9.
- 2001 Eggerelloides scabrus (Williamson), Meriç and Avşar, 2001, p. 127, pl. 1, figs. 3-4.
- 2001 Eggerelloides scabrus (Williamson), Debenay et al., pl. 1, fig. 5.

Occurrence: Gulf of Saros, S. 10 (68.50 m), S. 15 (39.50 m), S. 17 (33.90 m), S. 32 (67.00 m), S. 38 (53.40 m), S. 47 (24.50 m), S. 51 (12.30 m), S. 55 (22.00 m), S. 79 (29.00 m); Gökçeada, S. 28 (10.00 m), Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (18.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 32 (46.00 m); Gulf of Edremit, S. 6 (15.00 m), S. 7 (19.00 m), S. 10 (32.00 m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 3 (18.50 m), S. 4 (18.50 m), S. 5 (18.00 m), S. 8 (35.80 m), S. 10 (22.50 m), S. 12 (25.50 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 6 (45.60 m), S. 7 (305.20 m); Gulf of Gökova, S. 2 (27.00 m); Gulf of Datça, S. 4 (40.00 m): it occurs in the depth-range of between 10.00 m and 305.20 m. It is frequent in infralittoral and upper circalittoral zones, but rare in the upper epibathyal zone.

Family Textulariidae Ehrenberg, 1838 Subfamily Textulariinae Ehrenberg, 1838 Genus Bigenerina d'Orbigny, 1826 Bigenerina cylindrica Cushman (Pl. 2, fig. 6)

1922 Bigenerina cylindrica, Cushman, p. 26, pl. 3, figs. 7-8.
1960 Bigenerina cylindrica Cushman, Barker, p. 90, pl. 44, figs. 19-24.
1993 Bigenerina cylindrica Cushman, Sgarella and Moncharmont-Zei, p. 164, pl. 4, fig. 11.

Occurrence: Gulf of Saros, S. 26 (631.00 m), S. 41 (81.00 m): this species is very rare and occurs in the depth-range of 81.00-631.00 m in lower circalittoral and upper epibathyal zones.

- Figure 15 a. Distribution of Eggerelloides advenus (Cushman) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 15 b. Distribution of Eggerelloides scabrus (Williamson) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 15 c. Distribution of *Bigenerina cylindrica* Cushman in the Eastern Aegean Sea, Turkish Coasts.
- Figure 15 d. Distribution of *Bigenerina nodosaria* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.





15 a

15 b





15 c

15 d

# Bigenerina nodosaria d'Orbigny (Pl. 2, fig. 7)

- 1826 Bigenerina nodosaria, d'Orbigny, p. 261, pl. 2, figs. 9-10.
- 1922 Bigenerina nodosaria d'Orbigny, Cushman, p. 24, pl. 3, fig. 24.
- 1958 Bigenerina nodosaria d'Orbigny, Le Calvez, Y., p. 153.
- 1974 Bigenerina nodosaria d'Orbigny, Colom, p. 87, pfigs. 6 a-k.
- 1979 Bigenerina nodosaria d'Orbigny, Alfirevic, p. 64, pl. 4.
- 1988 Bigenerina nodosaria d'Orbigny, Loeblich and Tappan, p. 172, pl. 191, figs. 1, 2.
- 1991 Bigenerina nodosaria d'Orbigny, Cimerman and Langer, p. 21, pl. 9, figs. 9-10.
- 1993 Bigenerina nodosaria d'Orbigny, Sgarella and Moncharmont-Zei, p. 164, pl. 4, fig. 12.
- 1994 Bigenerina rodosaria d'Orbigny, Loeblich and Tappan, p. 27, pl. 31, figs. 8-12, pl. 32, figs. 11 and 12.
- 2001 Bigenerina nodosaria d'Orbigny, Avşar and Ergin, p. 765.
- 2002 Bigenerina nodosaria d'Orbigny, Kaminski et al., p. 23, pl. 1, fig. 9.
- 2002 Bigenerina nodosaria d'Orbigny, Avşar, p. 63, pl. 1, fig. 2.

Occurrence: Gulf of Saros, S. 4 (50.90 m), S. 5 (43.00 m), S. 6 (70.00 m), S. 7 (90.00 m), S. 8 (55.70 m), S. 9 (71.80 m), S. 10 (68.50 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 25 (188.00 m), S. 26 (631.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 33 (70.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 53 (440.00 m), S. 54 (94.50 m), S. 57 (52.00 m), S. 60 (55.00 m), S. 61 (70.00 m), S. 62 (110.00 m), S. 63 (96.00 m), S. 64 (75.00 m), S. 65 (61.00 m), S. 69 (72.00 m), S. 70 (13.00 m), S. 71 (90.00 m), S. 72 (500.00 m), S. 75 (42.00 m), S. 78 (63.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 6 (92.00 m); Gulf of Edremit, S. 2 (100.40 m), S. 12 (64.20 m), S. 16 (82.00 m); Dikili and Candarlı Bays, S. 13 (80.00 m), Gulf of Kusadası and Güllük Bay, S. 3 (113.00 m), S. 4 (226.00 m), S. 5 (137.00 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 12 (62.10 m), S. 13 (72.50 m), S. 14 (82.10 m), S. 15 (83.70 m); it is abundant and recorded in most of the samples. It occurs in the depth range of between 10.00 m and 631.00 m corresponding to infralittoral-lower epibathyal zones.

#### Genus Textularia Defrance, 1824 Textularia agglutinans d'Orbigny

- 1839 b Textularia agglutinans. d'Orbigny, p. 136, pl. 1, figs. 17, 18, 32-34.
- 1896 Textularia agglutinans d'Orbigny, Dezelic, p. 76.
- 1932 Textularia agglutinans d'Orbigny, Lacroix, p. 16, fig. 14.
- 1958 Textularia agglutinans d'Orbigny, Le Calvez, Y., p. 151, pl. 1, fig. 3.
- 1977a Textularia agglutinans d'Orbigny, Le Calvez, Y., p. 13, figs. 1-3.

- 1979 Textularia agglutinans d'Orbigny, Alfirevic, p. 61, pl. 3, fig. 1.
- 1991 Textularia agglutinans d'Orbigny, Cimerman and Langer, p. 21, pl. 10, figs. 1-2.
- 1992 Textularia agglutinans d'Orbigny, Hatta and Ujiie, p. 58, pl. 2, figs. 3 a and b.
- 1993 Textularia agglutinans d'Orbigny, Sgarella and Moncharmont-Zei, p. 164.
- 1993 Textularia agglutinans d'Orbigny, Hottinger et al., p. 36, pl. 13, figs. 1-9.
- 1994 Textularia agglutinans d'Orbigny, Loeblich and Tappan, p. 27, pl. 33, figs. 8-12.
- 1995 Textularia agglutinans d'Orbigny, Meriç et al., pl. 1, fig. 3 a and b.
- 1997 Textularia agglutinans d'Orbigny, Haunold et al., p. 201, fig. 12 and p. 202, fig. 13.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 13 (79.00 m): it occurs only in one sample coming from the upper circalittoral zone.

### Textularia bocki Höglund (Pl. 2, figs. 8-10)

1947 Textularia bocki, Höglund, p. 171, pl. 12, figs. 5-6.

1932 Textularia agglutinans d'Orbigny, Lacroix, p. 16, fig. 13.

1958 Textularia bocki Höglund, Le Calvez, Y., p. 150, pl. 1, fig. 4.

1991 Textularia bocki Höglund, Cimerman and Langer, p. 21, pl. 10, figs. 3-6

2001 Textularia bocki Höglund, Avşar and Ergin, p. 768.

2001 Textularia bocki Höglund, Meriç and Avşar, 2001, p. 127, pl. 1, figs. 5-6.

2002 Textularia bocki Höglund, Kaminski et al., p. 30, pl. 1, figs. 1 and 2.

2002 Textularia bocki Höglund, Avşar, p. 63, pl. 1, fig. 3.

Occurrence: Gulf of Saros, S. 2 (15.50 m), S. 4 (50.90 m), S. 6 (70.00 m), S. 7 (90,00 m), S. 9 (71.80 m), S. 10 (68.50 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 25 (186.00 m), S. 26 (631.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31(83.80 m), S. 32 (67.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 52 (61.10 m), S. 53 (440.00 m), S. 54 (94.50 m), S. 56 (41.00 m), S. 57 (52.00 m), S. 58 (60.00 m), S. 60 (55.00 m), S. 61 (70.00 m), S. 62 (110.00 m), S. 63 (96.00 m), S. 64 (75.00 m), S. 67 (550.00 m), S. 69 (72.00 m), S. 72 (500.00 m), S. 80 (98.00 m); Gökçeada, S. 13 (13.00 m), S. 16 (4.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Bozcaada, S. 10 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 3 (59.60 m), S. (127.50 m), S. 6 (92.00 m), S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (29.90 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28

(39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m), S. 3 (230.00 m), S. 4 (76.30 m), S. 7 (19.00 m), S. 10 (32.00 m), S. 14 (37.70 m), S. 16 (82.00 m), S. 17 (47.40 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. I (51.50 m), S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.5 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 3 (113.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 13 (72.50 m), S. 14 (82.10 m), S. 15 (83.70 m); Gulf of Gökova, S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 7 (198.00 m), S. 8 (78.30 m); Gulf of Datça, S. 1 (252.30 m), S. 2 (45.00 m), S. 3 (39.50 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 6 (56.10 m), S. 7 (56.40 m), S. 8 (248.40 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 7 (29.90 m), S. 8 (69.00 m); it is found in the depth-range of between 12.30 m and 631.00 m and frequent deeper than 80.00 m. It is reported from infralittoral, circalittoral and epibathyal zones.

### Textularia conica d'Orbigny (Pl. 2, figs. 11-12)

1839a Textularia conica, d'Orbigny, p. 143, pl. 1, figs. 19, 20.

1899 Textularia conica d'Orbigny, Flint, p. 285, pl. 29, fig. 6.

1932 Textularia conica d'Orbigny, Cushman, p. 11, pl. 2, figs. 8-10.

1977a Textularia conica d'Orbigny, Le Calvez, Y., p. 18, figs. 1-2.

- 1991 Textularia conica d'Orbigny, Cimerman and Langer, p. 22, pl. 10, figs. 7-9.
- 1992 Textularia conica d'Orbigny, Hatta and Ujiie, p. 58, pl. 2, figs. 5 a and b.
- 1993 Textularia conica d'Orbigny, Sgarella and Moncharmont-Zei, p. 166, pl. 3, figs. 4-5.
- 2001 Textularia conica d'Orbigny, Avşar and Ergin, p. 768.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 17 (39.00 m), S. 20 71.00 m), S. 29 (50.00 m); Gulf of Datça, S. 3 (139.50 m), S. 5 (59.30 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5

- Figure 16 a. Distribution of *Textularia agglutinans* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 16 b. Distribution of *Textularia bocki* Höglund in the Eastern Aegean Sea, Turkish Coasts.
- Figure 16 c. Distribution of *Textularia conica* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 16 d. Distribution of *Textularia pseudorugosa* Lacroix in the Eastern Aegean Sea, Turkish Coasts.





16 a







16 c

16 d

(128.80 m), S. 6 (64.00 m): it occurs in the depth-range of 39.00-147.00 m, and is frequent in upper and lower circalittoral zones.

## Textularia pseudorugosa Lacroix (Pl. 2, figs. 13-15)

1932a Textularia pseudorugosa, Lacroix, p. 19, figs. 19-22.

1958 Textularia pseudorugosa Lacroix, Le Calvez, Y., p. 151.

1974 Textularia pseudorugosa Lacroix, Clom, p. 89, figs. 8 g-1.

1991 Textularia pseudorugosa Lacroix, Cimerman and Langer, p. 22, pl. 11, figs. 5-8.

1993 Textularia pseudorugosa Lacroix, Sgarella and Moncharmont-Zei, p. 166, pl. 3, fig. 8.

2001 Textularia pseudorugosa Lacroix, Avşar and Ergin, p. 768

Occurrence: Gulf of Saros, S. 12 (214.70), S. 14 (84.00), S. 22 (118.50), S. 27 (144.80), S. 29 (92.00), S. 35 (195.00), S. 40 (77.30), S. 43 (51.50), S. 51 (12.30), S. 54 (94.50), S. 80 (98.00); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50), S. 13 (79.00 m), S. 18 (69.00 m), S. 21 (47.00 m), S. 25 (74.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m), S. 3 (230.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (63.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 3 (113.00 m), S. 5 (137.00 m), S. 8 (29.00 m); Gulf of Gökova, S. 2 (27.00 m), S. 3 (80.40 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m), S. 5 (59.30 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 8 (69.00 m): this species is abundant in the depth-range of 12.30-334.50 m. It is frequent in infralittoral-upper epibathyal zones.

# Textularia truncata Höglund (Pl. 3, figs. 1-2)

1947 Textularia truncata, Höglund, p. 175, pl. 12, figs. 8, 9, text-figs. 147-149.

1958 Textularia truncata Höglund, Le Calvez, Y., p. 149, pl. 1, fig. 5.

1991 Textularia truncata Höglund, Cimerman and Langer, p. 22, pl. 12, figs. 1-3.

1995 Textularia truncata Höglund, Meriç et al., pl. 1, figs. 5 a, b, c.

2001 Textularia truncata Höglund, Avşar and Ergin, p. 768.

2001 Textularia truncata Höglund, Meriç and Avşar, 127, pl. 1, figs. 7-9.

2001 Textularia truncata Höglund, Debenay et al., pl. 1, fig. 4.

2002 Textularia truncata Höglund, Avşar, p. 63, pl. 1, fig. 4.

Occurrence: Gulf of Saros, S. 14 (84.00 m), S. 35 (195.00 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 43 (51.50 m), S. 51 (12.30 m), S. 57 (52.00 m), S. 80 (98.00 m); S. 16 (4.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 3 (59.60 m), S. 5 (137.50 m), S. 13 (79.00 m), S. 16 (47.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m),

S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 33 (39.00 m), S. 36 (82.00 m); Gulf of Edremit, S. 3 (230.00 m), S. 4 (76.30 m), S. 5 (125.00 m), S. 6 (15.00 m), S. 17 (47.40 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 8 (35.80 m), S. 11 (52.00 m), S. 12 (25.50 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 3 (113.00 m), S. 4 (226.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 11 (47.00 m); Gulf of Gökova, S. 3 (80.40 m), S. 6 (65.00 m), S. 7 (198.00 m), S. 8 (78.30 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m); Marmaris Bay, S. 1 (106.40 m), S. 3 (98.30 m), S. 5 (128.50 m): it occurs in the depth-range 12.30-252.00 m corresponding to infralittoral-upper epibathyal zones.

### Subfamily Siphotextulariinae Loeblich and Tappan, 1985 Genus Siphotextularia Finlay, 1939 Siphotextularia concava (Karrer) (Pl. 3, figs. 3-4)

1868 Plecanium concavum, Karrer, p. 192, pl. 1, fig. 3.

1932 Siphotextularia concava (Karrer), Lacroix, pl. 42, figs. 13-14.

1950 Siphotextularia concava (Karrer), Said, p. 5, pl. 1, fig. 3.

1960 Siphotextularia concava (Karrer), Barker, pl. 42, figs. 13-14.

1991 Siphotextularia concava (Karrer), Cimerman and Langer, p. 23, pl. 12, figs. 4-6.

1992 Siphotextularia concava (Karrer), Hatta and Ujiie, p. 59, pl. 3, figs. 1a and b.

1993 Siphotextularia concava (Karrer), Sgarella and Moncharmont-Zei, p. 166, pl. 3, figs. 6-7.

2001 Siphotextularia concava (Karrer), Meriç and Avşar, p. 127, pl. 1, figs. 10-11.

2002 Siphotextularia concava (Karrer), Avşar, p. 63, pl. 1, fig. 5.

Occurrence: Gulf of Saros, S. 10 (68.50 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 19 (96.50 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 29 (92.00 m), S. 34 (82.00 m), S. 36 (74.00 m), S. 54 (94.50 m), S. 60 (55.00 m), S. 72 (500.00 m), S. 80 (98.00 m); Gökçeada, S. 25 (25.00 m), Gökçeada-Bozcaada-Çanakkale triangle, S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 29 (50.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 2 (100.40 m), S. 17 (47.40 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 3 (113.00 m), S. 4 (226.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 13 (82.10 m), S. 14 (83.70 m); Gulf of Gökova, S. 5 (34.50 m), S. 7 (198.00 m), S. 8 (78.30 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m), S. 8 (248.40 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 3 (98.30 m), S. 5 (128.80 m): frequent in the depth-range 25.00-500.00 m. It occurs in infralittoral-upperepibathyal zones. It is frequent in the upper circalittoral zone.

### Family Pseudogaudryinidae Loeblich and Tappan, 1985 Subfamily Pseudogaudryininae Loeblich and Tappan, 1985 Genus Connemarella Cimerman and Langer, 1991 Connemarella rudis (Wright) (Pl. 3, figs. 5-7)

1937a Gaudryina rudis Wright, Cushman, p. 61, pl. 9.

1958 Gaudryina rudis Wright, Le Calvez, Y., p. 154, pl. 1, figs. 1 and 2.

1971 Gaudryina rudis Wright, Murray, p. 34, pl. 14, figs. 1-6.

1988 Connemarella rudis (Wright), Loeblich and Tappan, p. 774, pl. 1, figs. 1-7.

1991 Connemarella rudis (Wright), Cimerman and Langer, p. 23, pl. 8, figs. 1-4.

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 14 (84.00 m), S. 22 (118.50 m), S. 28 (631.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 72 (500.00 m), S. 80 (98.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 13 (79.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 29 (50.00 m), S. 31 (75.00 m); Gulf of Edremit, S. 3 (230.00 m); Dikili and Çandarlı Bays, S. 3 (49.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m), Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 3 (113.00 m), S. 8 (29.00 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 14 (83.70 m); Gulf of Datça, S. 2 (45.00 m), S. 3 (139.50 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 8 (69.00 m): it occurs frequently between 12.30 m and 631.00 m. This species is recorded in the infralittoral to lower epibathyal zones. It is also frequent in the upper circalittoral zone.

### Genus Pseudoclavulina Cushman, 1936 Pseudoclavulina crustata Cushman (Pl. 3, figs. 8-9)

1936 Pseudoclavulina crustata, Cushman, p. 19, pl. 3, figs. 12 a and b.

1937a Pseudoclavulina crustata Cushman, Cushman, p. 117, pl. 16, figs. 1 and 2.

1991 Pseudoclavulina crustata Cushman, Cimerman and Langer, p. 23, pl. 11, figs. 9-10.

1993 Clavulina crustata (Cushman), Sgarella and Moncharmont-Zei, p. 167, pl. 4, fig. 10.

Figure 17 a. Distribution of *Textularia truncata* Höglund in the Eastern Aegean Sea, Turkish Coasts.

Figure 17 b. Distribution of *Siphotextularia concava* (Karrer) in the Eastern Aegean Sea, Turkish Coasts.

Figure 17 c. Distribution of *Connemarella rudis* (Wright) in the Eastern Aegean Sea, Turkish Coasts.

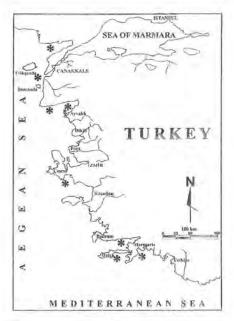
Figure 17 d. Distribution of *Pseudoclavulina crustata* Cushman in the Eastern Aegean Sea, Turkish Coasts.











17.0

17 d

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 13 (158.00 m), S. 14 (84.00 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 51 (12.30 m), S. 52 (61.10 m), S. 54 (94.50 m), S. 58 (60.00 m), S. 62 (100.00 m), S. 66 (65.00 m), S. 68 (210.00 m), S. 69 (72.00 m), S. 75 (42.00 m), S. 870 (98.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 20 (71.00 m), S. 25 (74.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 16 (82.00 m); Gulf of Kuşadası and Güllük Bay, S. 3 (445.00 m), S. 4 (80.40 m), S. 5 (46.20 m); Gulf of Gökova, S. 5 (34.50 m), S. 7 (198.00 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m), S. 9 (147.00 m); Marmaris Bay, S. 5 (128.00 m): this species occurs frequently. It is found in almost every sample down to 100.00 m depth. This species is rare in the infralittoral zone, but, frequent in the circalittoral zone. It also occurs in the upper epibathyal zone.

Order SPIRILLINIDA Corbachik and Montsurova, 1980
Suborder SPIRILLININA Hohenegger and Piller, 1975
Family Spirillinidae Reuss and Fritsch, 1861
Genus Spirillina Ehrenberg, 1843
Spirillina limbata Brady
(Pl. 3, fig. 10)

1960 Spirillina limbata Brady, Barker, p.pl. 85, figs. 18-22.
1991 Spirillina limbata Brady, Cimerman and Langer, p. 24, pl. 14, figs. 1-3.
1993 Spirillina limbata Brady, Sgarella and Moncharmont-Zei, p. 224-225.
2001 Spirillina limbata Brady, Avşar and Ergin, p. 768.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 18 (69.00 m), S. 31 (75.00 m); Gulf of Kuşadası and Güllük Bay, S. 3 (113.00 m), S. 4 (226.00 m); Gulf of Gökova, S. 6 (65.00 m), S. 8 (78.30 m); Marmaris Bay, S. 1 (106.40 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m): this species is frequent. It is found from 65.00 to 226.00 m depth. It is abundant in the lower circalittoral zone.

### Spirillina vivipara Ehrenberg (Pl. 3, figs. 11-12)

1930 Spirillina vivipara Ehrenberg, Heron-Allen and Earland, p. 178.

1958 Spirillina vivipara Ehrenberg, Le Calvez, Y., p. 181.

1960 Spirillina vivipara Ehrenberg, Barker, pl. 85, figs. 1-5.

1974 Spirillina vivipara Ehrenberg, Colom, p. 139, figs. 23 c and d.

1991 Spirillina vivipara Ehrenberg, Cimerman and Langer, p. 24, pl. 14, figs. 4-6.

1993 Spirillina vivipara Ehrenberg, Sgarella and Moncharmont-Zei, p. 226, pl. 20, fig. 2.

1994 Spirillina vivipara Ehrenberg, Loeblich and Tappan, p. 36, pl. 54, figs. 5-10.

1999 Spirillina vivipara Ehrenberg, Hayward et al., p. 92, pl. 3, fig. 7.

2001 Spirillina vivipara Ehrenberg, Avşar and Ergin, p. 768.
2001 Spirillina vivipara Ehrenberg, Meriç and Avşar, p. 127.
2001 Spirillina vivipara Ehrenberg, Debenay et al., pl. 4, figs. 24.

Occurrence: Gulf of Saros, S. 54 (94.50 m), Gökçeada, S. 29 (11.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 29 (50.00 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 4 (226.00 m), S. 6 (45.60 m); Marmaris Bay, S. 1 (106.40 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m): this species is found between 11.00 m to 226.00 m depths. It occurs in infralittoral and circalittoral zones.

Family Patellinidae Rhumbler, 1906 Subfamily Patellininae Rhumbler, 1906 Genus Patellina Williamason, 1858 Patellina corrugata Williamson

1858 Patellina corrugata, Williamson, p. 46, pl. 3, figs. 86-89.

1958 Patellina corrugata Williamson, Le Calvez, Y., p. 181.

1960 Patellina corrugata Williamson, Barker, pl. 86, figs. 1-7.

1970 Patellina corrugata Williamson, Daniels, p. 86, pl. 7, fig. 4.

1972 Patellina corrugata Williamson, Rosset -Moulinier, p. 173.

1974 Patellina corrugata Williamson, Colom, p. 139, figs. 23 e, f.

1988 Patellina corrugata Williamson, Loeblich and Tappan, p. 306, pl. 320, figs. 7-14.

1991 Patellina corrugata Williamson, Cimerman and Langer, p. 24, pl. 14, figs. 7-12.

1993 Patellina corrugata Williamson, Sgarella and Moncharmont-Zei, p. 226.

1993 Patellina corrugata Williamson, Hottinger et al., p. 76, pl. 87, figs. 7-11.

1995 Patellina corrugata Williamson, Meriç et al., pl. 1, fig. 6.

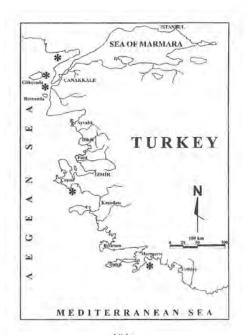
1999 Patellina corrugata Williamson, Hayward et al., p. 93, pl. 3, figs. 11-13.

2001 Patellina corrugata Williamson, Debenay et al., pl. 4, fig. 23 and 27.

Occurrence: Gökçeada, S. 29 (11.00 m): it is recorded only in one sample collected from the infralittoral zone.

- Figure 18 a. Distribution of Spirillina limbata Brady in the Eastern Aegean Sea, Turkish Coasts.
- Figure 18 b. Distribution of Spirillina vivipara Ehrenberg in the Eastern Aegean Sea, Turkish Coasts.
- Figure 18 c. Distribution of *Patellina corrugata* Williamson in the Eastern Aegean Sea, Turkish Coasts.
- Figure 18 d. Distribution of *Cornuspira foliacea* Philippi in the Eastern Aegean Sea, Turkish Coasts.











18 c

18 d

Order MILIOLIDA Lankester, 1885
Suborder MILIOLINA Delage and Héouard, 1896
Superfamily CORNUSPIRACEA Schultze, 1854
Family Cornuspiridae Schultze, 1854
Subfamily Cornuspirinae Schultze, 1854
Genus Cornuspira Schultze, 1854
Cornuspira foliacea Philippi
(Pl. 4, figs 1-2)

1858 Spirillina foliacea (Phillippi), Williamson, p. 91, pl. 7, figs. 199-201.

1917b Cornuspira foliacea (Philippi), Cushman, p. 24, pl. 1, fig. 1, pl. 2, fig. 1.

1974 Cyclogyra foliacea (Philippi), Colom, p. 211, figs. 69 a and b.

1991 Cormuspira foliacea (Philippi), Cimerman and Langer, p. 24, pl. 15, figs. 1-3.

1994 Cornuspira foliacea (Philippi), Loeblich and Tappan, p. 36, pl. 55, figs. 10-11.

1999 Cornuspira foliacea (Philippi), Hayward et al., p. 94, pl. 3, figs. 14-15.

Occurrence: Gulf of Saros, S. 10 (68.50 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 21 (97.40 m), S. 24 (386.00 m), S. 28 (115.50 m), S. 30 (90.50 m), S. 34 (82.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 32 (46.00 m); Gulf of Edremit, S. 15 (49.70 m); Dikili and Çandarlı Bays, S. 8 (35.80 m); Gulf of Kuşadası and Güllük Bay, S. 6 (45.60 m); Gulf of Gökova, S. 7 (198.00 m): it is recorded between 35.80 m and 386.00 m depths, and frequent in infralittoral-upper epibathyal zones.

## Cornuspira involvens (Reuss) (Pl. 4, figs. 3-4)

1850 Operculina involvens, Reuss, p. 370, pl. 454, fig. 20.

1917b Cornuspira involvens (Reuss), Cushman, p. 25, pl. 1, fig. 2, pl. 2, fig. 2.

1969 Cornuspira involvens (Reuss), Alfirevic, p. 66, pl. 4, fig. 4.

1992 Cornuspira involvens (Reuss), Hatta and Ujiie, p. 61, pl. 4, figs. 1 a-c.

1993 Cornuspira involvens (Reuss), Sgarella and Moncharmont-Zei, p. 167.

1994 Cornuspira involvens (Reuss), Loeblich and Tappan, p. 36, pl. 56, figs. 14 and 15.

1999 Cornuspira involvens (Reuss), Hayward et al., p. 94, pl. 3, fig. 16.

2001 Cornuspira involvens (Reuss), Debenay et al., p. 2, fig. 14.

Occurrence: Gulf of Saros, S. 10 (68.50 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 16 (71.10 m), S. 19 (96.50 m), S. 22 (118.50 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 32 (67.00 m), S. 34 (82.00 m), S. 40 (77.30 m), S. 61 (70.00 m), S. 72 (500.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 9 (72.00 m), S. 27 (70.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Dikili and Çandarlı Bays, S. 13 (80.00 m); Gulf of Kuşadası and Güllük Bay, S. 5 (137.00 m), S. 7 (305.20 m), S. 9 (67.00 m), S. 12 (62.10 m), S. 14 (62.10 m); Gulf of Gökova, S. 5 (34.10 m), S. 6 (65.00 m); Gulf of Datça, S. 5 (59.30 m); Marmaris Bay, S. 8 (69.00

m): it is frequent in infralittoral to upper epibathyal zones and occurs in the depthrange of 34,10-500,00 m.

Superfamily NUBECULARIACEA Jones, 1875
Family Ficherinidae Millet, 1898
Subfamily Ficherininae Millet, 1898
Genus Trisegmentina Wiesner, 1920
Trisegmentina compressa Wiesner
(Pl. 4, figs. 5-6)

- 1931 Trisegmentina compressa, Wiesner, p. 70, pl. 1, fig. 7.
- 1988 Trisegmentina compressa Wiesner, Loeblich and Tappan, p. 318, pl. 329, figs. 7-9.
- 1991 Trisegmentina compressa Wiesner, Cimerman and Langer, p. 25, pl. 15, figs. 9-11.
- 1993 Ficherina compressa (Wiesner), Sgarella and Moncharmont-Zei, p. 168, pl. 6, fig. 15.
- 2001 Trisegmentina compressa Wiesner, Meriç and Avşar, p. 127, pl. 1, figs. 12-13.

Occurrence: Gökçeada, S. 29 (11.00 m): its occurrence is very rare in Eastern Aegean Sea,

Subfamily Nodobaculariellinae Bogdanovich, 1981 Genus Vertebralina d'Orbigny, 1826 Vertebralina striata d'Orbigny (Pl. 4, figs. 7-8)

- 1858 Vertebralina striata d'Orbigny, Williamson, p. 90, pl. 7, figs. 197, 198.
- 1917b Vertebralina striata d'Orbigny, Cushman, p. 38, pl. 22, figs. 3, 4.
- 1923 Vertebralina striata d'Orbigny, Wiesner, p. 93, pl. 19, figs. 274, 275.
- 1929 Vertebralina striata d'Orbigny, Cushman, p. 96, pl. 22, figs. 6 a, b.
- 1970 Vertebralina striata d'Orbigny, Daniels, 72, text-fig. 47.
- 1979 Vertebralina striata d'Orbigny, Alfirevic, p. 68, pl. 5, fig. 42.
- 1988 Vertebralina striata d'Orbigny, Haig, p. 235, pl. 11, figs. 25-26.
- 1991 Vertebralina striata d'Orbigny, Cimerman and Langer, p. 25, pl. 16, figs. 1-5.
- 1992 Vertebralina striata d'Orbigny, Hatta and Ujiie, p. 62, pl. 4, figs. 6 a, b.
- 1993 Vertebralina striata d'Orbigny, Sgarella and Moncharmont-Zei, p. 169, pl. 6, fig. 7.
- 1993 Vertebralina striata d'Orbigny, Hottinger et al., p. 43, pl. 23, figs. 8-15.
- 2000 Vertebralina striata d'Orbigny, Cann et al., pl. 2, figs. m, n, o.
- 2001 Vertebralina striata d'Orbigny, Meriç and Avşar, p. 127, pl. 1, figs. 14, 15.

Occurrence: Gökçeada, S. 15 (3.00 m), S. 16 (4.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m);

Bozcaada S. 2 (0.50 m), S. 10 (0.50 m), S. 11 (7.00 m), S. 17 (0.50 m); Gulf of Edremit, S. 6 (15.00 m), S. 7 (19.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 8 (35.80 m), S. 12 (25.50 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 11 (47.00 m), S. 12 (62.10 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 4 (46.20 m), S. 6 (65.00 m); Gulf of Datca, S. 4 (40.00 m); Marmaris Bay, S. 1 (106.40 m), S. 8 (69.00 m): it occurs in a depth-range of 0.50-106.40 m, and is frequent in infralittoral and upper circalittoral zones.

### Genus Wiesnerella Cushman, 1933 Wiesnerella auriculata (Egger) (Pl. 4, fig. 9)

1893 Planispirina auriculata, Egger, p. 245, pl. 3, figs. 13-15.

1954 Wiesnerella auriculata (Egger), Cushman, Todd and Post, p. 341, pl. 85, fig. 30.

1988 Wiesnerella auriculata (Egger), Haig, p. 235, pl. 11, figs. 32-33.

1992 Wiesnerella auriculata (Egger), Hatta and Ujiie, p. 62, pl. 4, figs. 7 a-c.

1993 Wiesnerella auriculata (Egger), Sgarella and Moncharmont-Zei, p. 168.

1993 Wiesnerella auriculata (Egger), Hottinger et al., p. 43, pl. 24, figs. 1-4.

1994 Wiesnerella auriculata (Egger), Loeblich and Tappan, p. 39, pl. 62, figs. 1-3.

1999 Wiesnerella auriculata (Egger), Hayward et al., p. 95, pl. 3, fig. 19.

2001 Wiesnerella auriculata (Egger), Meriç and Avşar, p. 127.

Occurrence: Gökçeada, S. 25 (25.00 m): it occurs only at the depth of 25.00 m.

Family Nubeculariidae Jones, 1875 Subfamily Nubeculariinae Jones, 1875 Genus Nubecularia Defrance, 1825 Nubecularia lucifuga Defrance (Plate 4 figs, 10-12)

1917b Nubecularia lucifuga Defrance, Cushman, p. 41, pl. 8, fig. 6.

1923 Nubecularia lucifuga Defrance, Wiesner, p. 94, pl. 19, figs. 278-281.

1960 Nubecularia lucifuga Defrance, Barker, pl. 1, figs. 9-11, 13-16.

1974 Nubecularia lucifuga Defrance, Colom, p. 174, figs. 47 a-c, 48 a-f.

1991 Nubecularia lucifuga Defrance, Cimerman and Langer, p. 26, pl. 17, figs. 5-7.

1993 Nubecularia lucifuga Defrance, Sgarella and Moncharmont-Zei, p. 168.

2000 Nubecularia lucifuga Defrance, Cann et al., pl. 2, figs. a, b, c.

Occurrence: Gulf of Edremit, S. 7 (19.00 m), Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 5 (18.00 m), S. 8 (35.80 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m); Gulf of Gökova, S. 2 (27.00 m): it is found between 16.00 m and 35.80 m depths, corresponding to the infralittoral zone.

### Family Opthalmidiidae Wiesner, 1920 Genus Edentostomina Collins, 1958 Edentostomina cultrata (Brady) (Plate 5, fig. 1)

- 1884 Miliolina cultrata Brady, Brady, p. 161, pl. 5, figs. 1, 2.
- 1917a Quinqueloculina cultrata (Brady), Cushman, p. 54, pl. 21, fig. 1.
- 1958 Edentostomina cultrata (Brady), Collins, p. 371.
- 1992 Edentostomina cultrata (Brady), Hatta and Ujiie, p. 63, pl. 5, figs. 2 a-c.
- 1994 Edentostomina cultrata (Brady), Loeblich and Tappan, p. 40-41, pl. 63, figs. 8-12.
- 1999 Edentostomina cultrata (Brady), Hayward et al., p. 95, pl. 3, figs. 20-21.

Occurrence: Marmaris Bay. S. 7 (29.90 m): its occurrence is always very rare, and recorded at the depth of 29.90 m.

Superfamily MILIOLACEA Ehrenberg, 1839
Family Spiroloculinidae Wiesner, 1920
Subfamily Spiroloculininae Wiesner, 1920
Genus Adelosina d'Orbigny, 1826
Adelosina carinata-striata Wiesner

- 1923 Adelosina milleti var. carinata-striata, Wiesner, p. 77, pl. 14, figs. 190, 191.
- 1970 Quinqueloculina milleti var. carinata-striata (Wiesner), Daniels, p. 74, pl. 2, figs. 17 a-c, text-fig. 49.
- 1991 Adelosina carinata-striata Wiesner, Cimerman and Langer, p. 28, pl. 20, figs.1-4.

Occurrence: Dikili and Çandarlı Bays, S. 1 (16.00 m): it is very rare and recorded at the depth of 16.00 m.

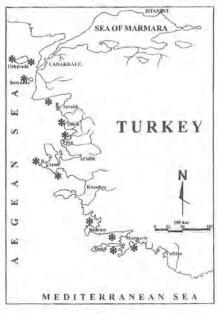
Adelosina cliarensis (Heron-Allen and Earland) (Pl. 5, figs. 2-5)

- 1930 Quinqueloculina cliarenesis, Heron-Allen and Earland, p. 58, pl. 3, figs. 26, 31.
- 1958 Quinqueloculina cliarensis Heron-Allen and Earland, Le Calvez, J. and Y.,
- Figure 19 a. Distribution of *Cornuspira involvens* (Reuss) in the Eastern Aegean Sea, Turukish Coasts.
- Figure 19 b. Distribution of *Trisegmentina compressa* Wiesner in the Eastern Aegean Sea, Turkish Coasts.
- Figure 19 c. Distribution of *Vertebralina striata* d'Orbigny in the Eastern Mediterranean Sea, Turkish Coasts.
- Figure 19 d. Distribution of Wiesnerella auriculata (Egger) in the Eastern Aegean Sea, Turkish Coasts.





19 b





19 c

19 d

p. 186, pl. 5, figs. 40-41.

1958 Quinqueloculina cliarensis Heron-Allen and Earland, Le Calvez, Y., p. 157. pl. 1, figs. 10-11.

1991 Adelosina cliarensis (Heron-Allen and Earland), Cimerman and Langer, p. 26, pl. 18, figs. 1-4.

1995 Adelosina cliarensis (Heron-Allen and Earland), Meriç et al., 1995, pl. 1, figs. 7 a, b, c.

2001 Adelosina cliarensis (Heron-Allen and Earland), Meriç and Avşar, p. 127, pl. 1, figs. 17-18.

2002 Adelosina cliarensis (Heron-Allen and Earland), Kaminski et al.., p. 21, pl. 1, figs.12-13.

Occurrence: Gulf of Saros, S. 13 (156.00 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 20 (92.00 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 56 (41.00 m), S. 57 (52.00 m), S. 61 (70.00 m), S. 65 (61.00 m), S. 67 (550.00 m), S. 70 (13.00 m), S. 72 (500.00 m), S. 74 (200.00 m), S. 76 (53.00 m), S. 80 (98.00 m); Gökçeada, S. 11 (0.50 m), S. 13 (13.00 m), S. 14 (55.00 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 21 (15.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Bozcaada, S. 2 (0.50 m), S. 3 (0.50 m), S. 5 (0.50 m), S. 7 (0.50 m), S. 10 (0.50 m), S. 11 (7.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 5 (137.50 m), S. 7 (18.00 m), S. 12 (63.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m), S. 3 (230.00 m), S. 6 (15.00 m), S. 7 (19.00 m), S. 8 (49.30 m), S. 10 (32.00 m), S. 13 (31.00 m), S. 14 (37.70 m), S. 15 (49.70 m), S. 17 (47.40 m), S. 18 (29.00 m); Dikili and Candarh Bays, S. 1 (14.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9. (49.00 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 13 (80.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Çeşme, S. 1 (1.00 m), S. 2 (1.00 m), S. 3 (1.00 m), S. 4 (1.00 m), S. 8 (1.00 m), S. 11 (1.00 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 4 (226.00 m), S. 5 (137.00 m), S. 7 (305.20 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 12 (62.10

Figure 20 a. Distribution of *Nubecularia lucifuga* Defrance in the Eastern Aegean Sea, Turkish Coasts.

Figure 20 b. Distribution of *Edentostomina cultrata* (Brady) in the Eastern Aegean Sea, Turkish Coasts.

Figure 20 c. Distribution of *Adelosina carinata-striata* Wiesner in the Eastern Aegean Sea, Turkish Coasts.

Figure 20 d. Distribution of Adelosina cliarensis (Heron-Allen and









20 c

20 d

m), S. 13 (72.50 m); Gulf of Gökova; S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 7 (198.00 m), S. 8 (78.30 m); Gulf of Datça, S. 1 (252.30 m), S. 2 (45.00 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 6 (56.10 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 8 (69.00 m): it ranges from 12.30 m depth, more frequent than 100.00 m. This species occurs in the infralittoral zone. It is frequent in the upper circalittoral zone, and rare in lower circalittoral and upper epibathyal zones.

## Adelosina duthiersi Schlumberger (Pl. 5, figs. 6-7)

1886 Adelosina duthiersi, Schlumberger, p. 100, pl. 16, figs. 16, 18.

1923 Adelosina dutuhiersi Schlumberger, Wiesner, p. 83, pl. 16, figs. 232-234.

1958 Quinqueloculina duthiersì (Schlumberger), Le Calvez, J. and Y., p. 175, pl. 3, fig. 11.

1974 Quinqueloculina (Adelosina) duthiersi (Schlumberger), Colom, p. 187, figs. 53, h-m.

1991 Adelosina duthiersi Schlumberger, Cimerman and Langer, p. 27, pl. 18, fig. 8.

1993 Adelosina duthiersi Schlumberger, Sgarella and Moncharmont-Zei, p. 178, pl. 7, fig. 12.

Occurrence: Gulf of Saros, S. 4 (50.80 m), S. 5 (43.00 m), S. 6 (70.00 m), S. 7 (90.00 m), S. 8 (55.70 m), S. 10 (68.50 m), S. 11 (79.80 m), S. 12 (214.70 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 22 (118.50 m), S. 27 (144.30 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 57 (52.00 m), S. 60 (55.00 m), S. 64 (75.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 16 (47.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 28 (39.00 m); Bozcaada, S. 11 (7.00 m), S. 14 (0.50 m); Gulf of Edremit, S. 2 (100.40 m), S. 6 (15.00 m), S. 10 (32.00 m), S. 11 (55.80 m), S. 14 (37.70 m), S. 16 (82.00 m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 3 (18.50 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m); Gulf of Kuşadası and Güllük Bay, S. 6 (45.60 m), S. 7 (305.20 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 13 (7250 m); Gulf of Gökova, S. 1 (42.00 m), S. 7 (198.00 m), S. 8 (78.30 m); Gulf of Datça, S. 4 (40.00 m), S. 5 (59.30 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 2 (79.10 m), S. 8 (69.00 m): it occurs between 12.30 m and 305.20 m depths corresponding infralittoral-upper epibathyal zones.

#### Adelosina elegans (Williamson)

- 1858 Miliolina bicornis Walker and Jacob var. elegans, Williamson, p. 88, pl. 7, fig. 195.
- 1923 Adelosina elegans Williamson, Wiesner, p. 80, pl. 15, fig. 209.
- 1958 Quinqueloculina williamsoni, Le Calvez, J. and Y., p. 177, pl. 5, fig. 45.
- 1991 Adelosina elegans (Williamson), Cimerman and Langer, p. 27, pl. 20, figs. 5-6.
- 1993 Adelosina elegans (Williamson), Sgarella and Moncharmont-Zei, p. 178, pl. 8, fig. 3.

Occurrence: Gulf of Saros, S. 39 (37.70 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 17 (39.00 m), S. 33 (39.00 m); it occurs in three samples recovered from depth-range between 37,70 m and 39.00 m. It is frequent in the infralittoral zone.

#### Adelosina intricata (Terquem)

1878 Quinqueloculina intricata, Terquem, p. 73, pl. 8, figs. 16-21.

1923 Adelosina intricata (Terquem), Wiesner, p. 84, pl. 16, figs. 236-238.

1958 Quinqueloculina intricata Terquem, Le Calvez, J. and Y., p. 176, pl. 5, figs. 38-39.

1991 Adelosina intricata (Terquem), Cimerman and Langer, p. 27, pl. 18, figs. 9-10.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 18 (69.00 m), S. 22 (45.00 m), S. 28 (39.00 m); Çeşme, S. 1 (0.50 m): it is poorly recorded between 0.50 m and 69.00 m, and frequent in the infralittoral zone.

### Adelosina italica (Terquem) (PI, 5, fig. 8)

1878 Quinqueloculina italica, Terquem, p. 69, pl. 7, figs. 17-20.

1993 Adelosina italica (Terquem). Sgarella and Moncharmont-Zei, p. 179, pl. 7, figs. 13-14.

Occurrence: Gulf of Saros, S. 3 (34.60 m): this species is rare, and found only in one sample.

# Adelosina mediterranensis (Le Calvez J. and Y.) (Pl. 5, figs. 9-13)

- 1958 Quinqueloculina mediterranensis, Le Calvez , J. and Y., p. 177, pl. 4, figs. 29-31.
- 1991 Adelosina mediterranensis (Le Calvez J. and Y.), Cimerman and Langer, p. 28, pl. 19, figs. 1-16.
- 1993 Adelosina mediterranensis (Le Calvez J. and Y.), Sgarella and

Moncharmont-Zei, p. 179, pl. 7, figs. 9-11.

1995 Adelosina mediterranensis (Le Calvez J. and Y.), Meriç et al., pl. 2, figs. 1a, b, c, d.

2001 Adelosina mediterranensis (Le Calvez J. and Y.), Meriç and Avşar, p. 127, pl. 1, figs. 19-20.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 9 (71.80 m), S. 10 (68.50 m), S. 13 (156.00 m), S. 15 (39.50 m), S. 16 (71.00 m), S. 17 (39.90 m), S. 18 (88.10 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 52 (61.10 m), S. 54 (94.50 m), S. 57 (52.00 m), S. 64 (75.00 m), S. 66 (65.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 24 (68.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 27 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Bozcaada, S. 4 (0.50 m), S. 5 (0.50 m), S. 10 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 4 (85.50 m), S. 6 (92.00 m), S. 16 (47.00 m), S. 19 (69.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 33 (29.00 m); Gulf of Edremit, S. 2 (100.40 m), S. 3 (230.00 m), S. 4 (76.30 m), S. 7 (19.00 m), S. 9 (49.60 m), S. 10 (32.00 m), S. 11 (55.60 m), S. 14 (37.70 m), S. 17 (47.40 m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (211.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m); Ceşme, S. 2 (1.00 m); Gulf of Kuşadası and Güllük Bay, S. I (73.00 m), S. 2 (31.30 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 13 (72.50 m), S. 14 (82.10 m), Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datca, S. 2 (45.00 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 7 (29.90 m), S. 8 (69.00 m): it is occurs in depth-range of between 10.00 m and 305.20 m, and frequent in infralittoral and lower circulittoral zones. It is rare in the upper epibathyal zone.

- Figure 21 a. Distribution of Adelosina duthiersi Schlumberger in the Eastern Aegean Sea, Turkish Coasts.
- Figure 21 b. Distribution of *Adelosina elegans* (Williamson) in the Eastern Aegean Sea, Turukish Coasts.
- Figure 21 c. Distribution of Adelosina intricata (Terquem) in the Eastern Aegean Sea, Turkish Coasts.

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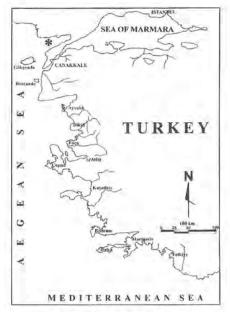
Figure 21 d. Distribution of Adelosina italica (Terquem) in the Eastern Aegean Sea, Turkish Coasts.











21 c

21 d

### Adelosina partschi (d'Orbigny) (Pl. 6, fig. 1)

1846 Quinqueloculina partschi, d'Orbigny, p. 293, pl. 19, figs. 4-6.

1958 Quinqueloculina partschi d'Orbigny, Le Calvez , J. and Y., p. 186, pl. 10, figs. 109-111.

1991 Adelosina partschi (d'Orbigny), Cimerman and Langer, p. 28, pl. 20, figs. 7-8.

2001 Adelosina cf. partschi (d'Orbigny), Meriç and Avşar, p. 127. pl. 1, fig. 21.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 4 (50.90 m), S. 12 (214.70 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 33 (70.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 4 (77.30 m), S. 41 (88.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 46 (40.20 m), S. 47 (24.50 m), S. 51 (12.30 m), S. 60 (55.00 m), S. 72 (500.00 m), S. 80 (98.00 m); Gökçeada, S. 14 (55.00 m), S. 25 (25.00 m), S. 32 (16.00 m); Bozcaada, S. 2 (0.50 m), S. 10 (0.50 m), S. 11 (7.00 m), S. 17 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 6 (92.00 m), S. 7 (18.00 m), S. 16 (47.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 29 (50.00 m), S. 31 (75.00 m); Gulf of Edremit, S. 2 (100.40 m), S. 3 (230.00 m), S. 4 (76.30 m), S. 6 (15.00 m), S. 7 (19.00 m), S. 10 (32.00 m), S. 13 (31.00 m), S. 14 (37.70 m); Dikili and Candarlı Bays, S. 2 (39.50 m), S. 3 (18.50 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.50 m), S. 9 (49.00 m), S. 11 (52.00 m), Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 12 (62.10 m); Gulf of Gökova, S. 3 (80.40 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (98.30 m); Gulf of Datça, S. 2 (45.00 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 6 (56.10 m); Marmaris Bay, S. 1 (106.40 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 8 (69.00 m); this form is found between 12.30 m and 500.00 m.It is frequent down to 50.00 m. It is also reported from infralittoral to upper epibathyal zones.

### Adelosina pulchella d'Orbigny (Pl. 6, figs. 2-5)

1846 Adelosina pulchella, d'Orbigny, p. 203, pl. 20, figs. 25-30.

1958 Quinqueloculina pulchella (d'Orbigny), Le Calvez, J. and Y., p. 175, pl. 3, figs. 12-14.

1979 Quinqueloculina pulchella (d'Orbigny), Blanc-Vernet et al., pl. 21, fig. 7.

1991 Adelosina pulchella d'Orbigny, Cimerman and Langer, p. 28, pl. 20, figs. 9-10.

1993 Adelosina pulchella d'Orbigny, Sgarella and Moncharmont-Zei, p. 179.

2001 Adelosina pulchella d'Orbigny, Meriç and Avşar, p. 127.

Occurrence: Gulf of Saros, S. 4 (50.90 m), S. 5 (43.00 m), S. 6 (70.00 m), S. 10 (68.50 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 20 (92.00 m), S. 21 (97.40 m), S. 221 (118.50 m), S. 23 (383.00 m), S. 25 (188.00 m), S. 27 (146.80 m), S. 28 (115.50 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 33 (70.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 45 (33.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 60 (55.00 m), S. 70 (13.00 m), S. 72 (500.00 m), S. 75 (42.00 m), S. 77 (53.00 m), S. 78 (63.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gokceada, S. 26 (9.00 m); Bozcaada, S. 10 (0.50 m), S. 14 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 6 (92.00 m), S. 13 (79.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 31 (75.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m), S. 4 (76.30 m), S. 8 (49.30 m), S. 9 (49.60 m), S. 10 (32.00 m), S. 11 (55.60 m), S. 13 (31.00 m), S. 14 (37.70 m), S. 16 (82.00 m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 5 (36.50 m); Cesme, S. 11 (1.00 m); Gulf of Kusadası and Güllük Bay, S. 1 (73.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 13 (72.50 m), S. 15 (83.70 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 2 (45.00 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 6 (56.10 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 8 (69.00 m): this species occurs between 0.50 m and 500.00 m and also is frequent in infralittoral-upper epibathyal zones.

### Genus Spiroloculina d'Orbigny, 1826 Spiroloculina angulata d'Orbigny

- 1917b cf. Spiroloculina grata var. angulata Cushman, Cushman, p. 36, pl. 7, fig. 5.
- 1986 Spiroloculina angulata Cushman, Debenay, p. 23, pl. 6, fig. 3.
- 1993 Spiroloculina cf. S. angulata Cushman, Hottinger et al., p. 44-45, pl. 24, figs. 11-14.
- Figure 22 a. Distribution of *Adelosina mediterranensis* (Le Calvez J, and Y.) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 22 b. Distribution of *Adelosina partschi* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 22 c. Distribution of Adelosina pulchella (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 22 d. Distribution of *Spiroloculina angulata* d'Orsbigny in the Eastern Aegean Sea, Turkish Coasts.











22 c

22 d

Occurrence: Gökçeada, S. 13 (13.00 m), S. 15 (3.00 m), S. 19 (40.00 m), S. 21 (15.00 m), S. 25 (25.00 m), S. 28 (10.00 m), S. 30 (3.00 m), S. 32 (16.00 m); it is rarely recorded between 3.00 m and 40.00 m. It is found only in the infralittoral zone.

## Spiroloculina angulosa Terquem (Pl. 6, figs. 6-8)

1878 Spiroloculina angulosa, Terquem, p. 53, pl. 5, fig. 7.

1958 Spiroloculina angulosa Terquem, Le Calvez J. and Y., p. 204, pl. 8, fig. 92.

1991 Spiroloculina angulosa Terquem, Cimerman and Langer, p. 29, pl. 21, figs. 10-13.

2002 Spiroloculina angulosa Terquem. Avşar, p. 63, pl. 1, fig. 6.

Occurrence: Gulf of Saros, S. 25 (188.00 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 34 (82.00 m), S. 36 (74.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 62 (110.00 m), S. 72 (500.00 m); Gökçeada, S. 16 (4.00 m), S. 25 (25.00 m), S. 28 (10.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 5 (137.50 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 3 (230.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.00 m), S. 3 (44.00 m), S. 5 (26.50 m); Ceşme, S. 1 (0.50 m), S. 2 (0.50 m), S. 3 (0.50 m), S. 7 (0.50 m), S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 3 (113.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 10 (66.40 m), S. 13 (72.50 m), S. 15 (83.70 m); Gulf of Gökova, S. 1 (42.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 1 (262.30 m), S. 2 (45.00 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 6 (56.10 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 6 (64.00 m), S. 7 (29.90 m), S. 9 (69.00 m): this taxon is recorded from between depth-range of 3.00m and 262.30 m and abundant in infralittoralupper epibathyal zones.

- Figure 23 a. Distribution of *Spiroloculina angulosa* Terquem in the Eastern Aegean Sea, Turkish Coasts.
- Figure 23 b. Distribution of *Spiroloculina antillarum* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 23 c. Distribution of *Spiroloculina corrugata* Cushman and Todd in the Eastern Aegean Sea, Turkish Coasts.
- Figure 23 d. Distribution of Spiroloculina depressa d'Orbigny in the Eastern Aegean Sea , Turkish Coasts.











23 c

23 d

#### Spiroloculina antillarum d'Orbigny

1839 Spiroloculina antillarum d'Orbigny, p. 166, pl. 9, figs. 3, 4. 1968 Spiroloculina antillarum d'Orbigny, Albani, p. 14, fig. 28. 1986 Spiroloculina antillarum d'Orbigny, Debenay, p. 23, pl. 6, fig. 8. 2000 Spiroloculina antillarum d'Orbigny, Cann et al., pl. 2, figs. g, h, i.

Occurrence: Çeşme, S. 1 (0.50 m), S. 2 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m). S. 9 (0.50 m): this species is rare in the infrabathyal zone of Eastern Aegean Sea.

### Spiroloculina corrugata Cushman and Todd (Pl. 6, fig. 9)

1944a Spiroloculina corrugata, Cushman and Todd, p. 61, pl. 8, figs. 22-25.
1949 Spiroloculina corrugata Cushman and Todd, Said, p. 15, pl. 1, fig. 33.
1951a Spiroloculina corrugata Cushman and Todd, Asano, p. 13, figs. 91, 92.
1978 Spiroloculina corrugata Cushman and Todd, Cheng and Zheng, p. 169, pl. 7, figs. 10-12.

Occurrence: Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m), Ceşme, S. 2 (0.50 m), S. 7 (0.50 m), Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m): it occurs in few samples recorded from infralittoral-upper circalittoral zones.

## Spiroloculina depressa d'Orbigny (Pl. 6, fig.10)

1826 Spiroloculina depressa d'Orbigny, p. 298, no. 1.

1944 Spiroloculina depressa d'Orbigny, Cushman and Todd, p. 28, pl. 1, figs. 1, 6, pl. 5, figs., 1-9.

1974 Spiroloculina depressa d'Orbigny, Colom, p. 208, figs. 62 a, b.

1988 Spiroloculina depressa d'Orbigny, Loeblich and Tappan, p. 33, pl. 340, figs.

1991 Spiroloculina depressa d'Orbigny, Cimerman and Langer, p. 29, pl. 22, figs. 9-12

2001 Spiroloculina depressa d'Orbigny, Debenay et al., p. 1, fig. 30.

Occurrence: Gulf of Saros, S. 4 (50.90 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 18 (88.10 m), S. 21 (97.40 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 35 (195.00 m), S. 38 (53.40 m), S. 40 (77.30 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 60 (55.00 m), S. 63 (96.00 m), S. 66 (65.00 m), S. 70 (13.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 25 (25.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 6 (92.00 m), S. 20 (71.00 m), S. 31 (75.00 m); Gulf of Edremit, S. 3 (230.00 m); Dikili and Çandarlı Bays, S. 13 (80.00 m); Gulf of Kuşadası and Güllük Bay, S. 3 (113.00 m), S. 4 (226.00 m), S. 9 (67.00 m); Gulf of Datça, S. 7

(56.40 m): it is frequent in infralittoral and lower circulittoral zones, rare in the upper epibathyal zone.

### Spiroloculina dilatata d'Orbigny (Pl. 6, fig. 11)

1846 Spiroloculina dilatata, d'Orbigny, p. 271, pl. 16, figs. 16-18.
1923 Spiroloculina dilatata d'Orbigny, Wiesner, p. 35, pl. 4, fig. 26.
1991 Spiroloculina dilatata d'Orbigny, Cimerman and Langer, p. 30, pl. 22, figs. 5-8.

Occurrence: Gulf of Saros, S. 42 (27.50 m), S. 44 (26.20 m), S. 51 (12.30 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 13 (79.00 m), S. 19 (73.00 m), S. 24 (38.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m); it is frequent in the infralittoral zone.

### Spiroloculina excavata d'Orbigny (Pl. 7, figs. 1-2)

1846 Spiroloculina excavata, d'Orbigny, p. 271, pl. 16, figs. 19-21.

1893 Spiroloculina excavata d'Orbigny, Schlumberger, p. 201, pl. 3, fig. 68.

1923 Spiroloculina excavata d'Orbigny, Wiesner, p. 34, pl. 5, figs. 23, 24.

1958 Spiroloculina excavata d'Orbigny, Le Calvez, J. and Y., p. 205, pl. 8, fig. 89.

1974 Spiroloculina excavata d'Orbigny, Colom, p. 208, figs. 62 c, d, h, I.

1979 Spiroloculina excavata d'Orbigny, Alfirevic, p. 67, pl. 5, fig. 4.

1991 Spiroloculina excavata d'Orbigny, Cimerman and Langer, p. 30, pl. 23, figs. 1-3.

1993 Spiroloculina excavata d'Orbigny, Sgarella and Moncharmont-Zei, p. 169, pl. 5, fig. 6.

1995 Spiroloculina excavata d'Orbigny, Meriç et al., p. 109, pl. 2, figs. 4 a-b.

2002 Spiroloculina excavata d'Orbigny, Kaminski et al., p. 29, pl. 1, fig. 11.

2002 Spiroloculina excavata d'Orbigny, Avşar, p. 63, pl. 1, figs. 7-8.

Occurrence: Gulf of Saros, S. 3 (36.40 m), S. 4 (50.90 m), S. 5 (43.00 m), S. 6 (70.00 m), S. 7 (90.00 m), S. 8 (55.70 m), S. 9 (71.80 m), S. 10 (68.50 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 52 (61.10 m), S. 54 (94.50 m), S. 57 (52.00 m), S. 60 (55.00 m), S. 61 (70.00 m), S. 64 (75.00 m), S. 66 (65.00 m), S. 72 (500.00 m), S. 74 (200.00 m), S. 75 (42.00 m), S. 80 (98.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 5 (137.50 m), S. 6 (92.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 51 (73.00 m), S. 61 (70.00 m), S. 61 (70.00 m), S. 75 (73.00 m), S. 51 (12.30 m), S. 61 (70.00 m), S. 75 (137.50 m), S. 61 (73.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 51 (12.30 m), S. 61 (70.00 m), S. 61 (

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S. 21 (47.00 m), S. 22 (45.00 m), S. 24 (56.00 m), S. 26 (72.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (45.00 m), S. 33 (39.00 m), S. 35 (80.00 m), S. 36 (82.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m), S. 3 (230.00 m), S. 4 (76.30 m), S. 5 (125.00 m), S. 6 (15.00 m), S. 7 (19.00 m), S. 12 (64.20 m), S. 13 (31.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 3 (113.00 m), S. 4 (226.00 m), S. 5 (137.00 m), S. 6(45.60 m), S. 7 (305.20 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 14 (82.10 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 7 (198.00 m), S. 8 (78.30 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 8 (69.00 m): it is frequent in the depth-range of 15.00-334.50 m and occurs in infralittoral-upper epibathyal zones.

## Spiroloculina ornata d'Orbigny (Pl. 7, figs. 3-4)

1839a Spiroloculina ornata, d'Orbigny, p. 167, pl. 12, fig. 7.
1958 Spiroloculina ornata d'Orbigny, Le Calvez, J. and Y., p. 207, pl. 8, fig. 83.
1977a Spiroloculina ornata d'Orbigny, Le Calvez, Y., p. 94, pl. 18, figs. 1-4.
1991 Spiroloculina ornata d'Orbigny, Cimerman and Langer, p. 30, pl. 23, figs. 8-11.

Occurrence: Gulf of Saros, S. 5 (43.00 m), S. 6 (70.00 m), S. 7 (90.00 m), S. 12 (214.70 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 39 (37.70 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 51 (12.30 m), S. 57 (52.00 m), S. 64 (75.00 m), S. 65 (61.00 m), S. 67 (550.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökceada, S. 15 (3.00 m), S. 16 (4.00 m), S. 23 (10.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 4 (85.50 m), S. 6 892.00 m), S. 19 (73.00 m), S. 22 (45.00 m), S. 31 (75.00 m); Gulf of Edremit, S. 2 (100.40 m), S. 3 (230.00 m), S. 4 (76.30 m), S. 6 (15.00 m), S. 7 (19.00 m), S. 16 (82.00 m), S. 18 (29.00 m); Dikili and Candarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m), S. 5 (26.50 m); Çeşme, S. 2 (0.50 m), S. 4 (0.50 m), S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 3 (113.00 m), S. 4 (226.00 m), S. 6 (45.60 m), S. 7 (305,20 m), S. 8 (29,00 m), S. 9 (67,00 m), S. 11 (47,00 m), S. 13 (72,50 m), S. 15 (83.70 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 1 (262.30 m), S. 2 (45.00 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 2 (79.10 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 8 (69.00 m): it is frequently encountered in the different localities of Eastern Aegean Sea. It is

frequent in infralittoral-lower epibathyal zones.

### Spiroloculina pellucida Said

1950 cf. Spiroloculina pellucida Said, Said, p. 7, pl. 1, fig. 12.

Occurrence: Gulf of Saros, S. 65 (61.00 m); Gökçeada, S. 29 (11.00 m); this species is very rare in infralittoral and upper circalittoral zones.

### Spiroloculina rostrata Reuss

1850 Spiroloculina rostrata, Reuss, p. 382, pl. 49, fig. 7.
1944 Spiroloculina rostrata Reuss, Cushman and Todd, p. 25, pl. 4, figs. 17-21.
1993 Spiroloculina rostrata Reuss, Sgarella and Moncharmont-Zei, p. 169, pl. 5, fig. 5.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 13 (79.00 m), S. 24 (56.00 m); this species is rare in the upper circalittoral zone.

## Spiroloculina tenuiseptata Brady (Pl. 7, figs. 5-7)

1884 Spiroloculina tenuiseptata, Brady, p. 153, pl. 10, fig. 5.

1923 Spiroloculina tenuiseptata Brady, Wiesner, p. 32, pl. 4, fig. 15.

1958 Spiroloculina tenuiseptata Brady, Le Calvez J. and Y., p. 207, pl. 8, fig. 87.

1958 Spiroloculina tenuiseptata Brady, Le Calvez, Y., p. 62, pl. 1, fig. 7.

1991 Spiroloculina tenuiseptata Brady, Cimerman and Langer, p. 31, pl. 24, figs. 6-9.

1993 Spiroloculina tenuiseptata Brady, Sgarella and Moncharmont-Zei, p. 169, pl. 5; fig. 7.

2002 Spiroloculina tenuiseptata Brady, Kaminski et al., p. 30, pl. 1, fig. 10.

Occurrence: Gulf of Saros, S. 5 (43.00 m), S. 7 (90.00 m), S. 9 (71.80 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 20 (92.00 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 32 (67.00 m), S. 34 (82.00 m), S. 35 (198.00 m), S. 36 (74.00 m)

- Figure 24 a. Distribution of *Spiroloculina dilatata* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 24 b. Distribution of *Spiroloculina excavata* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 24 c. Distribution of Spiroloculina ornata d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 24 d. Distribution of *Spiroloculina pellucida* Said in the Eastern Aegean Sea, Turkish Coasts.











24 c

W. ..

24 d

m), S. 37 (59.00 m), S. 38 (53.40 m), S. 40 (77.30 m), S. 43 (51.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 57 (52.00 m), S. 58 (60.00 m), S. 60 (55.00 m), S. 61 (70.00 m), S. 63 (96.00 m), S. 68 (210.00 m), S. 69 (72.00 m), S. 70 (13.00 m), S. 71 (90.00 m), S. 72 (500.00 m), S. 80 (98.00 m); Gökçeada-Bozcaada-Canakkale triangle, S. 4 (85.50 m), S. 5 (137.50 m), S. 6 (92.00 m), S. 9 (72.00 m), S. 13 (79.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 2 (100.40 m), S. 3 (230.00 m), S. 4 (76.30 m), S. 12 (64.20 m), S. 16 (82.00 m); Dikili and Candarlı Bays, S. 13 (80.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2(63.50 m); Gulf of Kuşadası and Güllük Bay, S. 3 (113.00 m), S. 4 (226.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 13 (72.50 m), S. 14 (82.00 m), S. 15 (83.70 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m), S. 6 (56.10 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 4 (71.80 m), S. 5 (128.80 m); this species is generally abundant in infralittoral-upper epibathyal zones of Eastern Aegean Sea.

> Family Hauerinidae Schwager, 1876 Subfamily Siphonapertinae Saidova, 1975 Genus Siphonaperta Vella, 1957 Siphonaperta agglutinans (d'Orbigny) (Pl. 7, fig. 8)

1839a Quinqueloculina agglutinans, d'Orbigny, p. 195, pl. 12, figs. 11, 12.

1958 Quinqueloculina agglutinans d'Orbigny, Le Calvez, J. and Y., p. 166, pl. 9, figs. 103, 104.

1977a Quinqueloculina agglutinans d'Orbigny, Le Calvez , Y., p.54, pl. 7, figs. 1-4.

1991 Siphonaperta agglutinans (d'Orbigny), Cimerman and Langer, p. 31, pl. 25, figs. 1-3.

Occurrence: Gökçeada, S. 3 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (18.00 m), S. 9 (72.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 24 (56.00 m); Çeşme, S. 1 (0.50 m), S. 2 (0.50 m), S. 6 (0.50 m); Gulf of Gökova, S. 2 (27.00 m): it is rare in infralittoral and upper circalittoral zones of Eastern Aegean Sea.

### Siphonaperta aspera (d'Orbigny) (PI. 7, figs. 9-10)

1826 Quinqueloculina aspera, d'Orbigny, p. 301, no. 11.

1958 Quinqueloculina aspera d'Orbigny, Le Calvez, J. and Y., p. 168, pl. 9, figs., 101, 102,

1991 Siphonaperta aspera (d'Orbigny), Cimerman and Langer, 1991, p. 31, pl. 25, figs. 4-6.

1993 Siphonaperta aspera (d'Orbigny), Sgarella and Moncharmont-Zei, p. 185, pl. 6, fig. 12.

Occurrence: Gulf of Saros, S. 14 (84.00 m), S. 17 (33.90 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 40 (77.30 m), S. 44 (26.20 m), S. 50 (41.00 m), S. 63 (96.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 1 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 9 (0.50 m), S. 11 (0.50 m), S. 13 (13.00 m), S. 14 (55.00 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 17 (4.00 m), S. 19 (40.00 m), S. 20 (3.00 m), S. 23 (10.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 27 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Canakkale triangle, S. I (49.50 m), S. 2 (32.40 m), S. 6 (92.00 m), S. 17 (39.00 m), S. 21 (47.00 m), S. 221 (45.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 33 (39.00 m), S. 34 (38.00 m); Gulf of Edremit, S. 6 (15.00 m), S. 19 (19.00 m), S. 10 (32.00 m), S. 14 (37.70 m), S. 18 (29.00 m); Dikili and Candarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 14 (21.00 m). Gulf of Izmir and vicinity of Karaburun Peninsula, S. I (51.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Ceşme, S. 2 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 7 (0.50 m), S. 8 (0.50 m), S. 9 (0.50 m), S. 11 (0.50 m), S. 12 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 13 (72.50 m); Gulf of Gökova, S. 1 (42.00 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m); it is frequently encountered in Eastern Aegean Sea, frequent in infralittoral and upper circalittoral zones, but, rare in the lower circulittoral zone.

### Siphonaperta dilatata (Le Calvez J. and Y.)

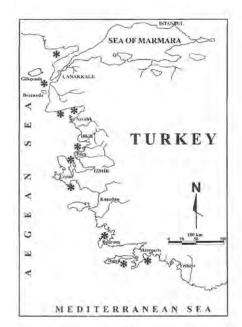
1958 Quinqueloculina aspera d'Orbigny var. dilatata, Le Calvez . J. and Y., p. 169, pl. 11, figs. 119-121.

1991 Siphonaperta dilatata (d'Orbigny), Cimerman and Langer, p. 31, pl. 26, figs. 1-3.

Occurrence: Gökçeada, S. 28 (10.00 m), S. 32 (16.00 m): poorly recorded from the infralittoral zone of the Eastern Aegean Sea.

- Figure 25 a. Distribution of *Spiroloculina rostrata* Reuss in the Eastern Aegean Sea, Turkish Coasts.
- Figure 25 b. Distribution of *Spiroloculina tenuiseptata* Brady in the Eastern Aegean Sea, Turkish Coasts.
- Figure 25 c. Distribution of Siphonaperta aglutinants (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 25 d. Distribution of *Siphonaperta aspera* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.











25 c

25 d

### Siphonaperta irregularis (d'Orbigny)

- 1826 Quinqueloculina irregularis, d'Orbigny, p. 136, no. 25.
- 1958 Quinqueloculina irregularis d'Orbigny, Le Calvez, J. and Y., p. 166, pl. 3. figs. 1, 2.
- 1974 Quinqueloculina irregularis d'Orbigny, Colom, p. 200, figs. 59 c, d.
- 1991 Siphonaperta irregularis (d'Orbigny), Cimerman and Langer, p. 32, pl. 26, figs. 4-6.

Occurrence: Gökçeada, S. 3 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 6 (92.00 m): this species is recorded from only two localities in the infralittoral and upper circalittoral zones.

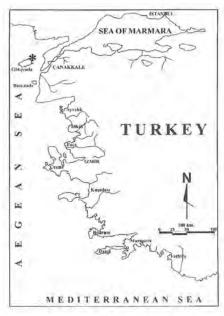
Subfamily Hauerininae Schwager, 1876 Genus Cycloforina Luczkowska, 1972 Cycloforina colomi (Le Calvez J. and Y.)

- 1958 Quinqueloculina colomi, Le Calvez, J. and Y., p. 176, pl. 3, figs. 15, 16; pl. 4, figs. 17-19.
- 1974 Quinqueloculina (Adelosina) colomi Le Calvez J. and Y., Colom, p. 187, figs. 57 a-d.
- 1991 Cycloforina colomi (Le Calvez J. and Y.), Cimerman and Langer, p. 32, pl. 27, figs. 4-6.

Occurrence: Bozcaada, S. 10 (0.50 m): it occurs rarely in the infralittoral zone of the Bozcaada region.

### Cycloforina contorta (d'Orbigny) (Pl. 7, figs. 11-13)

- 1846 Quinqueloculina contorta, d'Orbigny, p. 298, pl. 20, figs. 4-6.
- 1923 Quinqueloculina contorta d'Orbigny, Wiesner, p. 46, pl. 6, fig. 56.
- 1958 Quinqueloculina contorta d'Orbigny, Le Calvez, J. and Y., p. 171, pl. 12, figs. 140-142.
- 1988 Cycloforina contorta (d'Orbigny), Loeblich and Tappan, p. 33, pl. 342, figs. 4-9.
- Figure 26 a. Distribution of Siphonaperta dilatata (Le Calvez, J. and Y.) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 26 b. Distribution of *Siphonaperta irregularis* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 26 c. Distribution of *Cycloforina colomi* (Le Calvez , J. and Y.) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 26 d. Distribution of Cycloforina contorta (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.





26 b





26 c

26 d

1991 Cycloforina contorta (d'Orbigny), Cimerman and Langer, p. 32, pl. 27, figs. 7-11.

2002 Cycloforina contorta (d'Orbigny), Avşar, p. 63, pl. 1, figs. 9-10.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 4 (50.90 m), S. 7 (90.00 m), S. 12 (214.70 m), S. 14 (84.00 m), S. 18 (88.10 m), S. 32 (67.00 m), S. 34 (82.00 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 65 (61.00 m), S. 79 (29.00 m); Gökçeada, S. 15 (3.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 5 (137.50 m), S. 6 (92.00 m), S. 7 (18.00 m), S. 13 (79.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 22 (45.00 m), S. 24 (56.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (70.00 m), S. 34 (38.00 m); Gulf of Edremit, S. 4 (76.30 m), S. 6 (15.00 m), S. 7 (19.00 m), S. 13 (31.00 m), S. 17 (47.40 m); Dikili and Candarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 3 (113.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 13 (72.50 m), S. 14 (82.10 m); Gulf of Gökova, S. 1 (42.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 6 (65.00 m); Gulf of Datça, S. 2 (45.00 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 7 (56.40 m); Marmaris Bay, S. 3 (98.30 m), S. 4 871.80 m), S. 6 (64.00 m), S. 8 (69.00 m): it is widespread in Eastern Aegean Sea. It is frequent in infralittoral and upper circalittoral zones. This species is also recorded rarely in lower circulittoral and upper epibathyal zones.

### Cycloforina rugosa (d'Orbigny) (Pl. 8, fig. 1)

1826 Quinqueloculina rugosa, d'Orbigny, p. 302, no. 24.

1923 Quinqueloculina rugosa d'Orbigny, Wiesner, p. 46, pl. 6, fig. 54.

1958 Quinqueloculina rugosa d'Orbigny, Le Calvez, J. and Y., p. 171, pl. 12, figs. 137-139.

1991 Cycloforina rugosa (d'Orbigny), Cimerman and Langer, p. 33, pl. 28, figs. 3-4.

Occurrence: Gökçeada, S. 14 (55.00 m), S. 18 (30.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 17 (39.00 m), S. 21 (47.00 m): it is found rarely in the infralittoral zone.

#### Cycloforina tenuicollis (Wiesner)

1923 Miliolina tenucollis, Wiesner, p. 48, pl. 6, fig. 66. 1909 Miliolina ferussacii, Sidebottom, p. 17, pl. 5, fig. 7.

1970 Quinqueloculina tenuicollis (Wiesner), v. Daniels, p. 75, pl. 3, fig. 5.

1991 Cycloforina tenuicollis (Wiesner), Cimerman and Langer, p. 33, pl. 28, figs. 5-6.

Occurrence: Gökçeada, S. 25 (25.00 m), Gökçeada-Bozcaada-Çanakkale triangle, S. 9 (72.00 m), S. 22 (45.00 m), S. 36 (82.00 m): it occurs in a few samples recovered from infralittoral and upper circalittoral zones.

Cycloforina villafranca (Le Calvez, J. and Y.) (Pl. 8, figs. 2-3)

1958 Quinqueloculina villafranca, Le Calvez, J. and Y., p. 180, pl. 4, figs. 22, 23.
1991 Cycloforina villafranca (Le Calvez, J. and Y.), Cimereman and Langer, p. 33, pl. 28, figs. 7-9.

1993 Quinqueloculina villafranca Le Calvez, J. and Y., Sgarella and Moncharmont-Zei, p. 176, pl. 7, figs. 3-4.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 4 (50.90 m), S. 7 (90.00 m), S. 14 (84.00 m), S. 36 (74.00 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 60 (55.00 m), S. 80 (98.00 m); Gökçeada, S. 32 (16.00 m), Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 5 (137.50 m), S. 6 (92.00 m); Gulf of Edremit, S. 3 (230.00 m), S. 4 (76.30 m), S. 5 (125.00 m), S. 13 (31.00 m), S. 14 (37.70 m), S. 17 (47.40 m), S. 18 (29.00 m); Dikili and Candarh Bays, S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 11 (52.00 m), S. 13 (80.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 9 (67.00 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 13 (72.50 m), S. 14 (82.10 m), S. 15 (83.70 m); Gulf of Gökova, S. 1 (42.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datca, S. 2 (45.00 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 6 (56.10 m), S. 7 (56.40 m); Marmaris Bay, S. 1 (106.40 m), S. 3 898.30 m), S. 4 (71.80 m), S. 6 (64.00 m), S. 7 (29.90 m), S. 8 (69.00 m); this taxon occurs in many samples. It is frequent in infralittoral and upper circalittoral zones, but, rare in lower circalittoral and upper epibathyal zones.

### Genus Lachlanella Vella, 1957 Lachlanella bicornis (Walker and Jacob) (Pl. 8, figs. 4-7)

1896 Miliolina bicornis (Walker and Jacob), Dezelic, p. 70.

1923 Miliolina bicornis Williamson, Wiesner, p. 51, pl. 7, fig. 77.

1958 Quinqueloculina bicornis (Walker and Jacob), Le Calvez, J. and Y., p. 180, pl. 4, figs. 28, 32.

1958 Quinqueloculina bicornis (Walker and Jacob), Le Calvez, Y., p. 157, pl. 1, figs. 8, 9.

1960 Quinqueloculina bicornis (Walker and Jacob), Barker, pl. 6, fig. 9.

1971 Quinqueloculina bicornis (Walker and Jacob), Murray, p. 57, pl. 20, figs. 1-5.

1991 Lachlanella bicornis (Walker and Jacob), Cimerman and Langer, p. 34, pl. 29, figs. 1-3.

Occurrence: Gulf of Saros, S. 14 (84.00 m), S. 20 (92.00 m), S. 35 (195.00 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 45 (33.50 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 67 (550.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 6 (92.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 33 (39.00 m); Gulf of Edremit, S. 2 (100.40 m), S. 3 (230.00 m), S. 6 (15.00 m), S. 14 (37.70 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m), S. 3 (44.00 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 3 (113.00 m), S. 5 (137.00 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 11 (47.00 m), S. 13 (72.50 m), S. 14 (82.10 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 3 (139.50 m), S. 5 (59.30 m), S. 6 (56.10 m); Marmaris Bay, S. 1 (106.40 m), S. 3 (98.30 m), S. 4 (71.80 m): this species is abundant in infralittoral and upper circalittoral zones. It is also recorded from lower circalittoral-lower epibathiyal zones.

### Lachlanella undulata (d'Orbigny) (Pl. 8, fig. 8)

1826 Quinqueloculina undulata, d'Orbigny, p. 302, no. 27.

1893 Quinqueloculina undulata d'Orbigny, Schlumberger, p. 213, pl. 2, figs. 60, 61.

1923 Miliolina undulata (d'ORbigny), Wiesner, p. 53, pl. 7, fig. 81.

1958 Quinqueloculina undulata d'Orbigny, Le Calvez, J. and Y., p. 179, pl. 13, figs. 146-148.

1958 Quinqueloculina undulata d'Orbigny, Le Calvez, Y., p. 159.

1974 Quinqueloculina undulata d'Orbigny, Colom, p. 202, figs. 58 h-k.

1991 Lachlanella undulata (d'Orbigny), Cimerman and Langer, p. 34, pl. 30, figs. 3-6.

Figure 27 a. Distribution of *Cycloforina rugosa* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.

Figure 27 b. Distribution of *Cycloforina tenuicollis* (Wiesner) in the Eastern Aegean Sea, Turkish Coasts.

Figure 27 c. Distribution of *Cycloforina villafranca* (Le Calvez J. and Y.) in the Eastern Aegean Sea, Turkish Coasts.

Figure 27 d. Distribution of *Lachlanella bicornis* (Walker and Jacob) in the Eastern Aegean Sea, Turkish Coasts.











27 c

27 d

1995 Lachlanella undulata (d'Orbigny), Meriç et al., p. 109, pl. 4, figs. 4 a-c. 2001 Lachlanella undulata (d'Orbigny), Debenay et al., p. 2, fig. 9. 2002 Lachlanella undulata (d'Orbigny), Avşar, p. 63, pl. 1, fig. 11.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 6 (70.00 m), S. 7 (90.00 m), S. 8 (55.70 m), S. 10 (68.50 m), S. 12 (214.70 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 22 (118.50 m), S. 27 (144.80 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 33 (70.00 m), S. 36 (74.00 m), S. 39 (37.70 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 57 (52.00 m), S. 79 (29.00 m); Gökçeada, S. 24 (68.00 m), S. 25 (25.00 m), S. 29 (11.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 7 (18.00 m), S. 13 (79.00 m), S. 18 (69.00 m), S. 21 (47.00 m), S. 28 (39.00 m), S. 32 (46.00 m), S. 34 (38.00 m); Gulf of Edremit, S. 4 (76.30 m), S. 12 (64.20 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.00 m), S. 8 (35.80 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 5 (137.00 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 11 (47.00 m), S. 15 (83.70 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 5 (34.50 m); Gulf of Datça, S. 2 (45.00 m); Marmaris Bay, S. 2 (79.10 m), S. 4 (71.80 m): it is abundant in infralittoral and upper circalittoral zones, but, rare in lower circalittoral-upper epibathiyal zones.

Lachlanella variolata (d'Orbigny) (Pl. 8, figs. 9-10; Pl. 9, figs. 1-3)

1826 Quinqueloculina variolata, d'Orbigny, p. 302, no. 26.

1839a Triloculina carinata, d'Orbigny, p. 179, pl. 10, figs. 15-17.

1923 Miliolina reticulata (d'Orbigny), Wiesner, p. 52, pl. 7, fig. 78.

1970 Quinqueloculina reticulata d'Orbigny, Cherif, pl. 9, fig. 1.

1974 Quinqueloculina reticulata d'Orbigny, Colom, p. 201, figs. 56 a-d.

1977a Quinqueloculina variolata d'Orbigny, Le Calvez, Y., p. 102, figs. 15-17.

1991 Lachlanella variolata (d'Orbigny), Cimerman and Langer, p. 35, pl. 31, figs. 1-12.

2002 Lachlanella variolata (d'Orbigny), Avşar, p. 63, pl. 1, fig. 12.

Occurrence: Gökçeada, S. 23 (10.00 m), S. 26 (9.00 m), S. 29 (11.00 m), S. 30 (3.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 33 (39.00 m); Gulf of Edremit, S. 7 (19.00 m); Dikili and Çandarlı Bays, S. 5 (18.00 m), S. 8 (35.80 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m), S. 5 (26.50 m); Çeşme, S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m); Gulf of Gökova, S. 1 (42.00 m), S. 5 (34.50 m); Gulf of Datça, S. 4 (40.00 m): it occurs frequently in the infralittoral zone.

Genus Massilina Schlumberger, 1893 Massilina gualtieriana (d'Orbigny) (Pl. 9, figs. 5-6)

1839a Quinqueloculina gualtieriana, d'Orbigny, p. 186, pl. 11, figs. 1-3.

- 1932 Quinqueloculina gualtieriana d'Orbigny, Cushman, p. 23, pl. 6, figs. 1a-c. 1977a Quinqueloculina gualtieriana d'Orbigny, Le Calvez, Y., p. 75, pl. 12, figs. 4-8.
- 1991 Massilina gualtieriana (d'Orbigny), Cimerman and Langer, p. 35, pl. 29, figs. 6-9.

Occurrence: Gulf of Saros, S. 42 (27.50 m); Gökçeada, S. 3 (0.50 m), S. 4 (0.50 m), S. 15 (3.00 m), S. 19 (40.00 m), S. 23 (10.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 17 (39.00 m), S. 33 (39.00 m), S. 34 (38.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 3 (18.50 m), S. 5 (18.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Çeşme, S. 1 (0.50 m), S. 2 (0.50 m); Gulf of Gökova, S. 2 (27.00 m), S. 5 (34.50 m), S. 6 (65.00 m): it is frequent in infralittoral and rare in upper circalittoral zones of Eastern Aegean Sea.

#### Massilina secans (d'Orbigny) (Pl. 9, figs. 7-8)

- 1826 Quinqueloculina secans, d'Orbigny, p. 303, no. 43.
- 1958 Massilina secans (d'Orbigny), Le Calvez, J. and Y., p. 204, pl. 7, fig. 66.
- 1971 Massilina secans (d'Orbigny), Murray, p. 67, pl. 25, figs. 1-6.
- 1987 Massilina secans (d'Orbigny), Yanko and Troitskaja, pl. 2, fig. 9.
- 1988 Massilina secans (d'Orbigny), Loeblich and Tappan, p. 335, pl.344, figs. 1-3.
- 1991 Massilina secans (d'Orbigny), Cimerman and Langer, p. 35, pl. 30, figs. 7-12.
- 1993 Massilina secans (d'Orbigny), Sgarella and Moncharmont-Zei, p. 180, pl. 9, fig. 10.
- 2001 Massilina secans (d'Orbigny), Debenay et al., pl. 2. fig. 19.

Occurrence: Gulf of Saros, S. 39 (37.70 m), S. 42 (27.50 m), S. 44 (26.20 m); Gökçeada, S. 19 (40.00 m), S. 25 (25.00 m), S. 34 (41.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 34 (38.00 m); Gulf of Edremit, S. 6 (16.00 m), S. 7 (19.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 5 (26.50 m); Çeşme, S. 2 (0.50 m), S. 4 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m): it is rarely found in the infralittoral zone.

### Genus Quinqueloculina d'Orbigny, 1826 Quinqueloculina berthelotiana d'Orbigny (Pl. 9, figs. 9-10)

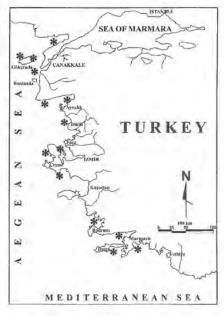
- 1839b Quinqueloculina berthelotiana, d'Orbigny, p. 142, pl. 3, figs. 25-27.
- 1923 Quinqueloculina berthelotiana d'Orbigny, Wiesner, p. 48, pl. 6, fig. 67.
- 1958 Quinqueloculina berthelotiana d'Orbigny, Le Calvez, J. and Y., p. 173, pl. 10, figs. 115-117.
- 1974 Quinqueloculina berthelotiana d'Orbigny, Colom, p. 188, figs. 59 e-g.

- 1991 Quinqueloculina berthelotiana d'Orbigny, Cimerman and Langer, p. 36, pl. 32, figs. 5-7.
- 1993 Quinqueloculina berthelotiana d'Orbigny, Sgarella and Moncharmont-Zei, p. 170, pl. 6, figs. 1-2.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 5 (43.00 m), S. 16 (71.10 m), S. 37 (59.00 m), S. 39 (37.70 m), S. 41 (81.00 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 65 (61.00 m), S. 79 (29.00 m); Gökçeada, S. 3, (0.50 m), S. 11 (0.50 m), S. 13 (13.00 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 20 (3.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 3 (59.60 m), S. 6 (92.00 m), S. 17 (39.00 m), S. 24 (56.00 m), S. 33 (39.00 m); Gulf of Edremit, S. 6 (15.00 m), S. 7 (19.00 m), S. 14 (37.70 m); Dikili and Candarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 8 (35.80 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Çeşme, S. 2 (0.50 m), S. 3 (0.50 m), S. 7 (0.50 m), S. 8 (0.50 m), S. 9 (0.50 m), S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 11 (47.00 m), S. 13 (72.50 m), S. 14 (82.10 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m); Gulf of Datça, S. 2 (45.00 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 6 (56.10 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 2 (79.10 m), S. 3 (98.30 m), S. 6 (64.00 m), S. 8 (69.00 m): this species occurs abundantly in Eastern Aegean Sea, mostly in the infralittoral zone. It is rear in upper-lower circalittoral zones.

### Quinqueloculina bidentata d'Orbigny (Pl. 9, figs.11-12)

- 1839a Quinqueloculina bidentata, d'Orbigny, p. 197, pl. 12, figs. 18-20.
- 1929 Quinqueloculina bidentata d'Orbigny, Cushman, p. 22, pl. 1, fig. 2.
- 1977a Quinqueloculina bidentata d'Orbigny, Le Calvez, Y., p. 64, pl. 65, figs. 1, 2.
- 1991 Quinqueloculina bidentata d'Orbigny, Cimerman and Langer, p. 36, pl. 32, figs. 10-14.
- 1992 Quinqueloculina bidentata d'Orbigny, Hatta and Ujiie, p. 66, pl. 7, figs. 3 a and b.
- Figure 28 a. Distribution of *Lachlanella undulata* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts
- Figure 28 b. Distribution of *Lachlanella variolata* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 28 c. Distribution of *Massilina gualtieriana* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 28 d. Distribution of *Massilina secans* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.











28 c

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28 d

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 4 (50.90 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 22 (118.50 m), S. 33 (70.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 42 (27.50 m), S. 45 (33.50 m), S. 72 (500.00 m), S. 79 (29.00 m); Gökçeada, S. 1 (0.50 m), S. 16 (4.00 m), S. 23 (10.00 m), S. 26 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 6 (92.00 m), S. 29 (50.00 m), S. 31 (75.00 m); Gulf of Edremit, S. 6 (15.00 m), S. 7 (19.00 m), S. 10 (32.00 m); Dikili and Candarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m); Çeşme, S. 1 (0.50 m), S. 2 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 13 (72.50 m), S. 14 (82.10 m), S. 15 (83.70 m); Gulf of Gökova, S. 4 (46.20 m), S. 5 (34.50 m), S. 8 (78.30 m); Gulf of Datça, S. 2 (45.00 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 5 (59.30 m); Marmaris Bay, S. 2 (79.10 m), S. 6 (64.00 m), S. 8 (69.00 m): this species is abundant in infralittoral and upper circalittoral zones, rare in lower circalittoral-upper epibathiyal zones.

### Quinqueloculina disparilis d'Orbigny (Pl. 10, figs. 1-3)

1826 Quinqueloculina disparilis, d'Orbigny, p. 302, no. 21.

1893 Quinqueloculina disparilis d'Orbigny, Schlumberger, p. 212, pl. 2, figs. 55-57.

1923 Quinqueloculina disparilis d'Orbigny, Wiesner, p. 47, pl. 6, figs. 60, 61.

1958 Quinqueloculina disparilis d'Orbigny, Le Calvez, J. and Y., p. 180, pl. 4, figs. 26, 27.

1974 Quinqueloculina disparilis d'Orbigny, Colom, p. 200, figs. 55 a-g.

1991 Quinqueloculina disparilis d'Orbigny, Cimerman and Langer, p. 36-37, pl. 33, figs. 1-4.

1993 Quinqueloculina disparilis d'Orbigny, Sgarella and Moncharmont-Zei, p. 170, pl. 8, fig. 2.

Occurrence: Gulf of Saros, S. 51 (12.30 m), S. 67 (550.00 m); Gökçeada, S. 3 (0.50 m), S. 16 (4.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Gulf of Edremit, S. 6 (15.00 m), S. 7 (19.00 m); Dikili and Çandarlı Bays, S. 3 (18.50 m), S. 5 (18.00 m), S. 14 (21.00 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m); Gulf of Gökova, S. 2 (27.00 m), S. 3 (80.40 m), S. 6 (65.00 m), S. 8 (78.30 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 6 (64.00 m): this species occurs frequently in the infralittoral zone. It is recorded rarely in upper circalittoral-upper epibathiyal zones.

Quinqueloculina eburnea (d'Orbigny) (Pl. 10, figs. 4-5)

1987 Quinqueloculina oblonga eburnea (d'Orbigny), Baccaert, pl. 46, figs. 3-5.

2001 Quinqueloculina eburnea (d'Orbigny), Meriç and Avşar, p. 128, 131, pl. 2, figs. 18-19.

Occurrence: Gökçeada, S. 3 (0.50 m), S. 13 (13.00 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 17 (4.00 m), S. 29 (11.00 m), S. 30 (3.00 m): it occurs rarely in the infralittoral zone.

# Quinqueloculina jugosa Cushman (Pl. 10, figs. 6-7)

1878 Quinqueloculina costata, Terquem, p. 63, pl. 6, figs. 3, 5.

1944 Quinqueloculina seminulum Linné var. jugosa, Cushman, p. 13, pl. 2, fig. 15.

1958 Quinqueloculina seminulum Linné var. jugosa Cushman, Le Calvez, J. and Y., p. 178, pl. 4, figs. 20, 21.

1991 Quinqueloculina jugosa Cushman, Cimerman and Langer, p. 37, pl. 33, figs. 12-14.

2002 Quinqueloculina jugosa Cushman, Avşar, p. 63, pl. 1, fig. 13.

Occurrence: Gulf of Saros, S. 17 (33.90 m), S. 42 (27.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 79 (29.00 m); Gökçeada, S. 14 (55.00 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 25 (25.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakakale triangle, S. 3 (59.60 m), S. 13 (79.00 m), S. 17 839.00 m), S. 33 (39.00 m), S. 34 (38.00 m); Gulf of Edremit, S. 6 (15.00 m), S. 10 (32.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 9 (49.00 m), S. 12 (25.50 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Çeşme, S. 2 (0.50 m), Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m); Gulf of Datça, S. 9 (147.00 m): this species occurs frequently in infralittoral and rarely in upper-lower epibathiyal zones.

# Quinqueloculina laevigata d'Orbigny (Pl. 10, figs. 8-9)

1839b Quinqueloculina laevigata, d'Orbigny, p. 143, pl. 3, figs. 32, 33.

1923 Miliolina laevigata (d'Orbigny), Wiesner, p. 55, pl. 8, figs. 94-96.

1929 Quinqueloculina laevigata d'Orbigny, Cushman, p. 30, pl. 4, fig. 3.

1958 Quinqueloculina laevigata d'Orbigny, Le Calvez, J. and Y., p. 184, pl. 10

Figure 29 a. Distribution of *Quinqueloculina berthelotiana* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.

Figure 29 b. Distribution of *Quinqueloculina bidentata* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.

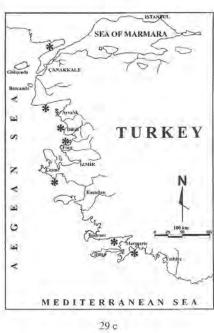
Figure 29 c. Distribution of *Quinqueloculina disparilis* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.

Figure 29 d. Distribution of *Quinqueloculina eburnea* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.











29 d

figs. 112-114.

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1991 Quinqueloculina laevigata d'Orbigny, Cimerman and Langer, p. 37, pl. 33, figs. 8-11.

Occurrence: Gulf of Saros, S. 13 (156.00 m), S. 14 (84.00 m), S. 17 (33.90 m); Gökçeada, S. 1 (0.50 m), S. 3 (0.50 m), s. 15 (3.00 m), S. 16 (4.00 m), S. 26 (9.00 m), S. 29 (11.00 m), S. 30 (3.00 m); Gökçeada-Bozcaada-Çanakakale triangle, S. 13 (79.00 m), S. 34 (38.00 m); Çeşme, S. 2 (0.50 m), S. 3 (0.50 m), s. 4 (0.50 m), S. 5 80.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 3 (113.00 m): it occurs rarely in Eastern Aegean Sea. This species is recorded generally in the infralittoral zone. It is rare in upper-lower circalittoral zones.

# Quinqueloculina lamarckiana d'Orbigny (Pl. 10, figs. 10-11)

1839a Quinqueloculina lamarckiana, d'Orbigny, p. 189, pl. 11, figs. 14, 15.

- 1921 Quinqueloculina lamarckiana d'Orbigny, Cushman, p. 419, pl. 87, figs. 2, 3.
- 1981 Quinqueloculina lamarckiana d'Orbigny, Chasens, pl. 1, figs. 5-9.
- 1984 Quinqueloculina lamarckiana d'Orbigny, Ross and Kennett, pl. 2, fig. 4.
- 1992 Quinqueloculina lamarckiana d'Orbigny, Hatta and Ujiie, p. 67, pl. 7, figs. 7 a and b.
- 2000 Quinqueloculina lamarckiana d'Orbigny, Cann et al., pl. 3, figs. e, f, g, h.
- 2002 Quinqueloculina lamarckiana d'Orbigny, Avşar, p. 63, pl. 1, figs. 14-15.

Occurrence: Gulf of Saros, S. 39 (37.70 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 46 (40.20 m), S. 47 (24.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 53 (440.00 m), S. 67 (550.00 m), S. 74 (200.00 m), S. 79 (29.00 m); Gökçeada, S. 1 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 8 (0.50 m), S. 9 (0.50 m), S. 11 (0.50 m), S. 13 (13.00 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 18 (3.00 m), S. 19 (40.00 m), S. 21 (15.00 m), S. 22 (3.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Canakkale triangle, S. 2 (32.40 m), S. 7 (18.00 m), S. 17 (39.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 31 (75.00 m), S. 33 (39.00 m), S. 34 (38.00 m); Gulf of Edremit, S. 6 (15.00 m), S. 7 (19.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Çeşme, S. 2 (0.50 m), S. 6 (0.50 m), S. 8 (0.50 m), S. 9 (0.50 m), S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 11 (47.00 m); Gulf of Gökova, S. 2 (27.00 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m); Marmaris Bay, S. 2 (79.10 m), S. 8 (69.00 m): it is widespread in the different gulfs of Eastern Aegean Sea. It is reported generally from the infralittoral zone. It is rare in upper circalittoral-lower epibathiyal zones.

### Quinqueloculina limbata d'Orbigny (Pl. 10, fig. 12)

1826 Quinqueloculina limbata, d'Orbigny, p. 302, no. 20.

1904 Quinqueloculina limbata d'Orbigny, Fornasini, p. 66, pl. 3, fig. 9.

1923 Miliolina limbata (d'Orbigny), Wiesner, p. 45, pl. 6, fig. 51.

- 1991 Quinqueloculina limbata d'Orbigny, Cimerman and Langer, p. 37, pl. 34, figs. 1-5.
- 1994 Quinqueloculina limbata d'Orbigny, Loeblich and Tappan, p. 49, pl. 78, figs. 10-12.
- 2002 Quinqueloculina limbata d'Orbigny, Avşar, p. 63, pl. 1, figs. 16-17.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 38 (53.40 m), S. 51 (12.30 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 16 (47.00 m), S. 18 (69.00 m), S. 21 (47.00 m), S. 28 (39.00 m), S. 29 (50.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 3 (18.00 m); Gulf of Gökova, S. 1 (42.00 m), S. 3 (80.40 m); Marmaris Bay, S. 3 (98.30 m), S. 8 (69.00 m): it occurs frequently in the infralittoral zone and rarely in the upper circalittoral zone.

# Quinqueloculina neapolitana Sgarella and Moncharmont-Zei (Pl. 11, fig. 1)

1993 Quinqueloculina neapolitana, Sgarella and Moncharmont-Zei, p. 172, pl. 5, figs. 10-12.

Occurrence: Gulf of Saros, S. 25 (188.00 m): its occurrence is always very rare in the lower circalittoral zone.

#### Quinqueloculina poeyana d'Orbigny

- 1839a Quinqueloculina poeyana, d'Orbigny, p. 191, pl. 11, figs. 25-27.
- 1977a Quinqueloculina poeyana d'Orbigny, Le Clvez, Y., p. 82-83, pl. 14, figs. 1-4.
- 1988 Quinqueloculina poeyana d'Orbigny, Haig, p. 234, pl. 7, figs. 15-17.
- 1990 Quinqueloculina poeyana d'Orbigny, Debenay, pl. 2, fig. 6.
- 1993 Quinqueloculina poeyana d'Orbigny, Sgarella and Moncharmont-Zei, p.
- Figure 30 a. Distribution of *Quinqueloculina jugosa* Cushman, in the Eastern Aegean Sea, Turkish Coasts.
- Figure 30 b. Distribution of *Quinqueloculina laevigata* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 30 c. Distribution of *Quinqueloculina lamarckiana* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 30 d. Distribution of *Quinqueloculina limbata* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.











30 c

30 d

174, pl. 6, figs. 3-4.

2000 Quinqueloculina poeyana d'Orbigny, Cann et al., pl. 3, figs. m, n, o, p.

Occurrence: Gulf of Saros, S. 13 (156.00 m): it occurs always rare in the lower circalittoral zone.

### Quinqueloculina seminula (Linné) (Pl. 11, figs. 2-4)

1893 Quinqueloculina seminulum (Linné), Schlumberger, p. 208, pl. 4, figs. 80, 81.

1923 Miliolina seminulum (Linné), Wiesner, p. 66, pl. 12, fig. 148.

1960 Quinqueloculina seminulum (Linné), Barker, pl. 5, fig. 6.

1970 Quinqueloculina seminulum (Linné), v. Daniels, p. 75, pl. 3, fig. 4.

1987 Quinqueloculina seminulum (Linné), Yanko and Troitskaja, pl. 2, figs. 3 and 4.

1990 Quinqueloculina seminula (Linné), Debenay, pl. 2, fig. 8.

1990 Quinqueloculina seminula (Linné), Galluzzo et al., pl. 1, fig. 14.

1991 Quinqueloculina seminula (Linné), Cimerman and Langer, p. 38, pl. 34, figs. 9-12.

1992 Quinqueloculina seminulum (Linné), Hatta and Ujiie, p. 69, pl. 9, figs. 1a-2 b.

1993 Quinqueloculina seminulum (Linné), Sgarella and Moncharmont-Zei, p. 174.

1999 Quinqueloculina seminula (Linné), Hayward et al., p. 103, pl. 5, figs. 9-10.

2001 Quinqueloculina seminula (Linné), Debenay et al., pl. 2, figs. 11-12.

2002 Quinqueloculina seminula (Linné), Avşar, p. 63, pl. 1, figs. 18-20.

Occurrence: Gulf of Saros, S. 6 (70.00 m), S. 8 (55.70 m), S. 10 (68.50 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 20 (92.00 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 25 (188.00 m), S. 26 (631.00 m), S. 27 (144.00 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 33 (70.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 46 (40.20 m), S. 47 (24.50 m), S. 48 (40.00 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 52 (61.00 m), S. 54 (94.50 m), S. 56 (41.00 m), S. 57 (52.00 m), S. 58 (60.00 m), S. 61 (70.00 m), S. 62 (110.00 m), S. 63 (96.00 m), S. 64 (75.00 m), S. 67 (550.00 m), S. 68 (210.00 m), S. 69 (72.00 m), S. 70 (13.00 m), S. 72 (500.00 m), S. 75 (42.00m), S. 78 (63.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 3 (0.50 m), S. 8 (0.50 m), S. 11 (0.50 m), S. 14 (55.00 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 18 (30.00 m), S. 20 (3.00 m), S. 25 (25.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m), S. 33 (28.00 m); Gökçeada-Bozcaada-Canakkale triangle, S. 5 (37.50 m), S. 6 (92.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 25 (74.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 35 (80.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m), S.

8 (49.30 m), S. 9 (49.60 m), S. 10 (32.00 m), S. 13 (31.00 m), S. 16 (82.00 m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.00 m), S. 3 (18.50 m), S. 4 (18.50 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 5 (26.50 m); Çeşme, S. 4 (0.50 m), S. 7 (0.50 m), S. 8 (0.50 m), S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 8 (29.00 m), S. 12 (62.10 m), S. 15 (83.70 m); Gulf of Gökova, S. 3 (80.40 m), S. 4 (46.20 m), S. 6 (65.00 m); Gulf of Datça, S. 1 (252.30 m), S. 2 (45.00 m), S. 4 (40.00 m), S. 7 (56.40 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 8 (69.00 m): this species is abundant in the different depth-ranges, and occurs frequently both in infralittoral-upper circalittoral zones and lower circalittoral-lower epibathial zones.

#### Quinqueloculina stalkeri Loeblich and Tappan (Pl. 11, fig. 5)

1993 Quinqueloculina stalkeri Loeblich and Tappan, Sgarella and Moncharmont-Zei, p. 174, pl. 5, figs. 13-14.

Occurrence: Gökçeada, S. 28 (10.00 m), Gulf of Izmir S. 4 (40.00 m): this species is recorded poorly from the infralittoral zone.

### Quinqueloculina stelligera Schlumberger

- 1893 Quinqueloculina stelligera Schlumberger, p. 210, pl. 2, figs. 58, 59.
- 1923 Miliolina schlumbergeri, Wiesner, p. 49, pl. 6, fig. 73.
- 1958 Quinqueloculina stelligera Schlumberger, Le Calvez . J. and Y., p. 174, pl. 11, figs. 125, 126.
- 1970 Quinqueloculina schlumbergeri Wiesner, Haake, p. 196, pl. 1, figs. 3, 4.
- 1991 Quinqueloculina stelligera Schlumberger, Cimerman and Langer, p. 38, pl. 34, figs. 13-15.
- 1993 Quinqueloculina stelligera Schlumberger, Sgarella and Moncharmont-Zei, p. 175, pl. 6, figs. 13-14.
- 2001 Quinqueloculina stelligera Schlumberger, Debenay et al., pl. 2, figs. 3-4.
- 2002 Quinqueloculina stelligera Schlumberger, Kaminski et al., p. 29, pl. 2, fig.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 13 (79.00 m), S. 17 (39.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 22 (45.00 m), S. 24 (56.00 m), S. 27 (70.00 m), S. 31 (75.00 m), S. 33 (39.00 m): it occurs rarely in Eastern Aegean Sea, and is recorded from infralittoral and upper circalittoral zones.

# Quinqueloculina viennensis Le Calvez J. and Y. (Pl. 11, figs. 6-7)

- 1958 Quinqueloculina viennensis, Le Calvez, J. and Y., p. 187, pl. 5, figs. 42, 44, 45.
- 1993 Quinqueloculina viennensis Le Calvez J. and Y., Sgarella and Moncharmont-Zei, p. 176, pl. 7, fig. 8.

Occurrence: Gulf of Saros, S. 18 (88.10 m), S. 38 (53.40 m); Gökçeada, S. 29 (11.00 m), s. 30 (3.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 34 (38.00 m); it is found rarely in infralittoral and upper circalittoral zones.

## Quinqueloculina vulgaris d'Orbigny (Pl. 11, fig. 8)

- 1826 Quinqueloculina vulgaris, d'Orbigny, p. 302, no. 33.
- 1893 Quinqueloculina vulgaris d'Orbigny, Schlumberger, p. 207, pl. 2, figs. 65, 66.
- 1904 Miliolina seminulum (Linné) var. cornuta, Sidebottom, p. 11, figs. 11, 12.
- 1923 Miliolina vulgaris (d'Orbigny), Wiesner, p. 66, pl. 12, fig. 149.
- 1929 Quinqueloculina vulgaris d'Orbigny, Cushman, p. 25, pl. 2, fig. 3.
- 1949 Quinqueloculina vulgaris d'Orbigny, Said, p. 11, pl. 1, fig. 26.
- 1958 Quinqueloculina vulgaris d'Orbigny, Le Calvez J, and Y., p. 185, pl. 5, figs. 36, 37.
- 1974 Quinqueloculina vulgaris var. cornuta Sidebottom, Colom, p. 203, figs. 54 j-o.
- 1991 Quinqueloculina vulgaris d'Orbigny, Cimerman and Langer, p. 38-39, pl. 35, figs. 13-14.

Occurrence: Gulf of Saros, S. 3 (34.60 m): it occurs only in one sample collected from the infralittoral zone of the Gulf of Saros.

- Figure 31 a. Distribution of Quinqueloculina neapolitana Sgarella and Moncharmont-Zein in the Eazstern Aegean Sea, Turkish Coasts.
- Figure 31 b. Distribution of *Quinqueloculina poeyana* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 31 c. Distribution of *Quinqueloculina seminula* (Linné) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 31 d. Distribution of *Quinqueloculina stalkeri* Loeblich and Tappan in the Eastern Aegean Sea, Turkish Coasts.











31 c

31 d

### Subfamily Miliolinellinae Vella, 1957 Genus Biloculinella Wiesner, 1931 Biloculinella depressa (Wiesner) (Pl. 11, fig. 9)

- 1923 Biloculinella labiata Schlumberger var. depressa, Wiesner, p. 90, pl. 18, fig. 263.
- 1958 Biloculinella labiata (Schlumberger) var. depressa Wiesner, Le Calvez, J. and Y., p. 202, pl. 16, figs. 193, 194.
- 1991 Biloculinella depressa (Wiesner), Cimerman and Langer, p. 39, pl. 36, fig. 11.

Occurrence: Gulf of Saros, S. 6 (70.00 m), S. 7 (90.00 m), S. 8 (55.70 m), S. 9 (71.80 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 16 (71.10 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 24 (386.00 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 38 (53.40 m), S. 40 (77.30 m), S. 62 (110.00 m), S. 68 (210.00 m), S. 71 (90.00 m), S. 72 (500.00 m), S. 80 (98.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 6 (92.00 m), S. 10 (57.00 m), S. 19 (73.00 m), S. 27 (70.00 m); Gulf of Kuşadası and Güllük Bay, S. 5 (137.00 m); Gulf of Gökova, S. 7 (198.00 m): ît is frequent and reported from upper circalittoral to upper epibathial zones.

#### Biloculinella elongata (Wiesner)

- 1923 Biloculinella labiata Schlumberger var. elongata, Wiesner, p. 89, pl. 18, fig. 258.
- 1991 Biloculinella elongata (Wiesner), Cimerman and Langer, p. 39, pl. 36, figs. 3-4.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 31 (75.00 m), S. 32 (46.00 m): it occurs in a few samples in the upper circalittoral zone.

# Biloculinella globula (Bornemann) (Pl. 11, figs, 10-11)

- 1855 Biloculina globulus, Bornemann, p. 349, pl. 19, figs. 3 a, b.
- 1891 Biloculina globulus Bornemann, Schlumberger, p. 575, pl. 12, figs. 97-100.
- 1958 Biloculinella globula (Bornemann), Le Calvez, J.and Y., p. 201, pl. 7, fig. 76.
- Figure 32 a. Distribution of *Quinqueloculina stelligera* Schlumberger in the Eastern aegean Sea, Turkish Coasts.
- Figure 32 b. Distribution of *Quinqueloculina viennensis* Le Calvez, J. and Y. in the Eastern Aegean Sea, Turkish Coasts.
- Figure 32 c. Distribution of *Quinqueloculina vulgaris* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 32 d. Distribution of *Biloculinella depressa* (Wiesner) in the Eastern Aegean Sea, Turkish Coasts.











32 e

32 d

1991 Biloculinella globula (Bornemann), Cimerman and Langer, p. 40, pl. 36, figs. 1-2.

1993 Biloculinella globula (Bornemann), Sgarella and Moncharmont-Zei, p. 188.

2002 Biloculinella globula (Bornemann), Kaminski et al., p. 23, pl. 2, fig. 1.

2002 Biloculinella globula (Bornemann), Avşar, p. 63, pl. 1, fig. 21.

Occurrence: Gulf of Saros, S. 11 (79.10 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 35 (195.00 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 66 (65.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 9 (72.00 m), S. 10 (57.00 m), S. 13 (79.00 m), S. 17 (39.00 m), S. 19 (73.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 36 (46.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m), S. 12 (64.20 m); Gulf of Kuşadası and Güllük Bay, S. 3 (113.00 m), S. 5 (137.00 m), S. 7 (305.20 m), S. 8 (29.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m); it is frequent in infralittoral and upper circalittoral zones, and occurs rarely in lower circalittoral and upper epibathial zones.

### Biloculinella inflata (Wright) (Pl. 11, figs. 12-13)

1902 Biloculina inflata, Wright, p. 183, pl. 13, figs. 1-4.
1993 Biloculinella inflata (Wright), Sgarella and Moncharmont-Zei, p. 188, pl. 10, fig. 12.

Occurrence: Gulf of Saros, S. 30 (90.50 m), S. 34 (82.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 27 (70.00 m), S. 36 (82.00 m): this species is poorly recorded from upper and lower circalittoral zones.

### Biloculinella labiata (Schlumberger) (Pl. 12, figs. 1-2)

1891 Biloculina labiata, Schlumberger, p. 556, pl. 9, figs. 60-62, text-figs. 13, 14.
1923 Biloculina labiata Schlumberger var. simplex, Wiesner, p. 89, pl. 18, fig. 261.

1958 Biloculinella labiata (Schlumberger) var. simplex Wiesner, Le Calvez J. and Y., p. 202, pl. 16, figs. 193, 194.

1958 Biloculinella labiata (Schlumberger), Parker, p. 255, pl. 1, figs. 10, 11.

1988 Biloculinella labiata (Schlumberger), Loeblich and Tappan, p. 337, pl. 348, figs. 1-4.

1991 Biloculinella labiata (Schlumberger), Cimerman and Langer, p. 40, pl. 36, fig. 121.

1993 Biloculinella labiata (Schlumberger), Sgarella and Moncharmont-Zei, p. 188.

2002 Biloculinella labiata (Schlumberger), Avşar, p. 63, pl. 1, fig. 22.

Occurrence: Gulf of Saros, S. 7 (90.00 m), S. 9 (71.80 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 39 (37.70 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 63 (96.00 m), S. 65 (61.00 m), S. 69 (72.00 m), S. 80 (98.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 9 (72.00 m), S. 19 (73.00 m), S. 21 (47.00 m), S. 24 (56.00 m), S. 27 (70.00 m); Gulf of Edremit, S. 3 (230.00 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 3 (113.00 m), S. 6 (45.60 m), S. 13 (72.50 m), S. 15 (83.70 m); Gulf of Gökova, S. 3 (80.40 m), S. 8 (78.30 m); Gulf of Datça, S. 6 (56.10 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 8 (69.00 m): it occurs frequently in the upper circalittoral zone. It is also reported from lower circalittoral-upper epibathial zones.

## Genus Miliolinella Wiesner, 1931 Miliolinella elongata Kruit (Pl. 12, fig. 3)

- 1955 Miliolinella circularis (Bornemann) var. elongata, Kruit, p. 110, pl. 1, figs. 15 a, b.
- 1971 Miliolinella circularis (Bornemann) var. elongata Kruit, Murray, p. 73, pl. 28, figs. 1-4.,
- 1991 Miliolinella elongata Kruit, Cimerman and Langer, p. 41, pl. 37, fig. 8.
  1993 Miliolinella circularis elongata Kruit, Sgarella and Moncharmont-Zei, p. 187, pl. 10, fig. 5.

Occurrence: Gulf of Saros, S. 19 (96.50 m), S. 20 (92.00 m), S. 40 (77.30 m); Gökçeada, S. 17 (4.00 m), S. 29 (11.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 8 (35.80 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 4 (40.00 m); Gulf of Kuşadası and Güllük Bay, S. 7 (305.20 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 13 (72.50 m), S. 14 (82.10 m); Gulf of Gökova, S. 3 (80.40 m), S. 5 (34.50 m); Gulf of Datça, S. 7 (56.40 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m): this species occurs frequently in the different localities of Eastern Aegean Sea. It is reported from infralittoral, upper and lower circalittoral and upper epibathial zones.

- Figure 33 a. Distribution of *Biloculinella elongata* (Wiesner) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 33 b. Distribution of *Biloculinella globula* (Bornemann) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 33 c. Distribution of *Biloculinella inflata* (Wright) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 33 d. Distribution of *Biloculinella labiata* (Schlumberger) in the Eastern Aegean Sea, Turkish Coasts.











33 c

33 d

### Miliolinella labiosa (d'Orbigny) (Pl. 12, fig. 4)

1839a Triloculina labiosa, d'Orbigny, p. 178, pl. 10, figs. 12-14.

1923 Miliolina labiosa (d'Orbigny), Wiesner, p. 71, pl. 134, fig. 171.

1929 Triloculina labiosa d'Orbigny, Cushman, p. 60, pl. 15, fig. 3.

1958 Triloculina labiosa d'Orbigny, Le Calvez, J. and Y., p. 196, pl. 14, figs. 168, 169.

1988 Miliolinella labiosa d'Orbigny, Haig, p. 224, pl. 2, fig. 15.

1991 Miliolinella labiosa (d'Orbigny), Cimerman and Langer, p. 41, pl. 38, figs. 1-3.

2000 Miliolinella labiosa (d'Orbigny), Cann et al., pl. 5, figs. g, h, i, j.

**Occurrence:** Marmaris Bay, S. 2 (79.10 m): this species is rarely recorded in one sample. It occurs in the upper circalittoral zone.

# Miliolinella semicostata (Wiesner) (Pl. 12, figs. 5-8)

1923 Miliolinella semicostata, Wiesner, p. 72, pl. 14, figs. 177, 178.

1958 Triloculina semiicostata (Wiesner), Le Calvez, J. and Y., p. 194, pl. 15, figs. 170-172.

1991 Miliolinella semicostata (Wiesner), Cimerman and Langer, p. 42, pl. 38, figs. 10-15.

1993 Miliolinella semicostata (Wiesner), Sgarella and Moncharmont-Zei, p. 187, pl. 10, fig. 7.

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 13 (156.00 m), s. 22 (118.50 m), S. 23 (383.00 m), S. 68 (210.00 m), S. 80 (98.00 m); Gökçeada, S. 15 (3.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 29 (11.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m); Gulf of Edremit, S. 1 (334,50 m), S. 3 (230.00 m), S. 6 (15.00 m), S. 7 (19.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 5 (18.00 m), S. 8 (35.80 m), s. 12 (25.50 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 6 (45.60 m), S. 10 (66.40 m); Gulf of Gökova, S. 3 (80.60 m); it occurs frequently in the infralittoral zone, and is reported also from upper-lower circalittoral and upper epibathial zones.

# Miliolinella subrotunda (Montagu) (Pl. 12, figs. 9-11)

1803 Vermiculum subrotundum, Montagu, p. 521.

1923 Miliolina subrotunda (Walker and Boys), Wiesner, p. 69, pl. 13, figs. 165-169.

1970 Miliolinella subrotunda (Walker and Boys), v. Daniels, p. 77, pl. 4, fig. 2, text-fig. 52.

1970 Miliolinella subrotunda (Montagu), Murray, p. 73, pl. 28, figs. 5, 6.

1987 Miliolinella subrotunda (Montagu), Yanko and Troitskaja, pl. 3, figs. 4-6.

1991 Miliolinella subrotunda (Montagu), Cimerman and Langer, p. 42, pl. 38, figs. 4-9.

1993 Miliolinella subrotunda (Montagu), Sgarella and Moncharmont-Zei, p. 187.

1995 Miliolinella subrotunda (Montagu), Meriç et al., p. 109, pl. 5, figs. 2 a-d.

1999 Miliolinella subrotunda (Montagu), Hayward et al., p. 96, pl. 3, fig. 24.

2001 Miliolinella subrotunda (Montagu), Debenay et al., pl. 2, fig. 5.

2002 Miliolinella subrotunda (Montagu), Avşar, p. 63, pl. 1, figs. 23-24.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 12 (214.70 m), S. 14 (84.00 m), S. 18 (88.10 m), S. 31 (83.80 m), S. 39 (37.70 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 51 (12.30 m), S. 66 (65.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 1 (0.50 m), S. 3 (0.50 m), s. 4 (0.50 m), S. 5 (0.50 m), S. 8 (0.50 m), S. 16 (4.00 m), S. 17 (4.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 28 (10.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Bozcaada, S. 1 (0.50 m), S. 13 (0.50 m), S. 15 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 6 (92.00 m), S. 7 (18.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 36 (82.00 m); Gulf of Edremit, S. 2. (100.40 m), S. 3 (230.00 m), S. 4 (76.30 m), S. 7 (19.00 m), S. 10 (32.00 m), S. 13 (31.00 m), S. 14 (37.70 m), S. 17 (47.40 m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 13 (72.50 m), S. 14 (82.10 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), s. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 6 (56.10 m), S. 7 (56.40 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 6 (64.00 m), S. 8 (69.00 m): this species is abundant in Eastern Aegean Sea, and is reported mainly from infralittoral and upper-lower circalittoral zones. It is also rarely recorded from the lower epibathial zone.

Figure 34 a. Distribution of *Miliolinella elongata* Kruit in the Eastern Aegean Sea, Turkish Coasts.

Figure 34 b, Distribution of *Miliolinella labiosa* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.

Figure 34 c. Distribution of *Miliolinella semicostata* (Wiesner) in the Eastern Aegean Sea, Turukish Coasts.

Figure 34 d. Distribution of *Miliolinella subrotunda* (Montagu) in the Eastern Aegean Sea, Turkish Coasts.





34 b





34 c

territoria.

34 d

# Miliolinella webbiana (d'Orbigny) (Pl. 12, fig. 12; Pl. 13, figs. 1-2)

- 1839b Triloculina webbiana, d'Orbigny, p. 140, pl. 3, figs. 13-15.
- 1923 Miliolina webbiana (d'Orbigny), Wiesner, p. 72, pl. 14, fig. 179.
- 1958 Triloculina webbiana d'Orbigny, Le Calvez, J. and Y., p. 195, pl. 15, figs. 176-178.
- 1974 Triloculina webbiana d'Orbigny, Le Calvez, Y., p. 90, pl. 23, figs. 1-4.
- 1991 Miliolinella webbiana (d'Orbigny), Cimerman and Langer, p. 42, pl. 39, figs. 1-3.
- 1992 Miliolinella webbiana (d'Orbigny), Hatta and Ujiie, p. 71, pl. 10, figs. 5a, b.
- 1993 Miliolinella webbiana (d'Orbigny), Sgarella and Moncharmont-Zei, p. 187, pl. 10, fig. 6.
- 2002 Miliolinella webbiana (d'Orbigny), Avşar, p. 63, pl. 2, fig. 1.

Occurrenece: Gulf of Saros, S. 39 (37.70 m), S. 42 (27.50 m), S. 44 (26.20 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 67 (550.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 3 (0.50 m), S. 16 (4.00 m), S. 17 (4.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Canakkale triangle, S. 2 (32.40 m), S. 5 (137.50 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 22 (45.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 36 (82.00 m); Gulf of Edremit, S. 2 8100.40 m), S. 3 (230.00 m), S. 4 (76.30 m), S. 6 (15.00 m), S. 7 (19.00 m); Dikili and Candarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 8 (35.80 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m), S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 873.00 m), S. 2 831.30 m), S. 6 45.60 m), S. 8 (29.00 m), S. 11 (47.00 m), S. 12 (62.10 m); Gulf of Gökova, S. 2 (27.00 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 4 (40.00 m), S. 5 (59.30 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m): it is abundant in different localities of Eastern Aegean Sea, and is reported from infralittoral to upper epibathial zones.

- Figure 35 a. Distribution of *Miliolinella webbiana* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 35 b. Distribution of *Pseudotriloculina laevigata* (d'Orbigny) in the Eastern Aegean Sea, turkish Coasts.
- Figure 35 b. Distribution of *Pseudotriloculina oblonga* (Montagu) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 35 d. Distribution of *Pseudotriloculina rotunda* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.





35 b





35 c

35 d

### Genus Pseudotriloculina Cherif, 1970 Pseudotriloculina laevigata (d'Orbigny) (Pl. 13, fig. 3)

1826 Triloculina laevigata, d'Orbigny, p. 300, no. 15.

1923 Miliolina laevigata (d'Orbigny), Wiesner, p. 55, pl. 8, figs. 94-96

1958 Triloculina laevigata d'Orbigny, Le Calvez, J. and Y., p. 19, pl. 6, figs. 62-64.

1991 Pseudotriloculina laevigata (d'Orbigny), Cimerman and Langer, p. 43, pl. 39, figs. 8-12.

2002 Pseudotriloculina laevigata (d'Orbigny), Avşar, p. 63, pl. 2, fig. 2.

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 35 (195.00 m), S. 42 (27.50 m), S. 51 (12.30 m), s. 65 (61.00 m), S. 67 (550.00 m), S. 72. (500 m); Gökçeada, S. 3 (0.50 m), S. 25 (25.00 m), S. 29 (11.00 m), S. 30 (3.00 m); Bozcaada, S. 11 (7.00 m); Gökçeada-Bozcaada-Canakkale triangle, S. 3 (59.60 m), S. 9 (72.00 m), S. 17 (39.00 m), S. 22 (45.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m); Gulf of Edremit, S. 6 (15.00 m), S. 7 (19.00 m); Dikili and Candarli Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m), S. 5 (26.50 m); Ceşme, S. 2 (0.50 m), S. 4 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00m), S. 7 (305.20 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m); Gulf of Datça, S. 2 (45.00 m), S. 5 (59.30 m); S. 7 (56.40 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 8 (69.00 m): it is widespread in different gulfs and localities of Eastern Aegean Sea. This species occurs in infralittoral, upper-lower circalittoral and upper-lower epibathial zones.

## Pseudotriloculina oblonga (Montagu) (Pl. 13, figs. 4-6)

1803 Vermiculum oblongum, Montagu, p. 522, pl. 14, fig. 9.

1839a Triloculina oblonga (Montagu), d'Orbigny, p. 175, pl. 10, figs. 3, 54.

1958 Triloculina oblonga (Montagu), Le Calvez, J. and Y., pl. 6, figs. 60, 61.

1958 Triloculina oblonga (Montagu), Le Calvez, Y., p. 115, figs. 1, 2.

1991 Pseudotriloculina oblonga (Montagu), Cimerman and Langer, p. 43, pl. 40, figs. 1-4.

Occurrence: Gulf of Saros, S. 8 (55,70 m), S. 14 (84.00 m), S. 17 (33.90 m), S. 39 (37.70 m), S. 42 (27.50 m), S. 44 (26.20 m), S. 51 (12.30 m), S. 63 (96.00 m), S. 66 (65.00 m), S. 79 (29.00 m), S. 90 (98.00 m); Gökçeada, S. 8 (0.50 m), S. 17 (4.00 m), S. 21 (15.00 m), S. 23 (10.00 m), S. 25 (25.00 m), S. 28 (10.00 m); Bozcaada, S. 10 (0.50 m), S. 13 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 13 (79.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 28 (39.00 m), S. 29 (50.00

m), S. 33 (39.00 m), S. 34 (38.00 m); Gulf of Edremit, S. 4 (76.30 m), S. 6 (15.00 m), s. 7 (19.00 m), S. 14 (37.70 m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 12 (25.50 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Çeşme, S. 4 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 3 (113.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 12 (62.10 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 2 (45.00 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 5 (59.30 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 8 (69.00 m): this species is very abundant and is reported generally from infralittoral and upper circalittoral zones. It is rare in the upper epibathial zone.

### Pseudotriloculina rotunda (d'Orbigny) (Pl. 13, figs. 7-9)

1826 Triloculina rotunda, d'Orbigny, p. 299, no. 4.

1893 Triloculina rotunda d'Orbigny, Schlumberger, p. 206, pl. 1, figs. 48-50.

1958 Triloculina rotunda d'Orbigny, Le Calvez , J. and Y., p. 192, pl. 6, figs. 57, 58.

1974 Triloculina rotunda d'Orbigny, Colom, p. 204, figs. 59 n, o.

1991 Pseudotriloculina rotunda (d'Orbigny), Cimerman and Langer, p. 43, pl. 40, figs. 5-6.

Occurrence: Gulf of Saros, S. 39 (37.70 m), S. 40 (77.30 m), S. 42 (27.50 m), S. 44 (26.20 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 57 (52.00 m), S. 67 (550.00 m), S. 68 (210.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 5 (0.50 m), S. 9 (0.50 m), S. 13 (13.00 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 25 (25.00 m), S. 29 (9.00 m), S. 27 (9.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2(32.40 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 33 (39.00 m), S. 34 (38.00 m); Gulf of Edremit, S. 4 (76.30 m), S. 6 (15.00 m), S. 7 (198.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 12 (25.50 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 7 (305.20 m), S. 11 (47.00 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m); Gulf of Datça, S. 2 (45.00 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 6 (56.10 m); Marmaris Bay, S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 6 (64.00 m), S. 8 (69.00 m): it occurs abundantly in infralittoral and upper circalittoral zones. It is rare in lower circalittoral-upper epibathial zones.

# Pseudotriloculina sidebottomi (Martinotti) (Pl. 13, figs. 10-11)

1940 Miliolina subrotunda Montagu, Sidebottom, p. 8, pl. 2, figs. 1-7.

1920 Sigmoilina sidebottomi, Martinotti, p. 280, pl. 2, fig. 29, text-figs. 59-61.

1974 Miliolinella sidebottomi (Martinotti), Colom, p. 207, figs. 61a-n.

1991 Pseudotriloculina sidebottomi (Martinotti), Cimerman and Langer, p. 43-44, pl. 40, figs. 9-10.

Occurrence: Gulf of Saros, S. 44 (26.20 m), S. 54 (94.50 m); Gökçeada, S. 29 (11.00 m); Bozcaada, S. 2 (0.50 m); Gulf of Edremit, S. 6 (15.00 m), S. 7 (19.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m); Gulf of Gökova, S. 2 (27.00 m), S. 5 (34.50 m); Gulf of Datça, S. 4 (40.00 m): it occurs frequently in the infralittoral zone.

### Pseudotriloculina subgranulata (Cushman) (Pl. 13, fig. 12)

1918 Triloculina subgranulata, Cushman, p. 290, pl. 96, fig. 4
1993 Pseudotriloculina subgranulata (Cushman), Hottinger et al., p. 59, pl. 47, figs. 8-13; pl. 48, figs. 1-8.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 22 (45.00 m), S. 31 (75.00 m); Gulf of Edremit, S. 6 (15.00 m); Gulf of Datça, S. 5 (59.30 m); Marmaris Bay, S. 3 (98.30 m): this species is very rare in infralittoral and upper circalittoral zones.

Genus Pyrgo Defrance, 1824 Pyrgo anomala (Schlumberger) (Pl. 13, fig.12; Pl. 14, figs. 1-2)

- 1891 Biloculina anomala, Schlumberger, p. 182, pl. 11, figs. 84, 86; pl. 12, fig. 101.
- 1917 Biloculina anomala Schlumberger, Cushman, p. 79, pl. 32, fig. 1.
- 1923 Biloculina anomala Schlumberger, Wiesner, p. 88, pl. 17, fig. 254; pl. 18, fig. 255.
- 1958 Pyrgo anomala (Schlumberger), Le Calvez, J. and Y., p. 200, pl. 7, fig. 77.
- 1958 Pyrgo anomala (Schlumberger), Parker, p. 255, pl. 1, figs. 22, 23.
- 1984 Pyrgo anomala (Schlumberger), Ross and Kennett, pl. 2, fig. 11.
- 1991 Pyrgo anomala (Schlumberger), Cimerman and Langer, p. 44, pl. 41, figs. 3-5.
- 1993 Pyrgo anomala (Schlumberger), Sgarella and Moncharmont-Zei, p. 180, pl. 9, fig. 3.
- 1999 Pyrgo anomala (Schlumberger), Hayward et al., p. 97, pl. 4, figs. 1-2.
- 2002 Pyrgo anomala (Schlumberger), Avşar, p. 63, pl. 2, fig. 3.

Occurrence: Gulf of Saros, S. 4 (50.90 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 18 (88.10 m), S. 19 (96.50 m), s. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 43 (51.50 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 63 (96.00 m), S. 69 (72.00 m), S. 80 (98.00 m); Gökçeada, S. 16 (40.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 6 (92.00 m), S. 19 (73.00 m), S. 31 (75.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m), S. 3 (230.00 m); Dikili and Çandarlı Bays, S. 13 (80.00 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 3 (113.00 m), S. 4 (226.00 m), S. 7 (305.00 m); Gulf of Gökova, S. 3 (80.40 m), S. 5 (34.50 m), S. 7 (198.00 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m); Marmaris Bay, S. 1 (106.40 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 8 (69.00 m); this species is abundant in infralittoral and upper circalittoral zones. It is also found in the lower circalittoral and upper epibathial zones.

#### Pyrgo comata (Brady)

1881 Biloculina comata, Brady, p. 45.

1884 Biloculina comata Brady, Brady, p. 144, pl. 3, figs. 9a, b.

1891 Biloculina comata Brady, Schlumberger, p. 565, pl. 10, figs. 72, 73, text-figs. 26-28.

1917 Biloculina comata Brady, Cushman, p. 81, pl. 34, fig. 1.

1929 Pyrgo comata (Brady), Cushman, p. 73, pl. 19, fig. 8.

1960 Pyrgo comata (Brady), Barker, pl. 3, figs. 9a, b.

1990 Pyrgo comata (Brady), Thomas et al., pl. 8, fig. 2.

1999 Pyrgo comata (Brady), Hayward et al, p. 98, pl. 4, figs. 3-4.

Occurrence: Gulf of Saros, S. 69 (72.00 m): this species is very rare in the upper circalittoral zone.

### Pyrgo elongata (d'Orbigny) (Pl. 14, figs. 3-5)

1826 Biloculina elongata, dOrbigny, p. 298, no. 4.

1891 Biloculina elongata d'Orbigny, Schlumberger, p. 571, pl. 11, figs. 87, 88; pl. 12, fig. 89, tex-figs. 35-36.

1917 Biloculina elongata d'Orbigny, Cushman, p. 78, pl. 31, fig. 1, text-fig. 40.

1923 Biloculina elongata d'Orbigny, Wiesner, p. 87, pl. 17, fig. 247.

1929 Pyrgo elongata (d'Orbigny), Cushman, p. 70, pl. 19, figs. 2, 3.

1958 Pyrgo elongata (d'Orbigny), Le Calvez, J. and Y., p. 200.

1974 Pyrgo elongata (d'Orbigny), Colom, p. 204, figs. 57 n, o.

1987 Pyrgo elongata (d'Orbigny), Yanko and Troitskaja, pl. 2, figs. 5-6.

2002 Pyrgo elongata (d'Orbigny), Avşar, p. 64, pl. 2, fig. 4.

Sec. 4

Occurrence: Gulf of Saros, S. 11 (79.60 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 25 (188.00 m),

S. 27 (144.80 m), B. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 41 (81.00 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 65 (61.00 m), S. 69 (72.00 m), S. 72 (500.00 m), S. 78 (63.00 m), S. 80 (98.00 m); Gökçeada, S. 28 (10.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 8 (58.00 m), S. 10 (57.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 36 (82.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m), S. 5 (125.00 m); Dikili and Çandarlı Bays, S. 13 (80.00 m); Gulf of Kuşadası and Güllük Bay, S. 3 (113.00 m), S. 8 (29.00 m); Gulf of Datça, S. 3 (139.50 m), S. 9 (147.00 m); this species occurs frequently in different localities of Eastern Aegean Sea. It is reported frequently from infralittoral and upper circalittoral zones, It is rare in lower circalittoral and upper epibathyal zones.

Pyrgo inornata (d'Orbigny) (Pl. 14, figs. 6-7)

1846 Biloculina inornata, d'Orbigny, p. 266, pl. 16, figs. 7-9.
1993 Pyrgo inornata (d'Orbigny), Sgarella and Moncharmont-Zei, p. 182, pl. 9, fig. 2.
2002 Pyrgo inornata (d'Orbigny), Avsar, p. 64, pl. 2, fig. 5.

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 20 (92.00 m), S. 21 (97.00 m), S. 23 (383.00 m), S. 25 (188.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 45 (39.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 53 (440.00 m), S. 54 (94.50 m), S. 68 (210.00 m), S. 77 (53.00 m), S. 80 (98.00 m); Gökçeada-Bozcaada-Çanakakale triangle, S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 25 (74.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m); Gulf of Datça, S. 1 (252.30 m); Marmaris Bay, S. 3 (98.30 m): it occurs frequently in upper circalittoral and rarely lower circalittoral and upper epibathyal zones.

Genus Pyrgoella Cushman and White, 1936 Pyrgoella sphaera (d'Orbigny) (Pl. 14, figs. 8-9)

1839c *Biloculina sphaera*, d'Orbigny, p. 65, pl. 8, figs. 13-16.
1891 *Planispirina sphaera* (d'Orbigny), Schlumberger, p. 577, figs. 45, 46.

1958 Pyrgoella sphaera (d'Orbigny), Le Calvez, J. and Y., p. 198, pl. 7, fig. 72.

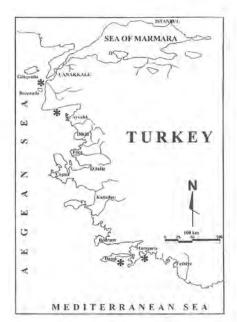
Figure 36 a. Distribution of *Pseudotriloculina sidebottomi* (Martinotti) in the Eastern Aegean Sea, Turkish Coasts.

Figure 36 b. Distribution of *Pseudotriloculina subgranulata* (Cushman) in the Eastern Aegean Sea, Turkish Coasts.

Figure 36 c. Distribution of *Pyrgo anomala* (Schlumberger) in the Eastern Aegean Sea, Turkish Coasts.

Figure 36 d. Distribution of *Pyrgo comata* (Brady) in the Eastern Aegean Sea, Turkish Coasts.











36 c

9.2

36 d

- 1958 Pyrgoella sphaera (d'Orbigny), Parker, p. 256, pl. 1, fig. 14.
- 1979 Pyrgoella sphaera (d'Orbigny), Alfirevic, p. 75, pl. 5, fig. 5.
- 1988 Pyrgoella sphaera (d'Orbigny), Loeblich and Tappan, p. 343, pl. 351, figs. 1-4.
- 1991 Pyrgoella sphaera (d'Orbigny), Cimerman and Langer, p. 45, pl. 41, figs. 1-2.
- 1993 Pyrgoella sphaera (d'Orbigny), Sgarella and Moncharmont-Zei, p. 184.

Occurrence: Gulf of Saros, S. 25 (188.00 m), S. 34 (82.00 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 69 (72.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 36 (82.00 m): it occurs between 12.30 m and 188.00 m in northeastern Aegean Sea, and is poorly recorded from infralittoral to lower circalittoral zones.

Genus Triloculina d'Orbigny, 1826 Triloculina adriatica Le Calvez, J. and Y. (Pl. 14, fig. 10; Pl. 15, fig. 1)

1923 Miliolina tricarinata (d'Orbigny), Wiesner, p. 62, pl. 10, fig. 128.
1958 Triloculina adriatica, Le Calvez, J. and Y., p. 188, pl. 14, figs. 158, 159.
1991 Triloculina adriatica Le Calvez, J. and Y., Cimerman and Langer, p. 45-46, pl. 42, figs. 9-10.

Occurrence: Gulf of Saros, S. 40 (77.30 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 50 (41.00 m), S. 51 (12.30 m): it is recorded only from the Gulf of Saros. It is rare in infralittoral and upper circalittoral zones.

# Triloculina bermudezi Acosta (Pl. 15, fig. 2)

1993 Triloculina bermudezi Acosta, Sgarella and Moncharmont-Zei, p. 186, pl. 9, fig. 12.

Occurrence: Bozcaada, S. 4 (0.50 m), S. 9 (0.50 m), S. 13 (0.50 m); Dikili and Çandarlı Bays, S. 14 (21.00 m), Gulf of Kuşadası and Güllük Bay, S. 11 (47.00 m); Gulf of Gökova, S. 2 (27.00 m), S. 5 (34.50 m); Gulf of Datça, S. 5 (59.30 m): it occurs rarely in Eastern Aegean Sea, and generally in infralittoral zone.

- Figure 37 a. Distribution of Pyrgo elongata (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 37 b. Distribution of Pyrgo inornata (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 37 c. Distribution of *Pyrgoella sphaera* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 37 d. Distribution of *Triloculina adriatica* Le Calvez , J. and Y. in the Eastern Aegean Sea, Turkish Coasts.





37 b





37 c

37 d

#### Triloculina cf. fichteliana d'Orbigny

1839a Triloculina fichteliana d'Orbigny, d'Orbigny, p. 171, pl. 9, figs. 8-10.

1859 Triloculina fichteliana d'Orbigny, Graham and Militante, p. 53, pl. 7, fig. 10.

1993 Triloculina fichteliana d'Orbigny, Hottinger et al., p. 65, pl. 66, figs. 10-15.

Occurrence: Gulf of Datça, S. 1 (252.30 m): it is found only in one sample collected from the upper epibathyal zone of the Gulf of Datça.

# Triloculina marioni Schlumberger (Pl. 15, figs. 3-5)

1893 Triloculina marioni, Schlumberger, p. 204, pl. 1, figs. 38-41.

1958 Triloculina marioni Schlumberger, Le Calvez, J. and Y., p. 191, pl. 6, figs. 54-56.

1991 Triloculina marioni Schlumberger, Cimerman and Langer, pl. 46, pl. 43, figs. 1-5.

2002 Triloculina marioni Schlumberger, Avşar, p. 64, pl. 2, fig. 6.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 4 (50.90 m), S. 5 (43.00 m), S. 6 (70.00 m), S. 8 (55.70 m), S. 10 (68.50 m), S. 12 (214.70 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 21 (97.40 m), S. 25 (188.00 m), S. 31 (83.80 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 47 (24.20 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 52 (61.10 m), S. 54 (94,50 m), S. 57 (52.00 m), S. 60 (55.00 m), s. 65 (61.00 m), S. 67 (550.00 m), S. 69 (72.00 m), S. 70 (13.00 m), S. 72 (500.00 m), s. 79 (29.00 m); Gőkçeada, S. 3 (0.50 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 17 (4.00 m), S. 18 (30.00 m), S. 19 (40.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Bozcaada, S. 2 (0.50 m), S. 5 (0.50 m), S. 9 (0.50 m), S. 10 (0.50 m), S. 13 (0.50 m), S. 14 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 3 (59.60 m), S. 4 (85.50 m), S. 6 (92.00 m), S. 7 (18.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 13 (79.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00m), S. 34 (38.00 m), S. 35 (80.00 m). S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 1 (334,50 m), S. 2 (100.40 m), S. 4 (76.30 m), S. 6 (15.00 m), S. 7 (19.00 m), S. 11 (56.60 m), S. 12 (64.20 m), S. 13 (31.00 m), S. 14 (37.70 m), S. 16 (82.00 m), S. 17 (47.40 m), S. 18 (29.00 m); Dikili and Candarli Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 4 (18.50 m), S. 5 (18.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Çeşme, S. 2 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 4 (226.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 13 (72.50 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), Gulf of Datça, S. 2 (45.00 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 6 (56.10 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 4 (71.80 m), S. 6 (64.00 m), S. 8 (69.00 m): it is very abundant in the different localities of Eastern Aegean Sea, and generally recorded from infralittoral and upper circalittoral zones. It is rare in lower circalittoral and upper-lower epibathyal zones.

#### Triloculina cf. ornata Le Calvez J. and Y.

1958 Triloculina ornata, Le Calvez, J. and Y., p. 190, pl. 14, figs. 160, 161.
1991 Triloculina ornata Le Calvez, J. and Y., Cimerman and Langer, p. 46, pl. 43, figs. 6-7.

Occurrence: Gulf of Saros, S. 27 (144.80 m), S. 28 (115.50 m): this species is very rare in the lower circalittoral zone.

# Triloculina plicata Terquem (Pl. 15, figs. 6-8)

1878 Triloculina plicata, Terquem, p. 61, pl. 6, figs. 2 a and b.

1923 Triloculina plicata Terquem, Wiesner, p. 62, pl. 11, figs. 129, 130.

1958 Triloculina plicata Terquem, Le Calvez, J. and Y., p. 189, pl. 14, figs. 162, 163.

1991 Triloculina plicata Terquem, Cimerman and Langer, p. 46, pl. 43, figs. 8-10.

1993 Triloculina plicata Terquem, Sgarella and Moncharmont-Zei, p. 186, pl. 10, fig. 2.

Occurrence: Gulf of Saros, S. 39 (37.70 m), S. 40 (77.30 m), S. 42 (27.50 m), S. 44 (26.50 m), S. 45 (33.50 m), S. 46 (40.20 m), S. 51 (12.30 m), s. 54 (94.50 m), S. 67 (550.00 m); Gökçeada, S. 8 (0.50 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 29 (11.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 5 (18.00 m), S. 8 (35.80 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 3 (113.00 m), S. 8 (29.00 m), S. 11 (47.00 m); Gulf

- Figure 38 a. Distribution of *Triloculina bermudezi* Acosta in the Eastern Aegean Sea, Turkish Coasts.
- Figure 38 b. Distribution of *Triloculina* cf. *fichteliana* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 38 c. Distribution of *Triloculina marioni* Schlumberger in the Eastern Aegean Sea, Turkish Coasts.
- Figure 38 d. Distribution of *Triloculina* cf. ornata Le Calvez, J. and Y. in the Eastern Aegean Sea, Turkish Coasts.











38 c

38 d

of Gökova, S. 3 (80.40 m), S. 5 (34.50 m), S. 6 (65.00 m); Gulf of Datça, S. 2 (45.00 m), S. 9 (147.00 m); Marmaris Bay, S. 4 (71.80 m): it occurs frequently in infralittoral and upper circalittoral zones, and rarely in lower circalittoral and lower epibathyal zones.

#### Triloculina schreiberiana d'Orbigny (Pl. 15, figs. 9-10)

1839a Triloculina schreiberiana, d'Orbigny, p. 174, pl. 9, figs. 20-22.

1893 Triloculina schreiberiana d'Orbigny, Schlumberger, p. 204, pl. 1, figs. 42-44.

1923 Triloculina schreiberiana d'Orbigny, Wiesner, p. 60, pl. 9, fig. 114.

1958 Triloculina schreiberiana d'Orbigny, Le Calvez , J. and Y., p. 194, pl. 7. fig. 67.

1977a Triloculina schreiberiana d'Orbigny, Le Calvez, Y., p. 121, figs. 1-3.

1991 Triloculina schreiberiana d'Orbigny, Cimerman and Langer, p. 46, pl. 44, figs. 1-2..

Occurrence; Gulf of Saros, S. 4 (50.90 m), S. 6 (70.00 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 17 (33.90 m), S. 29 (92.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 51 (12.30 m), S. 78 (63.00 m), S. 79 (29.00 m); Gökçeada, S. 16 (4.00 m), S. 25(25.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 33 (39.00 m), S. 34 (38.00 m); Gulf of Edremit, S. 6 (15.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 4 (18.50 m), S. 5 (18.00 m), S. 8 (35.80 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m); Gulf of Gökova, S. 2 (27.00 m): it occurs frequently in the infralittoral zone and rarely in upper and lower circalittoral zones.

#### Triloculina serrulata McCulloch

1977 Triloculina serrulata, McCulloch, p. 558, pl. 225, figs. 1, 2, 4.

**Occurrence:** Gökçeada-Bozcaada-Çanakkale triangle, S. 13 (79.00 m), S. 33 (39.00 m): poorly recorded deeper than 39.00 m to 79.00 m and is rare in infralittoral and upper circalittoral zones.

# Triloculina tricarinata d'Orbigny (Pl. 15, figs. 11-12)

1826 Triloculina tricarinata, d'Orbigny, p. 299, no. 6.

1923 Miliolina angularis (d'Orbigny), Wiesner, p. 63, pl. 11, fig. 133.

1958 Triloculina tricarinata d'Orbigny, Le Calvez, J. and Y., p. 189, pl. 5, figs, 47, 48.

1990 Triloculina tricarinata d'Orbigny, Thomas et al., pl. 8, fig. 5.

1991 Triloculina tricarinata d'Orbigny, Cimerman and Langer, p. 46-47, pl. 44, figs. 3-4.

1993 Triloculina tricarinata d'Orbigny, Hatta and Ujiie, p. 74-75, pl. 12, figs. 8a, b.

1993 *Triloculina tricarinata* d'Orbigny, Hottinger et al., p. 655, pl. 68, figs. 7-12, 1999 *Triloculina tricarinata* d'Orbigny, Hayward et al., p. 106, pl. 5, figs. 29-30, 2000 *Triloculina tricarinata* d'Orbigny, Cann et al., pl. 5, figs. c, d.

Occurrence: Gulf of Saros, S. 4 (50.90 m), S. 8 (55.70 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 18 (88.10 m), S. 21 (97.40 m), S. 28 (115.50 m), S. 45 (33.50 m), S. 54 (94.50 m), s. 67 (550.00 m); Gökçeada, S. 3 (0.50 m), S. 25 (25.00 m), S. 26 (9.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 17 (39.00 m), S. 22 (45.00 m), S. 27 (70.00 m), S. 33 (39.00 m), S. 36 (82.00 m); Gulf of Edremit, S. 3 (230.00 m), S. 7 (19.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 5 (18.00 m), S. 8 (35.80 m), S. 9 (49.00 m); Gulf of Kuşadası and Güllük Bay, S. 13 (72.50 m); it occurs frequently in some gulfs. This species is mainly reported in infralittoral and upper circalittoral zones. But, it also occurs rarely in lower circalittoral and upper-lower epibathyal zones.

Genus Wellmanellinella Cherif, 1970 Wellmanellinella striata (Sidebottom) (Pl. 15, figs. 13-14)

1904 Planispirina striata, Sidebottom, p. 21, pl. 5, figs. 12-14,

1970 Wellmanellinella striata (Sidebottom), Cherif, p. 56, pl. 28, fig. 2.

1974 Ficherina striata (Sidebottom), Colom, p. 211, fig. 69 f.

1988 Wellmanellinella striata (Sidebottom), Loeblich and Tappan, p. 346, pl. 354, figs. 13-15.

1991 Wellmanellinella striata (Sidebottom), Cimerman and Langer, p. 47, pl. 44, figs. 6-8.

Occurrence: Gökçeada, S. 29 (11.00 m): it occurs very poorly in the infralittoral zone.

Subfamily Sigmoilinitinae Luczkowska, 1974 Genus Sigmoilina Schlumberger, 1887 Sigmoilina sigmoidea (Brady) (Pl. 16, figs. 1-2)

1884 Planispirina sigmoidea, Brady, p. 197, pl. 2, figs. 1-3; p. 194, text-fig. 5c.

Figure 39 a. Distribution of *Triloculina plicata* Terquem in the Eastern Aegean Sea, Turkish Coasts.

Figure 39 b. Distribution of *Triloculina schreiberiana* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.

Figure 39 c. Distribution of *Triloculina serrulata* McCulloch in the Eastern Aegean Sea, Turkish Coasts.

Figure 39 d. Distribution of *Triloculina tricarinata* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.

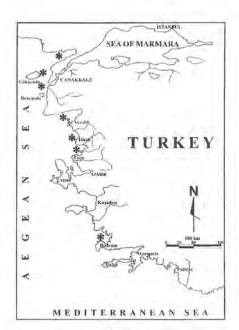
Service.











39 c

39 d

1929 Sigmoilina sigmoidea (Brady), Cushman, p. 50, pl. 11, figs. 3-6.
1993 Sigmoilina sigmoidea (Brady), Sgarella and Moncharmont-Zei, p. 184, pl. 9, fig. 13.

Occurrence: Gulf of Saros, S. 7 (90.00 m), S. 13 (156.00 m), S. 21 (97.00 m), S. 22 (118.50 m), S. 24 (386.00 m), S. 27 (144.80 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 40 (77.30 m), S. 66 (65.00 m), S. 69 (72.00 m), S. 74 (200.00 m), S. 80 (98.00 m); Gulf of Kuşadası and Güllük Bay, S. 5 (137.00 m), S. 8 (29.00 m): it occurs frequently in upper-lower circalittoral and upper epibathyal zones.

Genus Sigmoilinita Seiglie, 1965 Sigmoilinita costata (Schlumberger) (Pl. 16, figs. 3-5)

1893 Sigmoilina costata, Schlumberger, p. 203, pl. 1, figs. 51, 52. 1958 Sigmoilina costata Schlumberger, Le Calvez, J. and Y., p. 20, pl. 7, figs. 69,

1991 Sigmoilinita costata (Schlumberger), Cimerman and Langer, p. 47, pl. 45, figs. 1-6.

Occurrence: Gulf of Saros, S. 39 (37.70 m), S. 42 (27.50 m), S. 44 (26.20 m), S. 50 (41.00 m), S. 54 (94.50 m), S. 56 (41.00 m), S. 59 (98.00 m), S. 65 (61.00 m), S. 67 (550.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 7 (0.50 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 5 (137.50 m), S. 6 (92.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 14 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 2 (100.40 m), S. 6 (15,00 m), S. 7 (19.00 m), S. 14 (37.70 m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (69.00 m), S. 12 (25.50 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 2 (45.00 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 8 (69.00 m). This species occurs abundantly in different localities of Eastern Aegean Sea, and is reported mostly from infralittoral-upper circalittoral zones. It is rare in lower circalittoral and lower epibathyal zones.

### Sigmoilinita edwardsi (Schlumberger) (Pl. 16, figs. 6-7)

1997 Sigmoilinita edwardsi (Schlumberger), Avşar, p. 70, pl. 3, fig. 1.

Occurrence: Gulf of Saros, S. 13 (156.00 m), S. 18 (88,10 m), S. 19 (96.50 m), S. 20 (92.00 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 29 (92.00 m), S. 35 (195.00 m), S. 66 (65.00 m), S. 75 (42.00 m); Gökçeada, S. 4 (0.50 m), S. 30 (3.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 8 (58.00 m), S. 9 (72.00 m), s. 15 (47.00 m); Gulf of Edremit, S. 3 (230.00 m); Dikili and Çandarlı Bays, S. 5 (18.00 m), S. 7 (35.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 5 (26.50 m); Çeşme, S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 9 (67.00 m); Gulf of Gökova, S. 2 (27.00 m), S. 5 (34.50 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m), S. 9 (147.00 m): it is frequent in the various localities, and is reported generally from infralittoral to upper circalittoral zones. It also occurs frequently in lower circalittoral-upper epibathyal zones.

### Sigmoilinita tenuis (Czjzek)

1848 Quinqueloculina tenuis, Czjzek, p. 149, pl. 13, figs. 31-34.

1923 Spiroloculina tenuis (Czjzek), Wiesner, p. 30, pl. 4, fig. 9.

1958 Sigmoilina tenuis (Czjzek), Le Calvez, J. and Y., p. 210.

1979 Sigmoilina tenuis (Czjzek), Alfirevic, p. 77, pl. 8, fig. 5.

1988 Sigmoilinita tenuis (Czjzek), Loeblich and Tappan, p. 348, pl. 356, figs. 17 and 18.

1991 Sigmoilinita tenuis (Czjzek), Cimerman and Langer, p. 48, pl. 45, figs. 7-10.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 35 (80,00 m), S. 36 (82.00 m); it is poorly recorded from two localities of northeastern Aegean Sea. It occurs in the upper circalittoral zone.

Subfamily Sigmoilopsinae Vella, 1957 Genus Sigmoilopsis Finlay, 1947 Sigmoilopsis schlumbergeri (Silvestri) (Pl. 16, figs, 8-9)

- 1904 Sigmoilina schlumbergeri, Silvestri, p. 267.
- 1929 Sigmoilina schlumbergeri Silvestri, Cushman, p. 49, pl. 11, figs. 1-3.
- 1958 Sigmoilina schlumbergeri Silvestri, Le Calvez, J. and Y., p. 2110, pl. 8, fig. 94.
- 1958 Sigmoilina schlumbergeri Silvestri, Le Calvez, Y., p. 162.
- 1960 Sigmoilopsis schlumbergeri (Silvestri), Barker, pl. 8, fig. 1.
- 1984 Sigmoilopsis schlumbergeri (Silvestri), Todd and Kennett, pl. 2, fig. 13.
- 1988 Sigmoilopsis schlumbergeri (Silvestri), Loeblich and Tappan, p. 350, pl. 356, figs. 8-13.

1990 Sigmoilopsis schlumbergeri (Silvestri), Galluzzo, et al., pl. 1, fig. 18.

1990 Sigmoilopsis schlumbergeri (Silvestri), Thomas et al., pl. 8, fig. 4.

1991 Sigmoilopsis schlumbergeri (Silvestri), Cimerman and Langer, p. 48, pl. 46, figs. 10-14.

1993 Sigmoilopsis schlumbergeri (Silvestri), Sgarella and Moncharmont-Zei, p. 185, pl. 9, fig. 4.

Occurrence: Gulf of Saros, S. 5 (43.00 m), S. 6 (70.00 m), S. 7 (90.00 m), S. 8 (55.70 m), S. 9 (71.80 m), S. 10 (68.50 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m), S. 26 (631.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 43 (51.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 53 (440.00 m), S. 54 (94.50 m), S. 57 (52.00 m), S. 60 (55.00 m), S. 61 (70.00 m), S. 62 (110.00 m), S. 64 (75.00 m), S. 65 (61.00 m), S. 68 (210.00 m), S. 69 (72.00 m), S. 72 (500.00 m), S. 73 (600.00 m), S. 74 (200.00 m), S. 75 (42.00 m), S. 80 (98:00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 25 (74.00 m), S. 27 (70.00 m), S. 31 (75.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m); Dikili and Çandarlı Bays, S. 13 (80.00 m); Gulf of Kuşadası and Güllük Bay, S. 5 (137.00 m), S. 8 (29.00 m), S. 12 (62.10 m), S. 13 (72.50 m), S. 14 (82.10 m); Gulf of Gökova, S. 5 (34.50 m), S. 7 (198.00 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m), S. 6 (56.10 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 4 (71.80 m); this species is abundant. It is reported frequently from infralittoral and upper circalittoral zones. It is also frequent in the lower circalittoral to lower epibathyal zones.

> Family Tubinellidae Rhumbler, 1906 Genus Articulina d'Orbigny 1826 Articulina alticostata Cushman (Pl. 16, fig. 10)

1944 Articulina alticostata, Cushman, p. 16, pl. 4, figs. 10-13. 1978 Articulina alticostata Cushman, Graham and Militante, p. 33, pl. 3, fig. 2.

- Figure 40 a. Distribution of Wellmanellinella striata (Sidebottom) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 40 b. Distribution of Sigmoilina sigmoidea (Brady) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 40 c. Distribution of Sigmoilinita costata (Schlumberger) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 40 d. Distribution of Sigmoilinita edwardsi (Schlumberger) in the Eastern Aegean Sea, Turkish Coasts.











40 c

40 d

Occurrence: Gulf of Datça, S. 4 (40.00 m): this species is recorded only in one sample of the infralittoral zone of the Gulf of Datça.

### Articulina carinata Wiesner (Pl. 16, figs.11-12)

1923 Articulina sagra d'Orbigny var. carinata, Wiesner, p. 74, pl. 19, fig. 188. 1970 Articulina pasifica Cushman, v. Daniels, p. 78, text-fig. 53. 1991 Articulina carinata Wiesner, Cimerman and Langer, p. 48, pl. 47, figs. 1-5. 2002 Articulina carinata Wiesner, Ayşar, p. 64, pl. 2, fig. 7.

Occurrence: Gökçeada, S. 25 (25.00 m), S. 29 (11.00 m), S. 30 (3.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 22 (45.00 m), S. 26 (72.00 m), S. 29 (50.00 m), S. 32 (46.00 m), S. 34 (38.00 m); Dikili and Çandarlı Bays, S. 8 (35.80 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 11 (47.00 m); Gulf of Gökova, S. 2 (27.00 m), S. 4 (46.20 m), S. 5 (34.50 m); Gulf of Datça, S. 2 (45.00 m): this species is frequent in the infralittoral zone.

### Articulina tubulosa (Seguenza)

1958 Articulina tubulosa (Seguenza), Parker, p. 255, pl. 1, figs. 12-13, 18-19.
1984 Articulina tubulosa (Segueneza), Ross and Kennett, pl. 1, figs. 9-11.
1993 Articulina tubulosa (Seguenza), Sgarella and Moncharmont-Zei, p. 190, pl. 10, fig. 10.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 31 (75.00 m): it occurs only in one sample of the upper circalittoral zone of the northeastern Aegean Sea.

Genus Parrina Cushman, 1931 Parrina bradyi (Millett) (Pl. 16, figs, 13-15)

1898 Nubecularia bradyi, Millett, p. 261, pl. 5, figs. 6a, b.
1923 Miliolina hibrida (Terquem), Wiesner, p. 71, pl. 14, figs. 172-175.
1960 Parrina bradyi (Millett), Barker, pl. 1, figs. 5, 6.
1970 Parrina bradyi (Millett), v. Daniels, p. 78, pl. 4, fig. 3.
1988 Parrina bradyi (Millett), Loeblich and Tappan, p. 351, pl. 358, figs. 16-18.
1991 Parrina bradyi (Millett), Cimerman and Langer, p. 49, pl. 47, figs. 6-7.

Occurrence: Gökçeada, S. 26 (9.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 5 (18.00 m), S. 8 (35.80 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 11 (47.00 m): it is rare and recorded from the infralittoral zone.

FE .

### Superfamily SORITACEA Ehrenberg, 1839 Family Peneroplidae Schultze, 1854 Genus Coscinospira Ehrenberg, 1839 Coscinospira hemprichii Ehrenberg

1839 Coscinospira hemprichii, Ehrenberg, p. 131, pl. 2, fig. 2.

1949 Spirolina arietina (Batsch), Said, p. 24, pl. 2, figs. 35, 39.

1972 Cribrospirolina distinctiva, Haman, p. 111, text-figs. 1, 3.

1984 Peneroplis pertusus (Forskal), Reiss and Hottinger, p. 242, figs. G25 d-g.

1988 Coscinospira hemprichii Ehrenberg, Loeblich and Tappan, p. 369, pl. 390, figs. 7-10.

1991 Coscinospira hemprichii Ehrenberg, Cimerman and Langer, p. 49, pl. 47, figs. 8-11.

1993 Coscinospira hemprichii Ehrenberg, Hottinger et al., p. 69, pl. 76, figs. 1-12; pl. 77, figs. 1-8.

Occurrence: Çeşme, S. 1 (0.50 m), S. 2 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 7 (0.50 m), S. 8 (0.50 m): it occurs rarely in the infralittoral zone. It is recorded only in one sample.

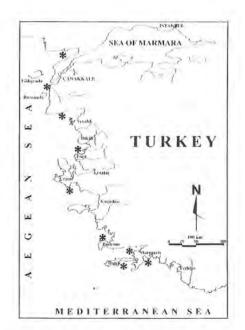
Genus Laevipeneroplis Sulc, 1936 Laevipeneroplis karreri (Wiesner) (Pl. 17, fig. 1)

1923 Peneroplis karreri, Wiesner, p. 96, pl. 20, fig. 285.
1991 Laevipeneroplis karreri (Wiesner), Cimerman and Langer, p. 49, pl. 48, figs. 1-7.

Occurrence: Gökçeada, S. 26 (9.00 m), S. 29 (11.00 m); Bozcaada, S. 10 (0.50 m); Çeşme, S. 1 (0.50 m), S. 2 (0.50 m), S. 4 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m): it is rare in Eastern Aegean Sea, and reported frequently from the infralittoral zone.

- Figure 41 a. Distribution of Sigmoilinita tenuis (Czjzek) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 41 b. Distribution of Sigmoilopsis schlumbergeri (Silvestri) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 41 c. Distribution of Articulina alticostata Cushman in the Eastern Aegean Sea, Turkish Coasts.
- Figure 41 d. Distribution of Articulina carinata Wiesner in the Eastern Aegean Sea, Turkish Coasts.











41 c

1961.64

41 d

### Genus Peneroplis de Montfort, 1803 Peneroplis pertusus (Forskal) (Pl. 17, figs. 2-4)

1775 Nautilus pertusus, Forskal, p. 125.

1917 Peneroplis pertusus (Forskal), Cushman, p. 86, pl. 36, fig. 1; pl. 37, figs. 1, 2, 6.

1974 Peneroplis pertusus (Forskal), Colom, p. 219, fig. 64.

1981 Peneroplis pertusus (Forskal), Chasens, pl. 1, fig. 13.

1991 Peneroplis pertusus (Forskal), Cimerman and Langer, p. 49, pl. 49, figs. 1-8.

1993 Peneroplis pertusus (Forskal), Sgarella and Moncharmont-Zei, p. 190, pl. 10, fig.13.

Occurrence: Gökçeada, S. 1 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 9 (0.50 m), S. 10 (0.50 m), S. 11 (0.50 m), S. 13 (13.00 m), S. 14 (55.00 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 17 (4.00 m), S. 18 (30.00 m), S. 19 (40.00 m), S. 20 (3.00 m), S. 21 (15.00 m), S. 22 (3.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 27 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Bozcaada, S. 1 (0.50 m), S. 2 (0.50 m), S. 3 (0.50 m), S. 5 (0.50 m), S. 6 (0.50 m), S. 7 (0.50 m), S. 8 (0.50 m), S. 9 (0.50 m), S. 10 (0.50 m), S. 11 (7.00 m), S. 12 (0.50 m), S. 13 (0.50 m), S. 14 (0.50 m), S. 15 (0.50 m), S. 16 (0.50 m), S. 17 (0.50 m); Gulf of Edremit, S. 7 (19.00 m); Dikili and Candarlı Bays, S. 3 (18.50 m), S. 5 (18.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 4 (40.00 m), S. 5 (26.50 m); Cesme, S. 1 (0.50 m), S. 2 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 7 (0.50 m), S. 8 (0.50 m), S. 9 (0.50 m), S. 10 (0.50 m), S. 11 (0.50 m), S. 11 (0.50 m), S. 12 (0.50 m); Gulf of Gökova, S. 2 (27.00 m), S. 5 (34.50 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m), S. 9 (147.00 m); Marmaris Bay, S. 8 (69.00 m): this species occurs frequently in different localities of Eastern Aegean Sea and is recorded mostly from the infralittoral zone and very rarely in upper-lower circalittoral zones.

# Peneroplis planatus (Fichtel and Moll) (Pl. 17, figs. 5-7)

1798 Nautilus planatus, Fichtel and Moll, p. 91, pl. 16, figs. a-h.

1826 Peneroplis planatus (Fichtel and Moll), d'Orbigny, p. 285, no. 1.

1858 Peneroplis planatus (Fichtel and Moll), Williamson, p. 45, pl. 3, figs. 84, 85.

1949 Peneroplis planatus (Fichtel and Moll), Said, p. 24, pl. 2, fig. 38.

1960 Peneroplis planatus (Fichtel and Moll), Barker, pl. 13, fig. 15.

1974 Peneroplis planatus (Fichtel and Moll), Colom, p. 219, figs. 64 h-i, k.

1981 Peneroplis planatus (Fichtel and Moll), Chasens, pl. 1, fig. 12.

1987 Peneroplis planatus (Fichtel and Moll), Baccaert, p. 58, pl. 17, figs. 1-4; pl. 18, fig. 1.

1988 Peneroplis planatus (Fichtel and Moll), Loeblich and Tappan, p. 371, pl. 391, figs. 7, 8.

1991 Peneroplis planatus (Fichtel and Moll), Cimerman and Langer, p. 50, pl. 50, figs. 1-6.

1993 Peneroplis planatus (Fichtel and Moll), Sgarella and Moncharmont-Zei, p. 190, pl. 10, fig. 14.

1993 Peneroplis planatus (Fichtel and Moll), Hottinger et al., p. 70, pl. 79, figs. 1-16; pl. 80, figs. 1-8.

1997 Peneroplis planatus (Fichtel and Moll), Haunold et al., p. 197, fig. 8.

2000 Peneroplis planatus (Fichtel and Moll), Cann et al., pl. 5, figs. o, p.

Occurrence: Gulf of Saros, S. 80 (98.00 M), Gökçeada, S. 1 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 10 (0.50 m), S. 11 (0.50 m), S. 15 (3.00 m), S. 17 (4.00 m), S. 21 (15.00 m), S. 26 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Bozcaada, S. 2 (0.50 m), S. 3 (0.50 m), S. 5 (0.50 m), S. 7 (0.50 m), S. 9 (0.50 m), S. 10 (0.50 m), S. 11 (7.00 m), S. 12 (0.50 m), S. 13 (0.50 m), S. 14 (0.50 m), S. 15 (0.50 m), S. 16 (0.50 m), S. 17 (0.50 m); Gulf of Edremit, S. 6 (15.00 m), S. 7 (19.00 m); Dikili and Çandarlı Bays, S. 3 (18.50 m), S. 5 (18.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 5 (26.50 m); Cesme, S. 1 (0.50 m), S. 2 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 6 (0.50 m), S. 7 (0.50 m), S. 8 (0.50 m), S. 9 (0.50 m), S. 10 (0.50 m), S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 12 (62.10 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 5 (34.50 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 6 (64.00 m), S. 8 (69.00 m): this species occurs abundantly in various localities of Eastern Aegean Sea, and is reported generally from the infralittoral zone and rarely in upper-lower circalittoral zones.

> Family Soritidae Ehrenberg, 1839 Subfamily Soritinae Ehrenberg, 1839 Genus Sorites Ehrenberg, 1839 Sorites orbiculus Ehrenberg (Pl. 17, fig. 8)

1775 Nautilus orbiculus, Forskal, p. 125.

1839 Sorites orbiculus, Ehrenberg, p. 134, pl. 3, fig. 2.

1852 Orbiculina complanata, Williamson, p. 115.

1961 Sorites orbiculus Ehrenberg, Lehman, p. 641, pl. 8, figs. 1-8.

1965 Sorites orbiculus Ehrenberg, Cole, p. 20-21, pl. 6, figs. 1-5, 7, 9; pl. 7, figs. 1-8, 10-12; pl. 8, figs. 7-9.

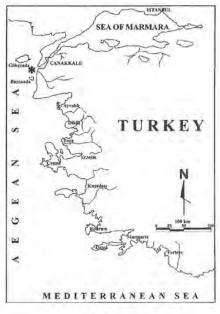
1977 Sorites orbiculus Ehrenberg, Hottinger, p. 94, figs. 9, 30 D, E, 32 B.

Figure 42 a. Distribution of Articulina tubulosa (Seguenza) in the Eastern Aegean Sea, Turkish Coasts.

Figure 42 b. Distribution of *Parrina bradyi* (Millet) in the Eastern Aegean Sea, Turkish Coasts.

Figure 42 c. Distribution of *Coscinospira hemprichii* Ehrenberg in the Eastern Aegean Sea, Turkish Coasts.

Figure 42 d. Distribution of *Laevipeneroplis karreri* (Wiesner) in the Eastern Aegean Sea, Turkish Coasts.











42 c

42 d

1984 Sorites orbiculus Ehrenberg, Reiss and Hottinger, p. 205, figs. 65 a-d.

1985 Sorites orbiculus Ehrenberg, Caprona d'Ersu, p. 355-356, pl. 9, figs 10-16; pl. 10, figs. 1-18; pl. 11, figs. 1-3; pl. 15, figs. 9-11.

1987 Sorites orbiculus Ehrenberg, Baccaert, pl. 28, figs. 1, 2; pl. 29, figs. 1 a, b.

1988 Sorites orbiculus Ehrenberg, Loeblich and Tappan, p. 382, pl. 419, figs. 4-10.

1991 Sorites orbiculus Ehrenberg, Cimerman and Langer, p. 50, pl. 51, figs. 1-5.

1993 Sorites orbiculus Ehrenberg, Sgarella and Moncharmont-Zei, p. 190, pl. 10, fig. 15.

1993 Sorites orbiculus Ehrenberg, Hottinger et al., p. 72, pl. 83, figs. 1-13.

1997 Sorites orbiculus Ehrenberg, Haunold et al., p. 199, fig. 10.

Occurrence: Gökçeada, S. 30 (3.00 m); Çeşme, S. 1 (0.50 m), S. 2 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 11 (0.50 m); Gulf of Gökova, S. 2 (27.00 m), S. 5 (34.50 m); Marmaris Bay, S. 8 (69.00 m): it occurs rarely in Eastern Aegean Sea and is reported from the infralittoral zone.

Order LAGENIDA Lankester, 1885
Superfamily NODOSARIACEA Ehrenberg, 1838
Family Nodosariidae Ehrenberg, 1838
Subfamily Nodosariinae Ehrenberg, 1838
Genus Dentalina Risso, 1826
Dentalina albatrossi (Cushman)
(Pl. 17, fig. 9)

1884 Nodosaria vertebralis Batsch, Brady, p. 514, pl. 63, fig. 35; pl. 64, figs. 11-14.

1923 Nodosaria vertebralis (Batsch) var. albatrossi, Cushman, p. 87, pl. 15, fig. 1.
1993 Dentalina albatrossi (Cushman), Sgarella and Moncharmont-Zei, p. 191, pl. 11, fig. 5.

Occurrence: Gulf of Kuşadası and Güllük Bay, S. 9 (67.00 m): this species is very rare in Eastern Aegean Sea and it is poorly recorded in the upper circalittoral zone.

Dentalina flintii (Cushman) (Pl. 17, figs. 10-12)

1923 Nodosaria flintii, Cushman, p. 85, pl. 14, fig. 1.

1960 Nodosaria flintii Cushman, Barker, pl. 64, figs. 20-22.

1991 Dentalina flintii (Cushman), Cimerman and Langer, p. 50-51, pl. 52, figs. 1-3.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 18 (69.00 m); Gulf of Edremit, S. 2 (100.40 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 8 (29.00 m); Gulf of Gökova, S. 3 (80.40 m), S. 7 (198.00 m); Gulf of Datça, S. 1 (252.30 m); Marmaris Bay, S. 2 (79.10 m): it is found in the depth-range of between

29.00 m and 252.30 m with low frequency. It is reported rarely from infralittoral to upper epibathyal zones.

### Dentalina inornata d'Orbigny (Pl. 18, figs. 1-3)

1846 Dentalina inornata, d'Orbigny, p. 44, pl. 1, figs. 50-51.
1985 Dentalina inornata d'Orbigny, p. 28, pl. 9, figs. 5-8.

1993 Dentalina inornata d'Orbigny, Sgarella and Moncharmont-Zei, p. 192, pl. 11, fig. 11.

Occurrence: Gulf of Saros, S. 13 (156.00 m), S. 21 (97.40 m), S. 25 (188.00 m), S. 28 (115.50 m), S. 64 (75.00 m), S. 68 (210.00 m); Gulf of Edremit, S. 2 (100.40 m): this species is rarely reported only from Gulf of Saros and Gulf of Edremit. It occurs in upper circalittoral-upper epibathyal zones.

# Dentalina mucronata Neugeboren (Pl. 18, figs. 4-5)

1884 Nodosaria mucronata (Neugeboren), Brady, p. 506, pl. 62, figs. 27-31.

1960 Dentalina mucronata Neugeboren, Hofker, p. 245, fig. 66.

1993 Dentalina mucronata Neugeboren, Sgarella and Moncharmont-Zei, p. 194, pl. 11, fig. 12.

Occurrence: Marmaris Bay, S. 1 (106.40 m): this species is very rare and recorded only in one sample coming from the Marmaris Bay. It occurs in the lower circalittoral zone.

### Genus Laevidentalina Loeblich and Tappan, 1986 Laevidentalina inflexa (Reuss)

1866 Nodosaria inflexa, Reuss, p. 131, pl. 2, fig. 1

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1913 Nodosaria inflexa Reuss, Barker, pl. 62, fig. 9.

1991 Laevidentalina inflexa (Reuss), Cimerman and Langer, p. 51, pl. 52, figs. 4-6.

1994 Laevidentalina inflexa (Reuss), Loeblich and Tappan, p. 65, pl. 114, figs. 10 16; pl. 115, fig. 6.

1999 Laevidentalina inflexa (Reuss), Hayward et al., p. 109-110, pl. 6, figs. 20-21

Figure 43 a. Distribution of *Peneroplis pertusus* (Forskal) in the Eastern Aegean Sea, Turkish Coasts.

Figure 43 b. Distribution of *Peneroplis planatus* (Fichtel and Moll) in the Eastern Aegean Sea, Turkish Coasts.

Figure 43 c. Distribution of *Sorites orbiculus* Ehrenberg in the Eastern Aegean Sea, Turkish Coasts.

Figure 43 d. Distribution of *Dentalina albatrossi* (Cushman) in the Eastern Aegean Sea, Turkish Coasts.











43 c

43 d

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 14 (71.00 m): it occurs only one sample of this region in upper circalittoral zone.

Genus Nodosaria Lamarck, 1812 Nodosaria raphanus (Linné) (Pl. 18, fig. 6)

1758 Nautilus raphanus, Linné, p. 711, pl. 1, fig. 6 d-h.
1993 Nodosaria raphanus (Linné), Sgarella and Moncharmont-Zei, p. 191, pl. 11, fig. 1.

Occurrence: Gulf of Saros, S. 4 (50.90 m), S. 6 (70.00 m), S. 11 (79.60 m), S. 14 (84.00 m), S. 21 (97.40 m), S. 28 (115.50 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 57 (52.00 m); Gulf of Kuşadası and Güllük Bay, S. 4 (226.00 m), S. 5 (137.00 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 10 (66.40 m); Gulf of Gökova, S. 5 (34.50 m); Gulf of Datça, S. 1 (252.30 m). This species is rare in Eastern Aegean Sea and occurs in the infralittoral zone. It is also reported from upper-lower circolittoral zones and rarely from the upper epibathyal zone.

Genus Pseudonodosaria Boomgaart, 1949 Pseudonodosaria comatula (Cushman) (Pl. 18, figs. 7-8)

1923 Nodosaria comatula, Cushman, p. 83, pl. 14, fig. 5.

1993 Pseudonodosaria comatula (Cushman), Sgarella and Moncharmont-Zei, p. 195, pl. 12, fig. 13.

1994 Pseudonodosaria comatula Cushman, Loeblich and Tappan, p. 66, pl. 116, figs. 13-16.

Occurrence: Gulf of Saros, S. 51 (12.30 m), S. 54 (94.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 6 (92.00 m), S. 20 (71.00 m), S. 25 (74.00 m): it is found rarely, in depth-range of between 12.30 m and 94.50 m. It is recorded from infralittoral and upper circalittoral zones.

Family Vaginulinidae Reuss, 1860 Subfamily Lenticulininae Chapman, Parr and Collins, 1934 Genus Lenticulina Lamarck, 1804 Lenticulina calcar (Linné)

1758 Nautilus calcar, Linné, p. 709.

1884 Cristellaria calcar, Brady, p. 55, pl. 70, figs. 9-12.

1960 Lenticulina calcar (Linné), Barker, pl. 70, figs. 9-12.

1974 Robulus calcar (Linné), Colom, p. 95, figs. 11 I, j, k.

1991 Lenticulina calcar (Linné), Cimerman and Langer, p. 51, pl. 53, figs. 1-4.

1993 Lenticulina calcar (Linné), Sgarella and Moncharmont-Zei, p. 194, pl. 12,

fig. 11, 1994 *Lenticulina calcar* (Linné), Loeblich and Tappan, p. 68, pl. 120, figs. 1-8.

Occurrence: Gulf of Gökova, S. 5 (34.50 m), S. 7 (198.00 m): poorly recorded in depth-range of between 34.50 m and 198.00 m and found only in the Gulf of Gökova. It occurs in infralittoral-lower circalittoral zones.

## Lenticulina cultrata (Montfort) (Pl. 18, figs. 9-10)

1808 Robulus cultratus, Montfort, p. 214, pl. 25, no. 14, 15.

1839b Robulina cultrata (Montfort), d'Orbigny, p. 26, pl. 5, figs. 19, 20.

1974 Lenticulina cultrata (Montfort), Le Calvez, Y., p. 58, text-fig. 1.

1991 Lenticulina cultrata (Montfort), Cimerman and Langer, p. 51, pl. 53, figs. 5-6.

1993 Lenticulina cultrata (Montfort), Sgarella and Moncharmont-Zei, p. 194.

Occurrence: Gulf of Saros, S. 7 (90.00 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 17 (33.90 m), S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 34 (82.00 m), S. 36 (74.00 m), S. 40 (77.30 m), S. 49 (45.00 m), S. 51 (12.30 m), S. 53 (440.00 m), S. 54 (94.50 m), S. 62 (110.00 m), S. 72 (500.00 m), S. 80 (98.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 20 (71.00 m); Gulf of Edremit, S. 3 (230.00 m); Dikili and Çandarlı Bays, S. 8 (35.80 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m); Gulf of Kuşadası and Güllük Bay, S. 8 (29.00 m); Gulf of Gökova, S. 7 (198.00 m), S. 8 (78.30 m); Gulf of Datça, S. 1 (252.30 m), S. 5 (59.30 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 71 (71.80 m), S. 5 (128.80 m): this species is generally abundant in Eastern Aegean Sea and occurs frequently in infralittoral, upper-lower circalittoral and upper epibathyal zones.

### Lenticulina gibba (d'Orbigny)

1826 Cristellaria gibba, d'Orbigny, p. 292, no. 17.

1839a Cristellaria gibba, d'Orbigny, p. 40, pl. 7, figs. 20, 21.

1913 Cristellaria gibba d'Orbigny, Cushman, p. 105, pl. 25, fig. 4.

1974 Robulus gibbus (d'Orbigny), Colom, p. 96, fig. 11 g.

1977b Lenticulina gibba (d'Orbigny), Le Calvez, Y., p. 25, fig. 1.

Figure 44 a. Distribution of *Dentalina flintii* (Cushman) in the Eastern Aegean Sea, Turkish Coasts.

Figure 44 b. Distribution of *Dentalina inornata* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.

Figure 44 c. Distribution of *Dentalina mucronata* Neugeboren in the Eastern Aegean Sea, Turkish Coasts.

Figure 44 d. Distribution of *Laeviidentalina inflexa* (Reuss) in the Eastern Aegean Sea, Turkish Coasts.









44 d

- 1991 Lenticulina gibba (d'Orbigny), Cimerman and Langer, p. 51, pl. 53, figs. 7-11.
- 1993 Lenticulina gibba (d'Orbigny), Sgarella and Moncharmont-Zei, p. 194.
- 2002 Lenticulina gibba (d'Orbigny), Kaminski et al., p. 27, pl. 2, fig. 6.

Occurrence: Gökçeada, S. 32 (16.00 m): it occurs poorly only one in locality of the infralittoral zone of the Eastern Aegean Sea.

### Lenticulina orbicularis (d'Orbigny) (Pl. 18, fig. 11)

1826 Robulina orbicularis, d'Orbigny, p. 288, pl. 15, figs. 8, 9.

1974 Robulus orbicularis (d'Orbigny), Colom, p. 97, fig. 11 a-e.

1991 Lenticulina orbicularis (d'Orbigny), Cimerman and Langer, p. 51-52, pl. 53, fig. 12.

1993 Lenticulina orbicularis (d'Orbigny), Sgarella and Moncharmont-Zei, p. 194, pl. 12, fig. 8.

Occurrence: Gulf of Edremit, S. 5 (125.00 m); Gulf of Kuşadası and Güllük Bay, S. 4 (226.00 m); Gulf of Gökova, S. 5 (34.50 m), S. 7 (198.00 m), S. 8 (78.30 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m), S. 9 (147.00 m); it is rare in infralittoral, upper-lower circalittoral and upper epibathyal zones.

### Genus Saracenaria Defrance, 1824 Saracenaria italica Defrance (Pl. 19, fig. 1)

1960 Saracenaria italica Defrance, Hofker, p. 248, fig. 81 A.

1964 Saracenaria italica Defrance, Colom, p. 527, fig. 15 (1, 2).

1993 Saracenaria italica Defrance, Sgarella and Moncharmont-Zei, p. 195, pl. 12, fig. 9.

1994 Saracenaria italica Defrance, Loeblich and Tappan, p. 69, pl. 125, figs. 9-16.

1999 Saracenaria italica Defrance, Hayward et al., p. 114, pl. 6, figs. 42-43.

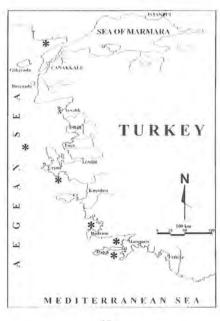
Occurrence: Gulf of Datça, S. 1 (252.30 m): it occurs very rare in Eastern Aegean Sea and in upper epibathyal zone.

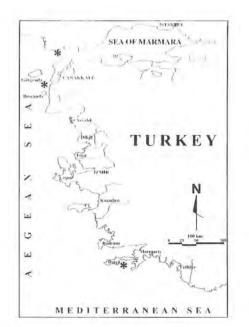
Figure 45 a. Distribution of *Nodosaria raphanus* (Linné) in the Eastern Aegean Sea, Turkish Coasts.

Figure 45 b. Distribution of *Pseudonodosaria comatula* (Cushman) in the Eastern Aegean Sea, Turkish Coasts.

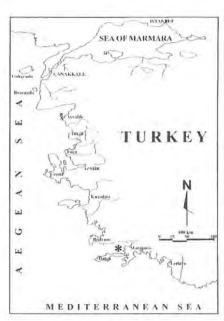
Figure 45 c, Distribution of *Lenticulina calcar* (Linné) in the Eastern Aegean Sea, Turkish Coasts.

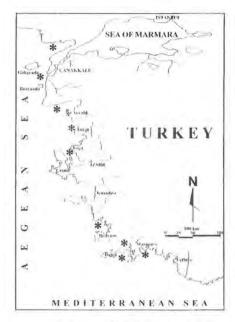
Figure 45 d. Distribution of *Lenticulina cultrata* (Montfort) in the Eastern Aegean Sea, Turkish Coasts.











45 c

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Subfamily Marginulininae Wedekind, 1936 Genus Amphicoryna Schlumberger, 1881 Amphicoryna scalaris (Batsch) (pl. 19, figs. 2-7)

1791 Nautilus (Ortoceras) scalaria. Batsch, p. 91, pl. 2, fig. 4 a, b, 1960 Amphicoryna scalaris (Batsch), Barker, pl. 63, figs. 28-31.

1970 Amphicoryna scalaris (Batsch), v. Daniels, p. 78, pl. 4, fig. 4, 1974 Nodosaria striaticollis (d'Orbigny), Le Calvez, Y., p. 32, pl. 8, figs. 1-5.

1988 Amphicoryna scalaris (Batsch), Loeblich and Tappan, p. 410, pl. 450, figs. 11-14.

1991 Amphicoryna scalaris (Batsch), Cimerman and Langer, p. 52, pl. 54, figs. 1-9.

1992 Amphicoryna scalaris (Batsch), Hatta and Ujiie, p. 166, pl. 21, figs. 8 a, b.

1993 Amphicoryna scalaris (Batsch), Sgarella and Moncharmont-Zei, p. 191, pl. 11, figs. 2-3.

2002 Amphicoryna scalaris (Batsch), Avşar, p. 64, pl. 2, figs. 8-9.

Occurrence: Gulf of Saros, S. 10 (68.50 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 20 (92.00 m), S. 22 (118.50 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 34 (82.00 m), S. 36 (74.00 m), S. 40 (77.30 m), S. 72 (500.00 m), S. 80 (98.00 m); Gokceada, S. 25 (25.00 m), S. 29 (11.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 15 (47.00 m), S. 22 (45.00 m), S. 24 (56.00 m), S. 26 (72.00 m); Gulf of Kuşadası and Güllük Bay, S. 3 (113.00 m), S. 4 (226.00 m), S. 5 (137.00 m), S. 8 (29.00 m); Gulf of Gökova, S. 5 (34.50 m), S. 7 (78.30 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.00 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 4 (71.80 m), S. 5 (128.80 m): this species occur abundantly in the different gulfs of Eastern Aegean Sea. It is reported from infralittoral to upper-lower circalittoral zones and is poor in upper-lower epibathyal zones.

Genus Astacolus de Montfort, 1808 Astacolus crepidulus (Fichtel and Moll) (Pl. 19, fig. 8)

1798 Nautilus crepidula, Fichtel and Moll, p. 107, pl. 19, figs. g-i.

1923 Cristellaria crepidula (Fichtel and Moll), Cushman, p. 117, pl. 35, figs. 3-4.

1960 Astacolus crepidulus (Fichtel and Moll), Barker, pl. 67, fig. 20; pl. 68, figs. 1 and 2.

1970 Planularia crepidula (Fichtel and Moll), v. Daniels, p. 78, pl. 4, fig. 5.

1971 Astacolus crepidulus (Fichtel and Moll), Murray, p. 77, pl. 29, figs. 5, 6.

1988 Astacolus crepidulus (Fichtel and Moll), Loeblich and Tappan, p. 410, pl. 450, figs. 7, 8.

- 1991 Astacolus crepidulus (Fichtel and Moll), Cimerman and Langer, p. 52, pl. 54, figs. 10-14.
- 1992 Astacolus crepidulus (Fichtel and Moll), Dawson, p. 132.
- 1993 Astacolus crepidulus (Fichtel and Moll), Sgarella and Moncharmont-Zei, p. 191, pl. 11, fig. 4.
- 1994 Astacolus crepidulus (Fichtel and Moll), Jones, pl. 67, fig. 20.
- 1994 Astacolus crepidulus (Fichtel and Moll), Loeblich and Tappan, p. 72, pl. 130, figs. 1-10.
- 1999 Astacolus crepidulus (Fichtel and Moll), Hayward et al., p. 112, pl. 6, figs. 28-29.
- 2001 Astacolus crepidulus (Fichtel and Moll), Debenay et al., pl. 3, fig. 30.

Occurrence: Gulf of Saros, S. 39 (37.70 m), S. 40 (77.30 m), S. 54 (94.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 22 (45.00 m); Gulf of Edremit, S. 6 (15.00 m); Gulf of Gökova, S. 7 (78.30 m); Gulf of Datça, S. 1 (252.30 m); Marmaris Bay, S. 1 (106.40 m), S. 3 (98.30 m): it occurs frequently in some gulfs of Eastern Aegean Sea. It is generally recorded in infralittoral and upper circalittoral zones. It is rare in lower circalittoral and upper epibathyal zones.

### Astacolus insolitus (Schwager)

- 1866 Cristellaria insolita, Schwager, p. 242, pl. 6, fig. 85.
- 1941 Astacolus insolitus (Schwager), Galloway and Heminway, p. 334, pl. 8, fig. 9.
- 1979 Astacolus insolithus (Schwager), Hayward and Buzas, p. 40, pl. 5, figs. 58-60.
- 1980 Astacolus insolitus (Schwager), Srinivasan and Sharma, p. 28, pl. 5, figs. 12,
- 1992 Astacolus insolitus (Schwager), Hatta and Ujiie, p. 166, pl. 21, figs. 9 a-c, 10.
- 1994 Astacolus insolitus (Schwager), Jones, pl. 67, fig. 17.
- 1999 Astacolus insolitus (Schwager), Hayward et al., p. 112, pl. 6, fig. 30.

Occurrence: Gulf of Gökova, S. 3 (80.40 m): this species is reported only from the Gulf of Gökova and it occurs in one sample coming from the upper circalittoral zone.

### Astacolus sublegumen (Parr) (PI, 19, fig. 9)

- 1884 Vaginulina legumen (Linné), Brady, p. 530, pl. 65, figs. 13, 14.
- 1950 Vaginulopsis sublegumen, Parr, p. 325, pl. 11, fig. 18.

Dec.

- 1960 Vaginulinopsis sublegumen Parr, Barker, p. 138, pl. 66, figs. 13, 14.
- 1992 Astacolus sublegumen (Parr), Hatta and Ujiie, p. 166, pl. 22, figs. 1, 2 a, b.

Occurrence: Gulf of Edremit, S. 18 (29.00 m); Gulf of Gökova, S. 5 (34.50 m): this species is poorly recorded only from two localities. It is recorded in the infralittoral zone.

### Genus Marginulina d'Orbigny, 1826 Marginulina costata (Batsch) (Pl. 19, figs. 10-12)

1791 Nautilus costatus, Batsch, p. 1, 4, pl. 1, figs. 1 a-g. 1960 Marginulina costata (Batsch), Hofker, p. 247, fig. 76.

1993 Marginulina costata (Batsch), Sgarella and Moncharmont-Zei, p. 195, pl. 12, fig. 5.

Occurrence: Gulf of Datça, S. 1 (252.30 m), S. 7 (56.40 m); Marmaris Bay, S. 3 (98.30 m), S. 4 (71.80 m): it occurs in four samples coming from two regions of Eastern Aegean Sea. It is found in the upper circalittoral zone. It also occurs rarely in the upper epibathyal zone.

### Family Lagenidae Reuss, 1862 GenusLagena Walker and Jacob, 1798 Lagena nebulosa Cushman

1923 Lagena laevis (Montagu) var. nebulosa, Cushman, p. 29, pl. 5, figs. 4-5.

1940 Lagena nebulosa Cushman, Buchner, p. 421, pl. 2, figs. 31, 32.

1993 Lagena nebulosa Cushman, Sgarella and Moncharmont-Zei, p. 198,pl. 11, fig. 18.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 36 (82.00 m): its occurrence is very rare in the upper circalittoral zone.

### Lagena semistriata Williamson

1848 Lagena striata (Montagu) var. b. semistriata, Williamson, p. 14, pl. 1, figs. 9, 10.

1940 Lagena laevis (Montagu) forma semistriata Williamson, Buchner, p. 418, pl. 3, figs. 39-43.

1993 Lagena semistriata Williamson, Sgarella and Moncharmont-Zei, p. 198, pl. 12, fig. 1.

2001 Lagena semistriata Williamson, Debenay et al., pl. 3, fig. 15.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 27 (70.00 m): this species

Figure 46 a. Distribution of *Lenticulina gibba* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.

Figure 46 b. Distribution of *Lenticulina orbicularis* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.

Figure 46 c. Distribution of Saracenaria italica Defrance in the Eastern Aegean Sea, Turkish Coasts.

Figure 46 d. Distribution of *Amphicoryna scalaris* (Batsch) in the Eastern Aegean Sea, Turkish Coasts.

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46 b





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46 d

occurs poorly in the upper circalittoral zone of Eastern Aegean Sea.

### Lagena striata d'Orbigny (Pl. 20, figs. 1-2)

1839c Oolina striata, d'Orbigny, pl. 5, fig. 12.

1923 Lagena substriata Williamson, Cushman, p. 56, pl. 10, fig. 11.

1970 Lagena striata (d'Orbigny), v. Daniels, p. 79, pl. 4, fig. 9 a.

1987 Lagena striata (d'Orbigny), Yanko and Troitskaja, pl. 3, fig. 16.

1990 Lagena striata (d'Orbigny), Thomas et al., pl. 8, fig. 9.

1991 Lagena striata (d'Orbigny), Cimerman and Langer, p. 53, pl. 55, figs. 6, 7.

1993 Lagena striata (d'Orbigny), Sgarella and Moncharmont-Zei, p. 198, pl. 12, figs. 2, 3.

2002 Lagena striata (d'Orbigny), Kaminski et al., p. 27, pl. 2, fig. 4.

2002 Lagena striata (d'Orbigny), Avşar, p. 64, pl. 2, fig. 10.

Occurrence: Gulf of Saros, S. 13 (156.00 m), S. 18 (88.10 m), S. 21 (97.40 m), S. 22 (118.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 9 (72.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 27 (70.00 m), S. 35 (80.00 m); Gulf of Kuşadası and Güllük Bay, S. 5 (137.00 m); Gulf of Gökova, S. 5 (34.50 m), S. 7 (198.00 m); Gulf of Datça, S. 1 (252.30 m), S. 8 (246.40 m), S. 9 (147.00 m); Marmaris Bay, S. 5 (128.80 m): it occurs frequently in different localities of Eastern Aegean Sea and is recorded from infralittoral to upper epibathyal zones.

Superfamily POLYMORPHINACEA d'Orbigny, 1839
Family Polymorphinidae d'Orbigny, 1839
Subfamily Polymorphininae d'Orbigny, 1839
Genus Globulina d'Orbigny, 1839
Globulina myristiformis (Williamson)
(Pl. 20, fig. 3)

1858 Polymorphina myristiformis, Williamson, p. 73, pl. 6, figs. 156, 157

1960 Globulina gibba d'Orbigny var. myristiformis (Williamson), Barker, p. 73, figs. 9, 10.

1972 Globulina myristiformis (Williamson), Rosset-Moulinier, p. 154, pl. 8, fig. 18

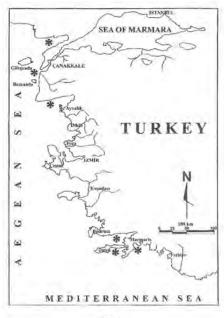
1974 Globulina gibba var. myristiformis (Williamson), Colom, p. 113, fig. 15b,

Gigure 47 a. Distribution of Astacolus crepidulus (Fichtel and Moll) in the Eastern Aegean Sea, Turkish Coasts.

Figure 47 b. Distribution of Astacolus insolithus (Schwager) in the Eastern Aegean Sea, Turkish Coasts.

Figure 47 c. Distribution of Astacolus sublegumen (Parr) in the Eastern Aegean Sea, Turkish Coasts.

Figure 47 d. Distribution of *Marginulina costata* (Batsch) in the Eastern Aegean Sea, Turkish Coasts.











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47 d

1991 Globuluina? myristiformis (Williamson), Cimerman and Langer, p. 53-54, pl. 56, figs. 13, 14.

1995 Globulina myristiformis (Williamson), Meriç et al., 1995, p. 109, pl. 6, fig. 6.

2001 Globulina myristiformis (Williamson), Debenay et al., pl. 3, fig. 12.

Occurrence: Gulf of Saros, S. 14 (84.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 6 (92.00 m): it occurs poorly in two localities corresponding to the upper circalittoral zone.

### Globulina punctata d'Orbigny

1846 Globulina punctata, d'Orbigny, p. 229, pl. 13, figs. 17, 18.

1930 Globulina gibba var. punctata d'Orbigny, Cushman and Ozawa, p. 69, pl. 17, figs. 4, 5,

1974 Globulina gibba var. punctata d'Orbigny, Colom, p. 113, figs. 15 e, f, I.

1991 Globulina? punctata d'Orbigny, Cimerman and Langer, p. 54, pl. 56, figs. 5-7.

2001 Globulina punctata d'Orbigny, Meric and Avşar, p. 128.

Occurrence: Gökçeada, S. 29 (11.00 m): this species occurs rarely and only in one sample blonging to the infralittoral zone.

Genus Polymorphina d'Orbigny, 1826 Polymorphina sp. 1 (Pl. 20, fig. 4)

1991 Polymorphina sp. 1, Cimerman and Langer, p. 54, pl. 56, figs. 8-10.

Occurrence: Gulf of Edremit, S. 1 (334.50 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 3 (18.50 m), S. 8 (35.80 m): it is rarely found in two localities. It is recorded in infralittoral and upper epibathyal zones.

Polymorphina sp. 2 (Pl. 20, fig. 5)

1991 Polymorphina sp. 2, Cimerman and Langer, p. 54, pl. 57, fig. 1.

Figure 48 a. Distribution of *Lagena nebulosa* Cushman in the Eastern Aegean Sea, Turkish Coasts.

Figure 48 b. Distribution of *Lagena semistriata* Williamson in the Eastern Aegean Sea, Turkish Coasts.

Figure 48 c. Distribution of Lagena striata d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.

Figure 48 d. Distribution of *Globulina myristiformis* (Williamson) in Eastern Aegean Sea, Turkish Coasts.

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48 c

48 d

Occurrence: Gökçeada, S. 29 (11.00 m); Gulf of Kuşadası and Güllük Bay, S. 6 (45.60 m); Gulf of Gökova, S. 3 (80.40 m): this species occurs poorly and is reported from infralittoral to upper circalittoral zones.

### Polymorphina sp. 3

1991 Polymorphina sp. 3, Cimerman and Langer, p. 54, pl. 57, figs. 2-4.

Occurrence: Gulf of Saros, S. 14 (84.00 m), S. 17 (33.90 m), S. 40 (77.30 m), S. 43 (51.50 m), S. 48 (40.00 m), S. 50 (41.00 m), S. 72 (500.00 m), S. 79 (29.00 m); Gökçeada, S. 3 (0.50 m), S. 13 (12.00 m), S. 14 (55.00 m), S. 16 (4.00 m), S. 18 (30.00 m), S. 23 (10.00 m), S. 25 (25.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Bozcaada, S. 3 (0.50 m), S. 4 (0.50 m), S. 9 (0.50 m), S. 13 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 22 (45.00 m); Gulf of Edremit, S. 18 (29.00 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m), S. 5 (59.30 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m): this species is recorded frequently in different localities of Eastern Aegean Sea. It occurs frequently in infralittoral and upper circalittoral zones, and rarely in lower circalittoral and upper epibathyal zones.

### Polymorphina sp. 5

1991 Polymorphina sp. 5, Cimerman and Langer, p. 54, pl. 57, figs. 5-7.

Occurrence: Gulf of Saros, S. 17 (33.90 m), S. 40 (77.30 m), S. 50 (41.00 m), S. 51 (12.30 m); Gökçeada, S. 16 (4.00 m), S. 25 (25.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Bozcaada, S. 3 (0.50 m), S. 13 (0.50 m), S. 14 (0.50 m); Gökçeada-Bozcaada-Canakkale triangle, S. 33 (39.00 m): it occurs generally in the infralittoral zone and rarely in the upper circalittoral zone.

#### Polymorphina sp. 7

1991 Polymorphina? sp. 7, Cimerman and Langer, p. 55, pl. 56, figs. 1-4.

Occurrence: Gulf of Saros, S. 39 (37.70 m), S. 42 (27.50 m): it occurs poorly only in one locality of Eastern Aegean Sea. It is recorded from the infralittoral zone.

Family Ellipsolagenidae A. Silvestri, 1923 Subfamily Oolininae Loeblich and Tappan, 1961 Genus Favulina Patterson and Richardson, 1987 Favulina hexagona (Montagu) (Pl. 20, figs. 6-7)

1848 Entosalenia squamosa (Montagu) var. hexagona Williamson, Williamson, p. 20, pl. 2, fig. 23.

- 1858 Entosalenia squamosa (Montagu) var. hexagona Williamson, Williamson, pl. 1, fig. 32.
- 1884 Lagena hexagona (Williamson), Brady, p. 472, pl. 58, fig. 33.
- 1960 Oolina hexagona (Williamson), Barker, p. 120, pl. 58, fig. 33.
- 1977 Oolina ef. hexagona (Williamson), McCulloch, p. 80, pl. 54, fig. 11.
- 1990 Oolina hexagona (Williamson), Thomas et al., pl. 8, fig. 13.
- 1991 Favulina hexagona (Montagu), Cimerman and Langer, p. 55, pl. 58, figs. 8-9.
- 1992 Favulina hexagona (Williamson), Hatta and Ujiie, p. 168, pl. 23, figs. 4 a, b
- 1994 Favulina hexagona (Williamson), Loeblich and Tappan, p. 86, pl. 151, figs. 11, 12.
- 1995 Favulina hexagona (Montagu), Meriç et al., pl. 6, figs. 7 a, b, c.
- 2002 Favulina hexagona (Montagu), Kaminski et al., p. 26, pl. 2, fig. 8.
- 2002 Favulina hexagona (Montagu), Avşar, p. 64, pl. 2, fig. 11.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 9 (72.00 m), S. 26 (72.00 m), S. 27 (70.00 m); Gulf of Edremit, S. 3 (230.00 m): this species occurs poorly in two localities of northeastern Aegen Sea. It is recorded from upper circalittoral to upper epibathyal zones.

Favulina squamosa (Montagu) (Pl. 20, figs. 8-9)

- 1957 Lagena squamosa Montagu, Mineraria, pl. 19, fig. 2. 2001 Favulina squamosa (Montagu), Debenay et al., pl. 3, fig. 6.
- Occurrence: Gulf of Edremit, S. 3 (230.00 m): this species is recorded only in one locality. It occurs very poorly in the upper epibathyal zone.

Subfamily Ellipsolageninae A. Silvestri, 1923 Genus Fissurina Reuss, 1850 Fissurina lucida (Williamson)

- 1858 Entosolenia marginata var. lucida, Williamson, p. 10, pl. 1, figs. 22, 23. 1987 Fissurina lucida (Williamson), Yanko and Troitskaja, pl. 5, figs. 1-12. 1991 Fissurina lucida (Williamson), Cimerman and Langer, p.55-56, pl.59, fig. 1. 1994 Fissurina lucida (Williamson), Loeblich and Tappan, p. 90, pl. 156, figs. 1-3.
- Figure 49 a. Distribution of *Globulina punctata* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 49 b. Distribution of *Polymorphina* sp. 1 in the Eastern Aegean Sea, Turkish Coasts.
- Figure 49 c. Distribution of *Polymorphina* sp. 2 in the Eastern Aegean Sea, Turkish Coasts.
- Figure 49 d. Distribution of *Polymorphina* sp. 3 in the Eastern Aegean Sea, Turkish Coasts.











49 c

49 d

1999 Fissurina lucida (Williamson), Hayward et al., p. 119, pl. 7, figs. 20-21. 2001 Fissurina lucida (Williamson), Debenay et al., pl. 3, fig. 27.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 17 (39.00 m): its occurrence is always very rare in Eastern Aegean Sea and reported from the infralittoral zone.

### Fissurina neptunii (Buchner)

1940 Lagena neptunii, Buchner, p. 484, pl. 15, figs. 294-296. 1993 Fissurina neptunii (Buchner), Sgarella and Moncharmont-Zei, p. 202, pl. 13, fig. 6.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 35 (80. 00 m): this species is always very rare in the upper circalittoral zone.

#### Fissurina orbignyana Seguenza

1940 Lagena orbignyana (Seguenza), Buchner, p. 504, pl. 20, figs. 410-412.

1971 Fissurina orbignyana Seguenza, Murray, p. 99, pl. 40, figs. 1-5.

1991 Palliolatella orbignyana Seguenza, Cimerman and Langer, p. 56, pl. 59, figs. 6-7.

1999 Fissurina orbignyana Seguenza, Hayward et al., p. 120, pl. 7, fig. 24.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 27 (70.00 m): this species occurs only in one locality and is very rare in the upper circalittoral zone.

#### Fissurina sidebottomi (Buchner)

1940 Lagena sidebottomi, Buchner, p. 484, pl. 16, figs. 297-299.
1993 Fissurina sidebottomi (Buchner), Sgarella and Moncharmont-Zei, p. 204, pl. 13, fig. 7.

Occurrence: Gulf of Saros, Harmantaşı locality, Line 1, S. 8 (45.00 m), S. 9 (50.00 m): this species is very rare. It occurs mostly in depth-range of between 45.00 m and 50.00 m, and is recorded in the infralittoral zone.

- Figure 50 a. Distribution of *Polymorphina* sp. 5 in the Eastern Aegean Sea, Turkish Coasts.
- Figure 50 b. Distribution of *Polymorphina* sp. 7 in the Eastern Aegean Sea, Turkish Coasts.
- Figure 50 c. Distribution of Favulina hexagona (Montagu) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 50 d. Distribution of Favulina squamosa (Montagu) in the Eastern Aegean Sea, Turkish Coasts.





50 b





50 c

50 d

### Subfamily Parafissurininae R. W. Jones, 1984 Genus Parafissurina Parr, 1947 Parafissurina lateralis (Cushman)

1913 Lagena lateralis, Cushman, p. 9, pl. 1, fig. 1.

1940 Lagena lateralis Cushman, Buchner, p. 520, pl. 23, figs. 487-503.

1993 Parafissurina lateralis (Cushman), Sgarella and Moncharmont-Zei, p. 205, pl. 13, fig. 11.

1994 Parafissurina lateralis (Cushman), Loeblich and Tappan, p. 94, pl. 164, figs. 1-10.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle. S. 8 (58.00 m), S. 9 (72.00 m): it occurs in depth-range of between 58.00 m and 72.00 m corresponding to the upper circalittoral zone.

### Parafissurina stapyllearia (Schwager)

1866 Fissurina staphyllearia, Schwager, p. 209, pl. 5, fig. 24.

1940 Lagena staphyllearia (Schwager), Buchner, p. 523, pl. 24, figs. 507-521.

1993 Parafissurina staphyllearia (Schwager), Sgarella and Moncharmont-Zei, p. 205, pl. 13, fig. 12.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 8 (58.00 m), S. 23 (58.00 m): it is very rare in northeastern Aegean Sea and reported from the upper circalittoral zone.

Family Glandulinidae Reuss, 1860 Subfamily Glandulininae Reuss, 1860 Genus Glandulina d'Orbigny, 1839 Glandulina laevigata (d'Orbigny)

1826 Nodosaria laevigata, d'Orbigny, p. 252, pl. 10, figs. 1-3.

1964 Glandulina laevigata (d'Orbigny), Loeblich and Tappan, 1964, fig. 421, figs. 1 and 2.

1993 Glandulina laevigata (d'Orbigny), Sgarella and Moncharmont-Zei, p. 206.

Occurrence: Gulf of Saros, S. 23 (383.00 m), S. 38 (53.40 m): it occurs rarely in the

Figure 51 a. Distribution of *Fissurina lucida* (Williamson) in the Eastern Aegean Sea, Turkish Coasts.

Figure 51 b. Distribution of *Fissurina neptunii* (Buchner) in the Eastern Aegean Sea, Turkish Coasts.

Figure 51 c. Distribution of *Fissurina orbignyana* Seguenza in the Eastern Aegean Sea, Turkish Coast.

Figure 51 d. Distribution of *Fissurina sidebottomi* (Buchner) in the Eastern Aegean Sea, Turkish Coasts.





51 b





51 c

51 d

Gulf of Saros and is reported from upper circalittoral to upper epibathyal zones.

Order ROBERTINIDA Mikhalevich, 1980
Superfamily CERATOBULIMINACEA Cushman, 1927
Family Epistominidae Wedekind, 1937
Subfamily Epistomininae Wedekind, 1937
Genus Hoeglundina Brotzen, 1948
Hoeglundina elegans (d'Orbigny)

1826 Rotalia (Turbinulina) elegans, d'Orbigny, p. 276, no. 54.

1931 Epistomina elegans (d'Orbigny), Cushman, p. 65, pl. 13, figs. 6 a-i.

1960 Hoeglundina elegans (d'Orbigny), Barker, pl. 105, figs. 3-6.

1974 Hoeglundina elegans (d'Orbigny), Colom, p. 173, figs. 44 v, w.

1988 Hoeglundina elegans (d'Orbigny), Loeblich and Tappan, p. 446, pl. 478, figs. 1-3.

1990 Hoeglundina elegans (d'Orbigny), Galluzzo et al., pl. 1, figs. 23-24.

1990 Hoeglundina elegans (d'Orbigny), Thomas et al., pl. 7, fig. 12.

1991 Hoeglundina elegans (d'Orbigny), Cimerman and Langer, p. 56-57, pl. 59, figs. 10-12.

1994 Hoeglundina elegans (d'Orbigny), Loeblich and Tappan, p. 98, pl. 174, figs.

1999 Hoeglundina elegans (d'Orbigny), Hayward et al., p. 123, pl. 8, figs. 5-7.

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 23 (383.00 m), S. 27 (144.80 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 36 (74.00 m), S. 69 (72.00 m), S. 72 (500.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 31 (75.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m), S. 6 (15.00 m); Gulf of Kuşadası and Güllük Bay, S. 5 (137.00 m), S. 8 (29.00 m); Gulf of Gökova, S. 7 (198.00 m); Gulf of Datça, S. 1 (252.00 m), S. 8 (246.40 m): this species occurs frequently in the different localities of Eastern Aegean Sea. It is recorded rarely in the infralittoral zone, but, frequently from upper circalittoral-upper epibathyal zones.

Order BULIMINIDA Fursenko, 1958
Superfamily BOLIVINACEA Glaessner, 1937
Family Bolivinidae Glaesner, 1937
Genus Brizalina O. G. Costa, 1856
Brizalina alata (Seguenza)
(Pl. 20, fig. 1)

1862 Vulvulina alata, Seguenza, p. 115, pl. 2, fig. 5.

1960 Bolivina alata (Seguenza), Hofker, p. 248, figs. 85-88.

1960 Bolivina alata (Segueneza), Barker, pl. 53, figs. 2-4.

1991 Brizalina alata (Seguenza), Cimerman and Langer, p. 59, pl. 61, figs. 12-14.

1993 Bolivina alata (Seguenza), Sgarella and Moncharmont-Zei, p. 207, pl. 14, fig. 8.

1995 Brizalina alata (Seguenza), Meriç et al., p. 109, pl. 6, figs. 8 a-d. 2002 Brizalina alata (Seguenza), Kaminski et al., p. 23, pl. 2, fig. 12. 2002 Brizalina alata (Seguenza), Avşar, p. 64, pl. 2, fig. 12.

Occurrence: Gulf of Saros, S. 55 (22.00 m), S. 56 (41.00 m), S. 57 (52.00 m), S. 61 (70.00 m), S. 62 (110.00 m), S. 65 (61.00 m), S. 70 (13.00 m), S. 71 (90.00 m), S. 72 (500.00 m), S. 75 (42.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 17 (39.00 m), S. 23 (58.00 m), S. 26 (72.00 m), S. 31 (75.00 m), S. 35 (80.00 m), S. 36 (82.00 m); this species is common in northeastern Aegean Sea. It is reported frequently from infralittoral-upper circalittoral zones, and it is rarely in upper epibathyal zone.

#### Brizalina spathulata (Williamson)

- 1858 Textularia variabilis var. spathulata, Williamson, p. 76, pl. 6, figs. 164, 165.
- 1937b Bolivina spathulata (Williamson), Cushman, p. 162, pl. 15, figs. 20-24.
- 1974 Brizalina spathulata (Williamson), Colom, p. 121, figs. 18 h, I.
- 1991 Brizalina spathulata (Williamson), Cimerman and Langer, p. 60, pl. 62, figs. 3-5.
- 1993 Bolivina spathulata (Williamson), Sgarella and Moncharmont-Zei, p. 210, pl. 14, fig. 3.
- 1995 Brizalina spathulata (Williamson), Meric et al., p. 109, pl. 7, figs. 1 a-b.
- 1999 Bolivina spathulata (Williamson), Hayward et al., p. 126, pl. 8, fig. 17.
- 2001 Brizalina spathulata (Williamson), Debenay et al., pl. 4, fig. 1.
- 2002 Brizalina spathulata (Williamson), Kaminski et al., p. 24, pl. 2, fig. 9.
- 2002 Brizalina spathulata (Williamson), Avşar, p. 64, pl. 2, fig. 13.

Occurrence: Gulf of Saros, S. 554 (22.00 m), S. 56 (41.00 m), S. 58 (60.00 m), S. 59 (98.00 m), S. 61 (70.00 m), S. 64 (75.00 m), S. 67 (550.00 m), S. 68 (210.00 m), S. 70 (13.00 m), S. 71 (90.00 m), S. 73 (600.00 m), S. 74 (200.00 m), S. 75 (42.00 m), S. 76 (53.00 m), S. 77 (53.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 31 (75.00 m), S. 32

- Figure 52 a. Distribution of *Parafissurina lateralis* (Cushman) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 52 b. Distribution of *Parafissurina staphyllearia* (Schwager) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 52 c. Distribution of Glandulina laevigata (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 52 d. Distribution of *Hoeglundina elegans* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.





52 b





52 c

36,3

52 d

(45.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m): this species occurs frequently in two localities of northeastern Aegean Sea. It is mostly reported in infralittoral and upper circalittoral zones. It also occurs frequently in upper-lower epibathyal zones.

#### Brizalina striatula (Cushman)

- 1922a Bolivina striatula, Cushman, p. 27, pl. 3, fig. 10.
- 1922b Bolivina striatula Cushman, Cushman, p. 43.
- 1937b Bolivina striatula Cushman, Cushman, p. 154, pl. 18, figs. 30, 31.
- 1974 Bolivina striatula Cushman, Colom, p. 120, figs. 17 a-g.
- 1991 Brizalina striatula (Cushman), Cimerman and Langer, p. 60, pl. 62, figs. 6-9.
- 1993 Bolivina striatula Cushman, Sgarella and Moncharmont-Zei, p. 210, pl. 14, fig. 16.
- 1999 Bolivina striatula Cushman, Haywart et al., p. 127, pl. 8, fig. 21.
- 2002 Brizalina striatula (Cushman), Kaminski et al., p. 24, pl. 2, fig. 10.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 27 (70.00 m), S. 36 (82.00 m): it is reported poorly from two localities in the upper circalittoral zone.

Superfamily CASSIDULINACEA d'Orbigny, 1839
Family Cassidulinidae d'Orbigny, 1839
Subfamily Cassidulininae d'Orbigny, 1839
Genus Cassidulina d'Orbigny, 1826
Cassidulina carinata Silvestri

- 1971 Cassidulina carinata Silvestri, Murray, p. 187, pl. 78, figs. 1-5.
- 1984 Cassidulina carinata Silvestri, Ross and Kennett, pl. 1, figs. 14-15.
- 1993 Cassidulina carinata Silvestri, Sgarella and Moncharmont-Zei, p. 236, pl. 23, figs. 8 and 9.
- 1994 Cassidulina carinata Silvestri, Loeblich and Tappan, p. 114, pl. 220, figs.
- 1995 Cassidulina carinata Silvestri, Meriç et al., p. 109, pl. 7, figs. 2 a-b.
- 1999 Cassidulina carinata Silvestri, Hayward et al., p. 127, pl. 8, figs. 23-24.
- 2002 Cassidulina carinata Silvestri, Kaminski et al, p. 24, pl. 3, figs. 1-2.
- 2002 Cassidulina carinata Silvestri, Avşar, p. 64, pl. 2, fig. 14.
- Figure 53 a. Distribution of *Brizalina alata* (Seguenza) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 53 b. Distribution of *Brizalina spathulata* (Williamson) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 53 c. Distribution of *Brizalina striatula* (Cushman) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 53 d. Distribution of *Cassidulina carinata* Silvestri in the Eastern Aegean Sea, Turkish Coasts.











53 c

6.11

53 d

Occurrence: Gulf of Saros, S. 23 (383.00 m), S. 55 (22.00 m), S. 56 (41.00 m), S. 58 (60.00 m), S. 64 (75.00 m), S. 67 (550.00 m), S. 70 (13.00 m), S. 73 (600.00 m), S. 75 (42.00 m), S. 76 (53.00 m), S. 77 (53.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 1 (334.50 m): this species occurs frequently in the northeastern Aegean Sea. It is reported frequently from infralittoral and upper circalittoral zones. It also occurs rarely in upper-lower epibathyal zones.

#### Genus Globocassidulina Voloshinova, 1960 Globocassidulina subglobosa (Brady) (Pl. 21, fig. 2)

1884 Cassidulina subglobosa, Brady, p. 430, pl. 54, fig. 17 a-c.

1922b Cassidulina subglobosa Brady, Cushman, p. 127, pl. 24, fig. 6.

1958 Cassidulina subglobosa Brady, Parker, p. 272, pl. 4, fig. 13.

1972 Cassidulina subglobosa Brady, Rosset-Moulinier, p. 185, pl. 11, fig. 20.

1991 Globocassidulina subglobosa (Brady), Cimerman and Langer, p. 61, pl. 63, figs. 4-6.

1993 Globocassidulina subglobosa (Brady), Sgarella and Moncharmont-Zei, p. 236 and 238, pl. 24, figs. 1-2.

1994 Globocassidulina subglobosa (Brady), Hatta and Ujiie, p. 13, pl. 2, fig. 5.

2002 Globocassidulina subglobosa (Brady), Avşar, p. 64, pl. 2, fig. 15.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (48.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m): it occurs frequently in one of the sampled localities of northeastern Aegean Sea. This form is recorded mostly in infralittoral-upper circalittoral zones.

Superfamily TURRILINACEA Cushman, 1923 Family Stainforthiidae Reiss, 1963 Genus Stainforthia Hofker, 1956 Stainforthia complanata (Egger)

1937b Virgulina complanata Egger, Cushman, p. 26-27, pl. 4, figs. 13-17.
1958 Virgulina complanata Egger, Parker, p. 272, pl. 4, fig. 20.
1960 Virgulina complanata Egger, Hofker, p. 249, fig. 99.

1990 Stainforthia complanata (Egger), Galluzzo et al., pl. 2, fig. 12.
1993 Stainforthia complanata (Egger), Sgarella and Moncharmont-Zei, p. 214, pl. 15, fig. 4.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 17 (39.00 m), S. 22 (45.00 m), S. 29 (50.00 m): this species is rare in the infralittoral zone.

Superfamily BULIMINACEA Jones, 1875 Family Siphogenerinoididae Saidova, 1981 Subfamily Tubulogenerininae Saidova, 1981 Genus Rectuvigerina Mathews, 1945 Rectuvigerina phlegeri Le Calvez (Pl. 21, fig. 3)

1993 Rectuvigerina phlegeri Le Calvez, Sgarella and Moncharmont-Zei, p. 215, pl. 16, figs. 3-4.

1995 Rectuvigerina phlegeri Le Calvez, Meriç et al., p. 109, pl. 7, figs. 4 a-c.

2002 Rectuvigerina phlegeri Le Calvez, Kaminski et al., p. 29, pl. 3, fig. 9.

2002 Rectuvigerina phlegeri Le Calvez, Avşar, p. 64, pl. 2, fig. 16.

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 13 (156.00 m), S. 56 (41.00 m), S. 76 (53.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 13 (79.00 m); this species occurs rarely, and is reported in infralittoral to upper epibathyal zones.

Subfamily Siphognerinoidinae Saidova, 1981 Genus Rectobolivina Cushman, 1927 Rectobolivina columellaris (Brady) (Pl. 21, figs. 4-5)

1884 Sagrina columellaris, Brady, p. 581-582, pl. 75, figs. 15-17.
1993 Rectobolivina columellaris (Brady), Sgarella and Moncharmont-Zei, p. 210, pl. 14, fig. 6

Occurrence: Gulf of Saros, S. 74 (200.00 m): this species is very rare in the lower circalittoral zone.

Family Buliminidae Jones, 1875 Genus Bulimina d'Orbigny, 1826 Bulimina aculeata d'Orbigny

1826 Bulimina aculeata, d'Orbigny, p. 269, no. 7.

1922b Bulimina aculeata d'Orbigny, Cushman, p. 96, pl. 22, figs. 1-2.

1960 Bulimina aculeata d'Orbigny, Barker, pl. 51, figs. 7-9.

1970 Bulimina aculeata d'Orbigny, v. Daniels, p. 82, pl. 5, fig. 8.

1974 Bulimina aculeata d'Orbigny, Colom, p. 115, fig. 16 g.

1984 Bulimina aculeata d'Orbigny, Ross and Kennett, pl. 2, fig. 6.

1987 Bulimina aculeata d'Orbigny, Yanko and Troitskaja, pl. 24, fig. 4.

1990 Bulimina aculeata d'Orbigny, Galluzzo et al., pl. 2, fig. 13.

1991 Bulimina aculeata d'Orbigny, Sgarella and Moncharmont-Zei, p. 211, pl. 15, fig. 1.

2002 Bulimina aculeata d'Orbigny, Kaminski et al., p. 24, pl. 3, fig. 3.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 15 (47.00 m), S. 24 (56.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m): this species is rare, mostly in depth-range of between 47.00 m and 82.00 m, corresponding to the upper circalittoral zone.

#### Bulimina costata d'Orbigny (Pl. 21, figs. 6-7)

1958 Bulimina costata d'Orbigny, Parker, p. 261, pl. 2, figs. 19-20.

1984 Bulimina costata d'Orbigny, Ross and Kennett, pl. 2, fig. 5.

1991 Bulimina cf. alazaensis Cushman, Cimerman and Langer, p. 62, pl. 64, figs. 1-2.

1993 Bulimina costata d'Orbigny, Sgarella and Moncharmont-Zei, p. 211, pl. 15, fig. 3.

2002 Bulimina costata d'Orbigny, Kaminski et al., p. 24, pl. 3, figs. 5-6.

2002 Bulimina costata d'Orbigny, Avşar, p. 64, pl. 2, figs. 17-18.

Occurrence: Gulf of Saros, S. 23 (383.00 m), S. 24 (386.00 m), S. 26 (631.00 m), S. 56 (41.00 m), S. 73 (600.00 m), S. 74 (200.00 m): this taxon occurs in depths deeper than 41.00 m. It is frequent between 200.00 m and 631.00 m, and recorded rarely in the infralittoral and frequently in upper-lower epibathyal zones.

#### Bulimina elongata d'Orbigny (Pl. 21, figs. 8-9)

1846 Bulimina elongata, d'Orbigny, p. 187, pl. 11, figs. 19-20.

1922b Bulimina elongata d'Orbigny, Cushman, p. 107.

1960 Bulimina elongata d'Orbigny, Barker, pl. 51, figs. 1-2.

1972 Bulimina elongata d'Orbigny, Rosset-Moulinier, p. 163, pl. 9, fig. 18.

1974 Bulimina elongata d'Orbigny, Colom, p. 116, fig. 16 a.

Figure 54 a. Distribution of *Globocassidulina subglobosa* (Brady) in the Eastern Aegean Sea, Turkish Coasts.

Figure 54 b. Distribution of *Stainforthia complanata* (Egger) in the Eastern Aegean Sea, Turkish Coasts.

Figure 54 c. Distribution of *Rectuvigerina phlegeri* Le Calvez in the Eastern Aegean Sea, Turkish Coasts.

Figure 54 d. Distribution of *Rectobolivina columellaris* (Brady) in the Eastern Aegean Sea, Turkish Coasts.











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- 1991 Bulimina elongata d'Orbigny, Cimerman and Langer, p. 62, pl. 64, figs. 3-8.
- 1993 Bulimina elongata d'Orbigny, Sgarella and Moncharmont-Zei, p. 211, pl. 15, figs. 10-11.
- 1995 Bulimina elongata d'Orbigny, Meriç et al., p. 110, pl. 7, figs. 5 a-c.
- 1999 Bulimina elongata d'Orbigny, Haywart et al., p. 132, pl. 9, figs. 6-7.
- 2001 Bulimina elongata d'Orbigny, Debenay et al., pl. 4, fig. 9.
- 2002 Bulimina elongata d'Orbigny, Kaminski et al., p. 24, pl. 3, fig. 4.

Occurrence: Gulf of Saros, S. 7 (90.00 m), S. 11 (79.60 m), S. 13 (158.00 m), S. 15 (39.50 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 35 (195.00 m), S. 38 (53.40 m), S. 40 (77.30 m), S. 48 (40.00 m), S. 52 (61.10 m), S. 53 (440.00 m), S. 55 (22.00 m), S. 56 (41.00 m), S. 59 (98.00 m), S. 65 (61.00 m), S. 66 (65.00 m), S. 69 (72.00 m), S. 76 (53.00 m); Gökçeada, S. 25 (25.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 17 (39.00 m), S. 19 (73.00 m), S. 23 (58.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Kuşadası and Güllük Bay, S. 5 (137.00 m): it occurs very frequently in infralittoral and upper circalittoral zones, and rarely in lower circalittoral-upper epibathyal zones.

#### Bulumina marginata d'Orbigny (Pl. 21, fig. 10)

- 1826 Bulimina marginata, d'Orbigny, p. 269, pl. 12, figs. 10-12.
- 1979 Bulimina marginata d'Orbigny, Hageman, p. 90, pl. 2, fig. 7.
- 1981 Bulimina marginata d'Orbigny, Sejrup et al., pl. 1, fig. 8.
- 1984 Bulimina marginata d'Orbigny, Ross and Kennett, pl. 2, fig. 7.
- 1987 Bulimina marginata forma marginata d'Orbigny, Jorissen, p. 46, pl. 4, fig. 6 a and b.
- 1988 Bulimina marginata forma marginata d'Orbigny, Jorissen, p. 75, pl. 4, fig. 6; pl. 12, figs. 7, 14-17; pl. 13, figs. 5, 10, 11, 13-15; pl. 14, figs. 1-3, 7, 9-11; pl. 15, figs. 1-2, 5-6.
- 1990 Bulimina marginata d'Orbigny, Galluzzo et al., pl. 2, fig. 15.
- 1991 Bulimina marginata d'Orbigny, Cimerman and Langer, p. 62, pl. 64, figs. 9-11.
- 1993 Bulimina marginata d'Orbigny, Sgarella and Moncharmont-Zei, p. 212, pl. 15, figs. 5-7.
- 1994 Bulimina marginata d'Orbigny, Loeblich and Tappan, p. 124, pl. 242, figs. 1-4.
- 1995 Bulimina marginata d'Orbigny, Meric et al., p. 109, pl. 7, fig. 6 a-d.
- 2001 Bulimina marginata d'Orbigny, Debenay et al., pl. 4, fig. 11.
- 2002 Bulimina marginata d'Orbigny, Avşar, p. 64, pl. 2, fig. 19.

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 13 (156.00 m), S. 55 (22.00 m), S. 56 (41.00 m), S. 62 (110.00 m), S. 65 (61.00 m), S. 66 (65.00 m), S. 70 (13.00 m), S.

76 (53.00 m), S. 77 (53.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 23 (58.00 m), S. 27 (70.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 1 (334.50 m); Gulf of Kuşadası and Güllük Bay, S. 4 (226.00 m): this species is frequent and occurs in depth-range of between 13.00 m and 334.50 m. It is common in infralittoral and upper circalittoral zones, and rare in the lower circalittoral zone. It is also reported from the upper epibathyal zone.

#### Genus Globobulimina Cushman, 1927 Globobulimina affinis (d'Orbigny) (Pl. 21, figs. 11-12)

1839c Bulimina affinis, d'Orbigny, p. 105, pl. 2, figs. 25-26.

1958 Globobulimina affinis (d'Orbigny), Parker, p. 262, pl. 2, figs. 24-25.

1984 Globobulimina affinis (d'Orbigny), Ross and Kennett, pl. 1, fig. 13.

1993 Globobulimina affinis (d'Orbigny), Sgarella and Moncharmont-Zei, p. 212, pl. 15, figs. 8-9.

2002 Globobulimina affinis (d'Orbigny), Kaminski et al., p. 26, pl. 3, fig. 8.

Occurrence: Gulf of Saros, S. 8 (55.70 m), S. 9 (71.80 m), S. 10 (68.50 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 20 (92.00 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m), S. 26 (631.00 m), S. 27 (144.00 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 33 (70.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 38 (53.40 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 48 (40.00 m), S. 52 (61.10 m), S. 53 (440.00 m), S. 54 (94.50 m), S. 56 (41.00 m), S. 60 (55.00 m), S. 62 (110.00 m), S. 66 (65.00 m), S. 68 (210.00 m), S. 69 (72.00 m), S. 71 (90.00 m), S. 72 (500.00 m), S. 74 (200.00 m), S. 75 (42.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 27 (70.00 m); Gulf of Edremit, S. 1 (334.50 m): it is abundant in various localities, generally in the northeastern part of Eastern Aegean Sea. This species occurs rarely in the infralittoral zone and is reported frequently in upper-lower circalittoral and upper-lower epibathyal zones.

#### Globobulimina pseudospinescens (Emiliani) (Pl. 21, fig. 13; Pl. 22, fig. 1)

1958 Globobulimina pseudospinescens (Emiliani), Parker, p. 262, pl. 2, figs. 26-27.

1984 Globobulimina pseudospinescens (Emiliani), Ross and Kennett, pl. 1, fig.

1993 Globobulimina pseudospinescens (Emiliani), Sgarella and Moncharmont-Zei, p. 212, pl. 15, fig. 12.

Occurrence: Gulf of Saros, S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m),

S. 53 (440.00 m), S. 56 (41.00 m), S. 57 (52.00 m), S. 62 (110.00 m), S. 68 (210.00 m), S. 75 (42.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 10 (57.00 m): it is relatively frequent in the northeastern part of Aegean Sea. This species is rare in the infralittoral zone and common in lower circalittoral and upper epibathyal zones.

Family Uvigerinidae Haeckel, 1894 Subfamily Uvigerininae Haeckel, 1894 Genus Euuvigerina Thalmann, 1953 Euuvigerina sp. (Pl. 21, figs. 2-3)

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 14 (84.00 m), S. 16 (71.10 m), S. 20 (92.00 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 25 (188.00 m), S. 26 (631.00 m), S. 28 (115.50 m), S. 59 (98.00 m), S. 62 (110.00 m), S. 66 (65.00 m), S. 68 (210.00 m), S. 69 (72.00 m), S. 72 (500.00 m), S. 75 (42.00 m): it is frequently recorded in depth-range of between 42.00 m and 500.00 m in the Gulf of Saros. It is rare in upper-lower circalittoral and upper-lower epibathyal zones.

Genus Uvigerina d'Orbigny, 1826 Uvigerina mediterranea Hofker (Pl. 22, figs. 4-5)

- 1932 Uvigerina mediterranea, Hofker, p. 1187, text-figs. 32 a-g.
- 1958 Uvigerina mediterranea Hofker, Parker, p. 263, pl. 2, figs. 39-40.
- 1974 Uvigerina mediterranea Hofker, Colom, p. 122, figs. 19 h-n.
- 1984 Uvigerina mediterranea Hofker, Ross and Kennett, pl. 2, figs. 1-2.
- 1987 Uvigerina mediterranea Hofker, Jorissen, pl. 1, fig. 2.
- 1991 Uvigerina mediterranea Hofker, Cimerman and Langer, p. 63, pl. 65, figs. 7-9.
- 1993 Uvigerina mediterranea Hofker, Sgarella and Moncharmont-Zei, p. 214, pl. 16, figs. 1-2.
- 1995 Uvigerina cf. mediterranea Hofker, Meric et al, p., 109, pl. 8, fig. 3.
- 2002 Uvigerina mediterranea Hofker, Kaminski et al., p. 30, pl. 3, fig. 10.

Occurrence: Gulf of Saros, S. 7 (90.00 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m)

- Figure 55 a. Distribution of *Bulimina aculeata* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 55 b. Distribution of *Bulimina costata* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 55 c. Distribution of *Bulimina elongata* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.
- Figure 55 d. Distribution of *Bulimina marginata* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.

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m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 53 (440.00 m), S. 62 (110.00 m), S. 63 (96.00 m), S. 66 (65.00 m), S. 69 (72.00 m), S. 70 (13.00 m), S. 72 (500.00 m), S. 73 (600.00 m), S. 74 (200.00 m), S. 75 (42.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 17 (39.00 m), S. 26 (72.00 m), S. 31 (75.00 m); Gulf of Edremit, S. 1 (334.50 m); Gulf of Kuşadası and Güllük Bay, S. 4 (226.00 m), S. 5 (137.00 m), S. 8 (29.00 m): this species is abundant in different localities of Eastern Aegean Sea. It occurs rarely in the infralittoral zone, and frequently from upper-lower circalittoral and upper epibathyal zones.

### Uvigerina peregrina Cushman (Pl. 22, fig. 6)

1923 Uvigerina peregrina, Cushman, p. 166, pl. 42, figs. 7-10.

1981 Uvigerina peregrina Cushman, Sejrup et al., pl. 2, fig. 12.

1984 Uvigerina peregrina Cushman, Ross and Kennett, pl. 2, figs. 3-4.

1990 Uvigerina peregrina Cushman, Galluzzo et al., p. 2, fig. 17.

1990 Uvigerina peregrina Cushman, Thomas et al., pl. 6, figs. 5-6.

1993 Uvigerina peregrina Cushman, Sgarella and Moncharmont-Zei, p. 215, pl. 16, fig. 5.

1995 Uvigerina peregrina Cushman, Meric et al., p. 109, pl. 8, figs. 3 a, b..

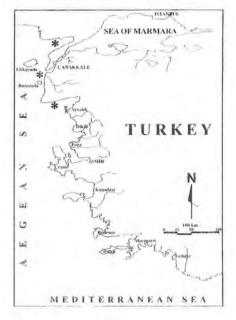
2001 Uvigerina peregrina Cushman, Debenay et al., pl. 4, fig. 17.

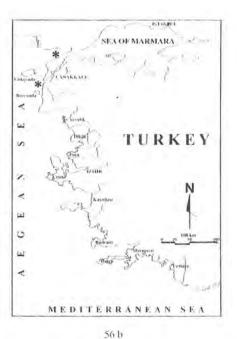
Occurrence: Gulf of Kuşadası and Güllük Bay, S. 4 (226.00 m), S. 5 (137.00 m), S. 8 (29.00 m); Gulf of Gökova, S. 3 (80.40 m), S. 5 (34.50 m); Gulf of Datça, S. I (252.30 m), S. 8 (246.40 m): poorly recorded in depth-range of between 29.00 m and 252,30 m. It is reported rarely in the infralittoral zone. It also occurs generally in upper-lower circalittoral and upper epibathyal zones.

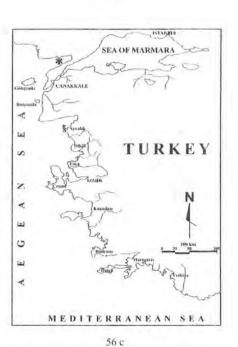
Subfamily Angulogerininae Galloway, 1933 Genus Angulogerina Cushman, 1927 Angulogerina angulosa (Williamson) (Pl. 22, fig. 7)

1858 *Uvigerina angulosa*, Williamson, p. 67, pl. 5, fig. 140. 1958 *Angulogerina angulosa* (Williamson), Le Calvez, Y., p. 180. 1960 *Trifarina angulosa* (Williamson), Barker, pl. 74, figs. 15-16.

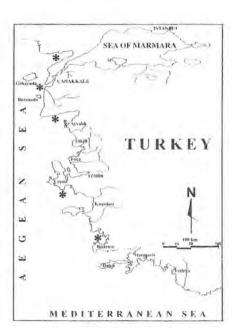
- Figure 56 a. Distribution of *Globobulimina affinis* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 56 b. Distribution of Globobulimina pseudospinescens (Emiliani) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 56 c. Distribution of *Euwigerina* sp. in the Eastern Aegean Sea, Turkish Coasts.
- Figure 56 d. Distribution of *Uvigerina mediterranea* Hofker in the Eastern Aegean Sea, Turkish Coasts.







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1970 Trifarina angulosa (Williamson), v. Daniels, p. 83, pl. 6, fig. 4.

1979 Trifarina angulosa (Williamson), Alfirevic, p. 121, pl. 25, fig. 3.

1988 Angulogerina angulosa (Williamson), Loeblich and Tappan, 1987, p. 525, pl. 574, figs. 5-9.

1991 Angulogerina angulosa (Williamson), Cimerman and Langer, p. 63, pl. 66, figs. 3-4.

1993 Angulogerina angulosa (Williamson), Sgarella and Moncharmont-Zei, p. 215, pl. 16, fig. 8.

1994 Angulogerina angulosa (Williamson), Loeblich and Tappan, p. 128, pl. 250, figs. 13-20.

2001 Angulogerina angulosa (Williamson), Debenay et al., pl. 4, fig. 15.

2002 Angulogerina angulosa (Williamson), Avşar, p. 64, pl. 2, fig. 20.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 8 (58.00 m), S. 9 (72.00 m), S. 21 (47.00 m), S. 34 (38.00 m), S. 36 (82.00 m): its occurrence is always rare in infralittoral and upper circalittoral zones.

Family Reussellidae Cushman, 1933 Genus Reussella Galloway, 1933 Reussella spinulosa (Reuss) (Pl. 22, fig. 8)

1850 Verneuilina spinulosa, Reuss, p. 374, pl. 47, fig. 12.

1970 Reussella spinulosa (Reuss), v. Daniels, p. 83, pl. 6, fig. 2.

1979 Reussella spinulosa (Reuss), Alfirevic, p. 117, pl. 25, fig. 2.

1988 Reussella spinulosa (Reuss), Loeblich and Tappan, p. 527, pl. 575, figs. 9-12.

1991 Reaussella spinulosa (Reuss), Cimerman and Langer, p. 63, pl. 66, figs. 5-8.

1993 Reussella spinulosa (Reuss), Sgarella and Moncharmont-Zei, p. 214, pl. 15, fig. 14.

1999 Reussella spinulosa (Reuss), Hayward et al., p. 135, pl. 9, fig. 28.

2002 Reussella spinulosa (Reuss), Avşar, p. 64, pl. 2, fig. 21.

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Occurrence: Gulf of Saros, S. 9 (71.80 m), S. 55 (22.00 m), S. 56 (41.00 m), S. 70 (13.00 m); Gökçeada, S. 29 (11.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Dikili and Çandarlı Bays, S. 8 (35.80 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m); Gulf of Datca, S. 2 (45.00 m): it is abundant in depth-range of between 11.00 m and 82.00 m and reported generally from infralittoral and upper circalittoral zones.

# Superfamily FURSENKOINACEA Loeblich and Tappan, 1961 Family Fursenkoinidae Loeblich and Tappan, 1961 Genus Fursenkoina Loeblich and Tappan, 1961 Fursenkoina acuta (d'Orbigny) (Pl. 22, fig. 9)

1846 Polymorphina acuta, d'Orbigny, p. 234, pl. 13, figs. 4-5,

1848 Virgulina schreibersiana, Czjzek, p. 147, pl. 13, figs. 18-21.

1971 Fursenkoina schreibersiana (Czjzek), Murray, p. 185, pl. 77, figs. 6-10.

1972 Virgulina schreibersiana Czjzek, Rosset-Moulinier, p. 184.

1985 Fursenkoina acuta (d'Orbigny), Papp and Schmid, p. 82, pl. 75, figs. 1-6.

1991 Fursenkoina acuta (d'Orbigny), Cimerman and Langer, p. 64, pl. 67, figs. 1-2.

1993 Fursenkoina acuta (d'Orbigny), Sgarella and Moncharmont-Zei, p. 235, pl. 23, fig. 7.

2002 Fursenkoina acuta (d'Orbigny), Kaminski et al., p. 26, pl. 3, figs. 11-12.

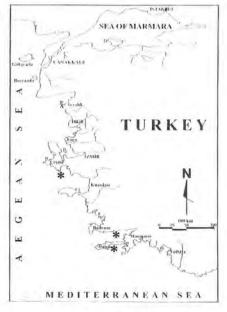
Occurrence: Gulf of Saros, S. 55 (22.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 10 (57.00 m), S. 11 (63.00 m), S. 15 (47.00 m), S. 23 (58.00 m), S. 28 (39.00 m), S. 34 (38.00 m): this species is poorly recorded in depth-range of between 22.00 m and 63.00 m in two localities. It is reported from infralittoral and upper circalittoral zones.

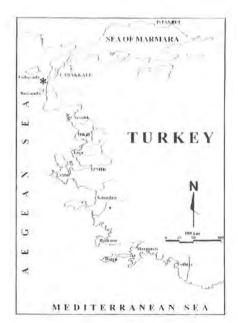
Order ROTALIIDA Lankester, 1885
Superfamily DISCORBACEA Ehreneberg, 1838
Family Bagginidae Cushman, 1927
Subfamily Baggininae Cushman, 1927
Genus Cancris de Montfort, 1808
Cancris sagra (d'Orbigny)
(Pl. 22, fig. 10)

1995 Cancris cf. sagra (d'Orbigny), Meric et al., p. 109, pl. 8, fig. 6.

Occurrence: Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m), S. 18 (29.00 m): it occurs poorly in three localities of the Gulf of Edremit and is reported poorly in infralittoral and upper epibathyal zones.

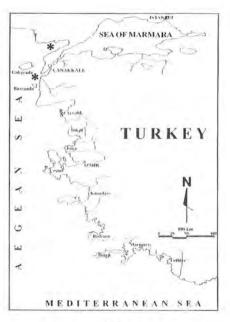
- Figure 57 a. Distribution of *Uvigerina peregrina* Cushman in the Eastern Aegean Sea, Turkish Coasts.
- Figure 57 b. Distribution of Angulogerina angulosa (Williamson) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 57 c. Distribution of *Reussella spinulosa* (Reuss) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 57 d. Distribution of *Fursenkoina acuta* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.











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#### Genus Valvulineria Cushman, 1926 Valvulineria bradyana (Fornasini) (Pl. 22, figs. 11-12)

1900 Discorbina bradyana, Fornasini, p. 393, text-fig. 43.

1982 Valvulineria bradyana (Fornasini), Agip, pl. 39, figs. 3 d, p, v.

1988 Valvulineria bradyana (Fornasini), Jorissen, p. 26, pl. 4, figs. 1-2.

1991 Valvulineria bradyana (Fornasini), Cimerman and Langer, p. 64, pl. 67, figs. 8-10.

1993 Valvulineria bradyana (Fornasini), Sgarella and Moncharmont-Zei, p. 220, pl. 18, figs. 1-2.

1995 Valvulineria bradyana (Fornasini), Meric et al., p. 109, pl. 8, figs. 7 a-b.

2002 Valvulineria bradyana (Fornasini), Avşar, p. 64, pl. 2, figs. 22-23.

Occurrence: Gulf of Saros, S. 1 (27.00 m), S. 2 (15.50 m), S. 3 (34.80 m), S. 6 (70.00 m), S. 7 (90.00 m), S. 8 (55.70 m), S. 9 (71.80 m), S. 10 (68.50 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 20 (92.00 m), S. 21 (97.40 m), S. 25 (188.00 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 45 (33.50 m), S. 46 (40.20 m), S. 47 (24.50 m), S. 48 (40.00 m), S. 49 (45.00 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 52 (61.10 m), S. 55 (22.00 m), S. 56 (41.00 m), S. 57 (52.00 m), S. 61 (70.00 m), S. 62 (110.00 m), S. 65 (61.00 m), S. 70 (13.00 m), S. 71 (90.00 m), S. 75 (42.00 m), S. 76 (53.00 m), S. 77 (53.00 m), S. 80 (98.00 m); Gökçeada, S. 25 (25.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 32 (46.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m), S. 13 (31.00 m); Dikili and Candarlı Bays, S. 8 (35.80 m), S. 10 (22.50 m), S. 12 (25.50 m), S. 13 (80.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m); Gulf of Kuşadası and Güllük Bay, S. 6 (45.60 m), S. 7 (305.20 m), S. 8 (29.00 m); Gulf of Gökova, S. 8 (78.30 m), Marmaris Bay, S. 1 (106.40 m), S. 8 (69.00 m): it is abundant in the depth-range of between 12.30 m and 334.50 m and reported mostly in infralittoral and upper circalittoral zones. It is rare in lower circalittoral-upper epibathyal zones.

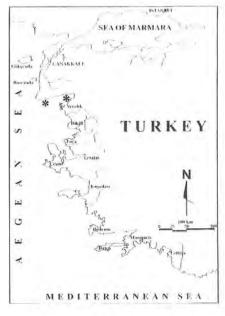
Figure 58 a. Distribution of *Cancris sagra* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.

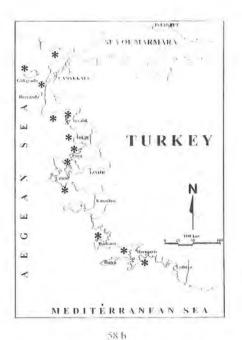
Figure 58 b. Distribution of Valvulineria bradyana (Fornasini) in the Eastern Aegean Sea, Turkish Coasts.

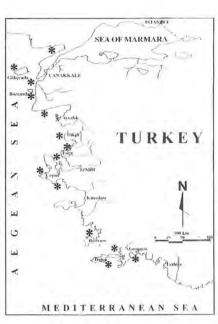
Figure 58 c. Distribution of *Eponides concameratus* (Williamson) in the Eastern Aegean Sea, Turkish Coasts.

Figure 58 d. Distribution of Planopulvinulina dispansa (Brady) in the Eastern Aegean Sea, Turkish Coasts.

- R.L.







SEA OF MARMARA

SEA OF MARMARA

TURKEY

TORKEY

58 c

58 d

Family Eponididae Hofker, 1951 Subfamily Eponininae Hofker, 1951 Genus Eponides de Montfort, 1808 Eponides concameratus (Williamason) (Pl. 22, figs. 13-14)

1858 Rotalina concamerata, Williamson, p. 52, pl. 4, figs. 101-102.

1960 Eponides repandus var. concamerata (Williamson), Barker, pl. 104, fig. 19.

1979 Eponides repanda var. concamerata (Williamson), Blanc-Vernet et al., p. 199, figs. 24-25.

1984 Eponides repandus (Fichtel and Moll), Rögl and Hansen, pl. 3, fig. 4; pl. 4, figs. 1-2.

1991 Eponides concameratus (Williamson), Cimerman and Langer, p. 64, pl. 67, figs. 11-14.

1993 Eponides repandus var. concamerata (Williamson), Sgarella and Moncharmont-Zei, p. 232, pl. 22, figs. 4-5.

2002 Eponides concameratus (Williamson), Avşar, p. 64, pl. 2, figs. 24-25.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 14 (84.00 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 28 (115.50 m), S. 30 (90.50 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 39 (37.70 m), S. 42 (27.50 m), S. 51 (12.30 m), S. 53 (440.00 m), S. 54 (94.50 m), S. 63 (96.00 m), S. 80 (98.00 m); Gökçeada, S. 25 (25.00 m), S. 32 (16.00 m); Bozcaada, S. 3 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 3 (59.60 m), S. 13 (79.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 25 (74.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 33 (39.00 m), S. 34 (38.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m), S. 3 (230.00 m), S. 4 (76.30 m), S. 5 (125.00 m), S. 7 (19.00 m); Dikili and Candarli Bays, S. 2 (39.50 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 3 (113,00 m), S. 4 (226,00 m), S. 5 (137,00 m), S. 7 (305,20 m), S. 8 (29,00 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 13 (72.50 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 6 (65.00 m), S. 7 (198.00 m), S. 8 (78.30 m); Gulf of Datça, S. 1 (252.30 m), S. 2 (45.00 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 6 (56.10 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 7 (29,90 m), S. 8 (69.00 m): this species occurs very abundantly in Eastern Aegean Sea. It is reported mostly in infralittoral-upper circalittoral zones and rarely from lower circalittoral-upper epibathyal zones.

#### Subfamily Sestronophorinae Saidova, 1981 Genus Planopulvinulina Schubert, 1921 Planopulvinulina dispansa (Brady) (Pl. 23, figs. 1-2)

1884 Pulvinulina dispansa, Brady, p. 687, pl. 115, fig. 3.

- 1987 Planopulvinulina dispansa (Brady), Loeblich and Tappan, p. 551, pl. 597, figs. 1-10.
- 1991 Planopulvinulina dispansa (Brady), Cimerman and Langer, p. 65, pl. 69, figs. 1-3.
- 1994 Planopulvinulina dispansa (Brady), Loeblich and Tappan, p. 136, pl. 271, figs. 4-11.

Occurrence: Gulf of Saros, S. 51 (12.30 m): its occurrence is always very rare in the infralittoral zone.

Family Mississippinidae Saidova, 1981 Subfamily Stomatorbinae Saidova, 1981 Genus Stomatorbina Doreen, 1948 Stomatorbina concentrica (Parker and Jones) (Pl. 23, figs. 3-4)

- 1864 Pulvinulina concentrica Parker and Jones, Brady, p. 470, pl. 48, figs. 14 a and b.
- 1931a Eponides concentrica Parker and Jones, Cushman, p. 43, pl. 9, fig. 4.
- 1960 Mississippina concentrica (Parker and Jones), Barker, pl. 105, figs. 1 a-c.
- 1974 Stomatorbina concentrica (Parker and Jones), Colom, p. 173, figs. 44 q-u.
- 1991 Stomatorbina concentrica (Parker and Jones), Cimerman and Langer, p. 65, pl. 68, figs. 7-9.
- 1992 Stomatorbina concentrica (Parker and Jones), Hatta and Ujiie, p. 180, pl. 30, figs. 5a-c.
- 1993 Stomatorbina concentrica (Parker and Jones), Sgarella and Moncharmont-Zei, p. 232, pl. 26, figs. 9-10.
- 1994 Stomatorbina concentrica (Parker and Jones), Loeblich and Tappan p. 136, pl. 273, figs. 1-7.
- 1995 Stomatorbina concentrica (Parker and Jones), Meriç et al., p. 109, pl. 8, figs. 8 a-b.
- 1999 Stomatorbina concentrica (Parker and Jones), Hayward et al., p. 139, pl. 10, figs. 7-8.

Occurrence: Gulf of Saros, S. 35 (195.00 m), S. 52 (61.10 m), s. 54 (94.50 m), S. 62 (110.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 17 (4.00 m), S. 29 (11.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 13 (79.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 22 (45.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 31 (75.00 m), S. 34 (38.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m), S. 3 (230.00 m); Gulf of

(4-1)

Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 3 (113.00 m), S. 5 (137.00 m), S. 8 (29.00 m); Gulf of Gökova, S. 3 (80.40 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 3 (139.50 m); Marmaris Bay, S. 1 (106.40 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 8 (69.00 m): this species is relatively frequent in Eastern Aegean Sea. It is reported generally from infralittoral and upper circalittoral zones. It also occurs rarely in lower circalittoral-upper epibathyal zones.

Stomatorbina sp. (Pl. 23, figs. 5-8)

1992 Stomatorbina sp., Hatta and Ujii, p. 181, pl. 30, figs. 6 a-c.

Occurrence: Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m); it is rare in upper and lower circalittoral zones.

Family Neoeponidiae Loeblich and Tappan, 1994 Genus Neoeponides Reiss, 1960 Neoeponides bradyi Le Calvez (Pl. 24, figs. 1-4)

1884 Pulvinulina berthelotiana (d'Orbigny), Brady, p. 701, pl. 106, fig. 1.

1960 Eponides berthelotianus (d'Orbigny), Barker, pl. 106, fig. 1.

1974 Eponides bradyi Le Calvez, Le Calvez, p. 63.

1984 Neoeponides bradyi Le Calvez, Rögl and Hansen, p. 33, pl. 7, figs. 1-6.

1990 Neoeponides bradyi Le Calvez, Hottinger et al., p. 336, pl. 1, figs. 1-5.

1993 Neoeponides bradyi Le Calvez, Hottinger et al., p. 112-113, pl. 146, figs. 8-12; pl. 147, figs. 1-3.

1994 Neoeponides bradyi Le Calvez, Loeblich and Tappan, p. 138, pl. 279, figs. 1-9.

2002 Neoeponides bradyi Le Calvez, Avşar, p. 64, pl. 3, figs. 1-2.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 45 (33.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 54 (94.50 m), S. 55 (22.00 m), S. 64 (75.00 m), S. 77 (53.00 m); Gökçeada, S. 3 (0.50 m), S. 14 (55.00 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 20 (3.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 5 (137.50 m), S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 5 (125.00 m), S. 7 (19.00 m), S. 8 (49.30 m), S. 10 (49.60 m), S. 14 (37.70 m), S. 17 (47.30 m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 11 (52.00 m); Gulf of Izmir and vicinity of

Karaburun Peninsula, S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m); Çeşme, S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 11 (47.00 m); Gulf of Gökova, S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 8 (69.00 m); it is abundant in the different localities of Eastern Aegean Sea, and is reported mostly from infralittoral to upper circalittoral zones. It occurs rarely in lower circalittoral and upper epibathyal zones.

Family Rosalinidae Reiss, 1963 Genus Gavelinopsis Hofker, 1951 Gavelinopsis praegeri (Heron-Allen and Earland)

- 1913 Discorbina praegeri, Heron-Allen and Earland, p. 122, pl. 10, figs. 8-10.
- 1958 Gavelinopsis praegeri (Heron-Allen and Earland), Parker, p. 264, pl. 3, figs. 24-25.
- 1960 Gavelinopsis praegeri (Heron-Allen and Earland), Hofker, p. 252, fig. 114.
- 1972 Gavelinopsis praegeri (Heron-Allen and Earland), Rosset-Moulinier, p. 167, pl. 9, figs. 27-28.
- 1988 Gavelinopsis praegeri (Heron-Allen and Earland), Loeblich and Tappan, p. 560, pl. 608, figs. 6-12.
- 1991 Gavelinopsis praegeri (Heron-Allen and Earland), Cimerman and Langer, p. 66, pl. 70, figs. 3-4.
- 1993 Gavelinopsis praegeri (Heron-Allen and Earland), Sgarella and Moncharmont-Zei, p. 218, pl. 17, figs. 1-2.
- 1994 Gavelinopsis praegeri (Heron-Allen and Earland), Loeblich and Tappan, p. 138, pl. 281, figs. 1-10.
- 1999 Gavelinopsis praegeri (Heron-Allen and Earland), Hayward et al., p. 140, pl. 10, figs. 15-17.
- 2001 Gavelinopsis praegeri (Heron-Allen and Earland), Debenay et al, pl. 5, figs. 3-4.
- 2002 Gavelinopsis praegeri (Heron-Allen and Earland), Avşar, p. 64, pl. 3, figs. 3-4.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00

- Figure 59 a. Distribution of *Stomatorbina concentrica* (Parker and Jones) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 59 b. Distribution of *Stomatorbina* sp. in the Eastern Aegean Sea, Turkish Coasts.,
- Figure 59 c. Distribution of *Neoeponides bradyi* Le Calvez in the Eastern Aegean Sea, Turkish Coasts.
- Figure 59 d. Distribution of *Gavelinopsis praegeri* (Heron-Allen and Earland) in the Eastern Aegean Sea, Turkish Coasts.











59 c

59 d

m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m): it is relatively frequent in Eastern Aegean Sea, and is reported generally from the infralittoral and upper circalittoral zones.

#### Genus Neoconorbina Hofker, 1951 Neoconorbina terquemi (Rzehak) (Pl. 24, figs. 5-6)

1876 Rosalina orbicularis, Terquem, p. 75, pl. 9, figs. 4 a, b.

1888 Discorbina terquemi, Rzehak, p. 228.

1958 Discorbis orbicularis (Terquem), Le Calvez, Y., p. 183.

1958 Neoconorbina terquemi (Rzehak), Parker, p. 267, pl. 3, figs. 26-27.

1972 Neoconorbina terquemi (Rzehak), v. Daniels, p. 186, pl. 9, figs. 29-30.

1974 Discorbis orbicularis (Terquem), Colom, p. 125, fig. 21 k.

1988 Neoconorbina terquemi (Rzehak), Loeblich and Tappan, p. 560, pl. 609, figs. 8-10.

1991 Neoconorbina terquemi (Rzehak), Cimerman and Langer, p. 66, pl. 70, figs. 5-7.

1993 Neoconorbina terquemi (Rzehak), Sgarella and Moncharmont-Zei, p. 218, pl. 17, fig. 3.

1994 Neoconorbina terquemi (Rzehak), Loeblich and Tappan, p. 139, pl. 284, figs. 1-12.

2001 Neoconorbina terquemi (Rzehak), Debenay et al., pl. 5, figs. 7-8.

2002 Neoconorbina terquemi (Rzehak), Avşar, p. 64, pl. 3, figs. 5-6.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 44 (26.20 m), S. 72 (500.00 m); Gökçeada, S. 24 (68.00 m), S. 25 (25.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (18.00 m), S. 9 (72.00 m), S. 13 (79.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (45.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Dikili and Çandarlı Bays, S. 5 (18.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 4 (40.00 m), S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 8 (29.00 m), S. 11 (47.00 m); Gulf of Gökova, S. 3 (80.40 m), S. 4 (46.20 m), S. 6 (65.00 m); Marmaris Bay, S. 3 (98.30 m), S. 8 (69.00 m): It occurs always frequently in Eastern Aegean Sea, and is reported generally from infralittoral to upper circalittoral zones. It is rare in lower circalittoral-lower epibathyal zones.

#### Genus Rosalina d'Orbigny, 1826 Rosalina bradyi Cushman (Pl. 24, figs. 7-8)

1884 Discorbina globularis, Brady, p. 178, pl. 86, figs. 8 a-c.

1915 Discorbis globularis (d'Orbigny) var. bradyi, Cushman, p. 12.

1951 Discopulvinulina bradyi (Cushman), Hofker, p. 452, figs. 310 a, b.

1960 Rosalina bradyi (Cushman), Barker, pl. 86, figs. 8 a-c.

1954 Rosalina bradyi (Cushman), Hornibrook and Vella, p. 26.

1991 Rosalina bradyi (Cushman), Cimerman and Langer, p. 66, pl. 71, figs. 1-5.

1993 Rosalina bradyi (Cushman), Sgarella and Moncharmont-Zei, p. 218, pl. 17, figs. 4-5.

1994 Rosalina bradyi (Cushman), Hatta and Ujiie, p. 14, pl. 3, fig. 4.

1995 Rosalina bradyi (Cushman), Meriç et al., p. 109, pl. 8, fig. 9 a-b.

1999 Rosalina bradyi (Cushman), Hayward et al., p. 142, pl. 11, figs. 1-3.

2001 Rosalina bradyi (Cushman), Debenay et al., pl. 5, fig. 1and 2.

2002 Rosalina bradyi (Cushman), Avşar, p. 64, pl. 3, figs. 7-8.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 4 (50.90 m), S. 5 (43.00 m), S. 13 (156.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 20 (92.00 m), S. 24 (386.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 30 (90.50 m), S. 33 (70.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 46 (40.20 m), S. 47 (24.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 53 (440.00 m), S. 57 (52.00 m), S. 65 (61.00 m), S. 67 (550.00 m), S. 70 (13.00 m), S. 72 (500.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 1 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 9 (0.50 m), S. 11 (0.50 m), S. 14 (55.00 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 17 (4.00 m), S. 19 (40.00 m), S. 21 (15.00 m), S. 22 (3.00 m), S. 23 (10.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Bozcaada, S. 2 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 10 (0.50 m), S. 11 (7.00 m), S. 12 (0.50 m), S. 14 (0.50 m), S. 16 (0.50 m), S. 17 (0.50 m); Gökçeada-Bozcaada-Çanakakale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 4 (85.50 m), S. 5 (137.50 m), S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), s. 21 (47.00 m), S. 22 (45.00 m), s. 23 (58.00 m), s. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 34 (38.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m), S. 4 (76.30 m), S. 5 (125.00 m), S. 6 (15.00 m), S. 7 (19.00 m), S. 17 (47.40 m); Dikili and Candarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 4 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Cesme, S. 2 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 7 (0.50 m), S. 9 (0.50 m), S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 3 (113.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S.7 (305.20 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 13 (72.50 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 6 (56.10 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 8 (69.00 m); it occurs abundantly in Eastern Aegean Sea and is reported generally abundant from infralittoral and upper circalittoral zones. It is rare in lower circalittoral, upper-lower epibathyal zones.

#### Rosalina floridensis (Cushman) (Pl. 24, figs. 9-10)

- 1922b Discorbis floridana, Cushman, p. 39, pl. 5, figs. 11-12.
- 1931 Rosalina bertheloti (d'Orbigny) var. floridensis, Cushman, p. 17, pl. 3, figs. 5 a-c.
- 1960 Discopulvinulina bertheloti (d'Orbigny), Hofker, p. 253, pl. 4, figs. 127 a-c.
- 1991 Rosalina floridensis (Cushman), Cimerman and Langer, p. 67, pl. 70, figs. 8-10.
- 1993 Rosalina floridana (Cushman), Sgarella and Moncharmont-Zei, p. 218-219, pl. 17, fig. 6.

Occurrence: Gulf of Saros, S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 47 (24.50 m), S. 50 (41.00 m), S. 51 (12.30 m); Gökçeada, S. 15 (3.00 m), S. 16 (4.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakakale triangle, S. 2 (32.40 m), S. 5 (137.50 m); Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m); Dikili and Çandarlı Bays, S. 8 (35.80 m); Gulf of Kuşadası and Güllük Bay, S. 6 (45.60 m), S. 7 (305.20 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 12 (62.10 m), S. 13 (72.50 m), S. 15 (83.70 m), Gulf of Datça, S. 4 (40.00 m), S. 5 (59.30 m). This species is frequent. It is reported frequently in infralittoral and upper circalittoral zones, however, it is rare in lower circalittoral and upper epibathyal zones.

#### Rosalina globularis d'Orbigny (Pl. 24, fig. 11)

- 1826 Rosalina globularis, d'Orbigny, p. 271, pl. 13, figs. 1-4.
- 1990 Rosalina globularis d'Orbigny, Galluzzo et al., pl. 2, figs. 29-30.
- 1993 Rosalina globularis d'Orbigny, Sgarella and Moncharmont-Zei, p. 219, pl. 17, figs. 7-8.
- 1994 Rosalina globularis d'Orbigny, Loeblich and Tappan, p. 140, pl. 286, figs. 7-15.
- 2001 Rosalina globularis d'Orbigny, Debenay et al., pl. 5, fig. 13.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 60 (55.00 m), S. 61 (70.00 m), S. 63 (96.00 m), S. 65 (61.00 m), S. 76 (53.00 m); Gökçeada, S. 1 (0.50 m), S. 3 (0.50 m), S. 11 (0.50 m), S. 20 (3.00 m), S. 21 (15.00 m), S. 22 (3.00 m), S. 23 (10.00 m), S. 30 (3.00 m); Bozcaada, S. 3

(0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 5 (137.50 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 19 (73.00 m), S. 21 (47.00 m), S. 24 (56.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 31 (71.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 2 (100.40 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 13 (80.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 4 (40.00 m); Gulf of Kuşadası and Güllük Bay, S. 3 (113.00 m), S. 4 (226.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 13 (72.50 m), S. 14 (82.10 m); Gulf of Gökova, S. 5 (34.50 m); Gulf of Datça, S. 5 (59.30 m); this species occurs abundantly in different gulfs of Eastern Aegean Sea. It is common in infralittoral and upper circalittoral zones and is reported rarely from lower circalittoral and upper epibathyal zones.

#### Rosalina macropora (Hofker)

1951 Discopulvinulina macropora, Hofker, p. 460, figs. 312-313.

1960 Discopulvinulina macropora, Hofker, p. 253, pl. D, figs. 122 a-c.

1987 Rosalina globularis semiporata (Egger), Wenger, p. 305, pl. 15, figs. 10-12.

1991 Rosalina macropora (Hofker), Cimerman and Langer, p. 67, pl. 71, figs. 6-7.

Occurrence: Gulf of Saros, S. 17 (33.90 m), S. 18 (88.10 m); Bozcaada, S. 2 (0.50 m), S. 3 (0.50 m), S. 9 (0.50 m), S. 10 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 29 (50.00 m), S. 34 (38.00 m): its occurrence is always rare and is reported from infralittoral and upper circalittoral zones.

## Rosalina obtusa d'Orbigny (Pl. 24, fig. 12; Pl. 25, figs. 1-3)

1846 Rosalina obtusa, d'Orbigny, p. 179, pl. 11, figs. 4-6.

1985 Rosalina obtusa d'Orbigny, Papp and Schmid, p. 67-68, pl. 61, figs. 7-12.

1987 Rosalina bradyi (Cushman), Jorissen, pl. 3, figs. 6 a-b.

1991 Rosalina bradyi (Cushman), Cimerman and Langer, p. 66, pl. 71, figs. 1-5.

1993 Rosalina obtusa d'Orbigny, Sgarella and Moncharmont-Zei, p. 219, pl. 17. figs. 9-10.

Occurrence: Gulf of Datça, S. 4 (40.00 m), S. 5 (59.30 m); Marmaris Bay, S. 2

Figure 60 a. Distribution of *Neoconorbina terquemi* (Rzehak) in the Eastern Aegean Sea, Turkish Coasts.

Figure 60 b. Distribution of *Rosalina bradyi* Cushman in the Eastern Aegean Sea, Turkish Coasts.

Figure 60 c. Distribution of *Rosalina floridensis* (Cushman) in the Eastern Aegean Sea, Turkish Coasts.

Figure 60 d. Distribution of *Rosalina globularis* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.







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(79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 6 (64.00 m); it is generally very rare in infralittoral and upper circulittoral zones.

#### Genus Pararosalina McCulloch, 1977 Pararosalina dimorphiformis McCulloch (Pl. 25, figs. 4-6)

1977 Pararosalina dimorphiformis McCulloch, p. 336, pl. 121, fig. 7 2002a Pararosalina dimorphiformis McCulloch, Meric et al., pl. 3, figs, 5a and b.

Occurrence: Gulf of Saros, Harmantaşı, Line II, S. 4 (25.00 m); Line IV, S. 1 (10.00 m), S. 3 (35.00 m), S. 10 (100.00 m); Bozcaada, S. 2 (0.50 m), S. 3 (0.50 m), S. 10 (0.50 m); Dikili and Çandarlı Bays, S. 5 (18.00 m), S. 7 (35.00 m), S. 8 (35.80 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m), S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 5 (137.00 m), S. 6 (45.60 m); Gulf of Gökova, S. 2 (27.00 m), S. 4 (46.20 m), S. 5 (34.50 m); Gulf of Datça, S. 2 (45.00 m), S. 3 (139.50 m), S. 5 (59.30 m); Marmaris Bay, S. 8 (69.00 m); this species occurs rarely in the infralittoral zone to upper-lower circalittoral zones.

#### Genus Tretomphalus Möbius, 1880 Tretomphalus bulloides (d'Orbigny) (Pl. 25, figs. 7-9)

1839a Rosalina bulloides, d'Orbigny, p. 98, pl. 3, ligs. 2-5.

1977h Tretomphalus bulloides (d'Orbigny), Le Calvez., p. 80, pl. 10, figs. 1, 6-8.

1985 Rosalina (Tretomphalus) bulloides (d'Orbigny), Banner et al., p. 164, pl. 1, figs. 1-5.

1988 Tretomphalus bulloides (d'Orbigny), Loeblich and Tappan, p. 262, pl. 612, figs. 1-11.

1991 Tretomphalus bulloides (d'Orbigny), Cimerman and Langer, p. 67, pl. 72, figs. 3-5.

1992 Tretomphalus bulloides (d'Orbigny), Hatta and Ujiie, p. 183-184, pl. 33, figs. 3a-c.

1993 Tretomphalus concinnus (Brady), Sgarella and Moncharmont-Zei, p. 219. pl. 17, figs. 11-12.

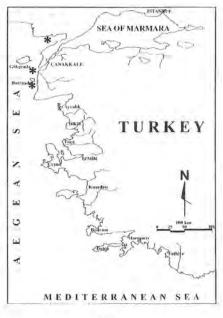
1993 Trethomphalus bulloides (d'Orbigny), Hottinger et al., p. 112, pl. 146, figs.

Figure 61 a. Distribution of Rosalina macropora (Hofker) in the Eastern Aegean Sea, Turkish Coasts.

Figure 61 b. Distribution of Rosalina obtusa d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.

Figure 61 c. Distribution of *Pararosalina dimorphiformis* McCulloch in the Eastern Aegean Sea, Turkish Coasts.

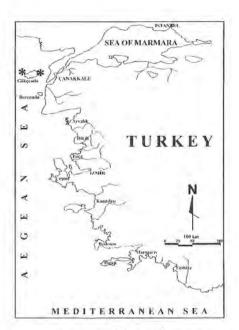
Figure 61 d. Distribution of *Tretomphalus bulloides* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.











61 c

61 d

Occurrence: Gökçeada, S. 5 (0.50 m), S. 7 (0.50 m), S. 9 (0.50 m), S. 21 (15,00 m), S. 23 (10,00 m), S. 24 (68.00 m), S. 25 (25,00 m), S. 26 (9.00 m), S. 29 (11.00 m); this species is rare and occurs in the depth-range of between 0.50 m and 68.00 m. It is reported as more frequent in the infralittoral zone and rare in the upper circalittoral zone.

Superfamily GLABRATELLACEA Loeblich and Tappan, 1964
Family Glabratellidae Loeblich and Tappan, 1964
Genus Conorbella Hofker, 1951
Conorbella erecta (Sidebottom)

1908 Discarbina erecta, Sidebottom, p. 16, pl. 5, figs. 6-7.

1991 Conorbella erecta (Sidebottom), Cimerman and Langer, p. 68, pl. 72, figs. 6-8.

2001 Conorbella erecta (Sidebottom), Avşar and Ergin, p. 759 and 766

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 34 (38.00 m): its occurrence is always rare in the infralittoral zone.

Conorbella imperatoria (d'Orbigny) (Pl. 25, figs. 10-11)

1846 Rosalina imperatoria, d'Orbigny, p. 176, pl. 190, figs. 16-18.

1908 Discorbina imperatoria (d'Orbigny), Sidebottom, p. 13, pl. 5, figs. 1-2.

1985 Schackoinella imperatoria (d'Orbigny), Papp and Schmid, p. 226, pl. 60, figs 2-5.

1991 Conorbella imperatoria (d'Orbigny), Cimerman and Langer, p. 68, pl. 72, figs. 9-11.

2002 Conorbella imperatoria (d'Orbigny), Avşar, p. 64, pl. 3, figs. 9-10.

Occurrence: Gulf of Saros, Harmantaşı, Line I, S. 11 (70.00 m) and S. 12 (80.00 m); Gökçeada, S. 11 (0.50 m), S. 16 (4.00 m), S. 29 (11.00 m); Gökçeada-Bozcaada-Çanaakkale triangle, S. 33 (39.00 m), S. 34 (38.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m); Gulf of Gökova, S. 1 (42.00 m); Marmaris Bay, S. 3 (98.30 m), S. 7 (29.90 m): its depth-range is between 0.50 m and 98.30 m and is reported from the infralittoral zone to upper circalittoral zone.

Genus Planoglabratella Sciglie and Bermudez, 1965 Planoglabratella opercularis (d'Orbigny) (Pl. 26, figs. 1-6)

1839a Rosalina opercularis, d'Orbigny, p. 93, pl. 3, figs. 24-25; pl. 4, fig. 11. 1974 Glabratella obtusa opercularis (d'Orbigny), Colom, fig. 22 h-o.

- 1993 Planoglabratella opercularis (d'Orbigny). Sgarella and Moncharmont-Zei, p. 222, pl. 19, figs. 4-5.
- 1994 *Planoglabratella opercularis* (d'Orbigny), Hatta and Ujiie, p. 15, pl. 4, figs. 2-3.
- 2002 Planoglabratella opercularis (d'Orbigny), Avşar, p. 64, pl. 3, figs. 11-13.

Occurrence: Gulf of Saros; S. 39 (37.70 m), S. 52 (61.10 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 5 (137.50 m), S. 16 (47.00 m), S. 18 (69.00 m), S. 21 (47.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (45.00 m), S. 34 (38.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 8 (35.80 m), S. 9 (49.00 m); Gulf of Kuşadası and Güllük Bay, S. 6 (45.60 m), S. 8 (29.00 m), S. 10 (66.40 m); Gulf of Gökova, S. 4 (46.20 m), S. 5 (34.50 m); this species is relatively frequent in infralittoral and uppercircalittoral zones. It is rare in the lower circalittoral zone.

Superfamily SIPHONINACEA Cushman, 1927 Family Siphoninindae Cushman, 1927 Subfamily Siphonininae Cushman, 1927 Genus Siphonina Reuss, 1850 Siphonina reticulata (Czjzek) (Pl. 26, fig. 7)

- 1848 Rotalina reticulata, Czjzek, p. 145, pl. 13, figs. 7-9.
- 1850 Siphonina fimbriata, Reuss, p. 372, pl. 47, fig. 6.
- 1931 Siphonina reticulata (Zzjzek), Cushman, p. 68, pl. 14, figs. 1 a-c.
- 1958 Siphonina reticulata (Czjzek), Parker, p. 273, pl. 4, fig. 25.
- 1960 Siphonina reticulata (Czjzek), Hofker, p. 257, figs. 151-152.
- 1971 Siphonina reticulata (Czjzek), Murray, p. 139, pl. 58, figs. 5-7.
- 1988 Siphonina reticulata (Czjzek), Loeblich and Tappan, p. 571, pl. 624, figs. 4-6.
- 1991 Siphonina reticulata (Czjzek), Cimerman and Langer, p. 69, pl. 73, figs. 11-13.
- 1993 Siphonina reticulata (Czjzek), Sgarella and Moncharmont-Zei, p. 222 and 224, p. 19, figs. 7-8.

Occurrence: Gulf of Saros, S. 18 (88.10 m); Harmantaşı, Line I, S. 2 (15.00 m); Line II, S. 2 (15.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 9 (72.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 35 (80.00 m); Gulf of Kuşadası and Güllük Bay, S. 5 (137.00 m), S. 8 (29.00 m), S.

- Figure 62 a. Distribution of *Conorbella erecta* (Sidebottom) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 62 b. Distribution of *Conorbella imperatoria* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 62 c. Distribution of *Planoglabratella opercularis* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 62 d. Distribution of *Siphonina reticulata* (Czjzek) in the Eastern Aegean Sea, Turkish Coasts.











62 c

62 d

10 (66.40 m): this species is rare and its depth-range is between 15.00 m and 137.50 m. It is mostly recorded in infralittoral and upper circalittoral zones. It is also present rarely in the lower circalittoral zone.

Superfamily DISCORBINELLECEA Sigal, 1952 Family Parreloididae Hofker, 1956 Genus Cibicidoides Thalmann, 1939 Cibicidoides pachyderma (Rzehak) (Pl. 26, figs. 8-9)

1974 Cibicides pseudoungerianus Cushman, Coloni, p. 149, fig. 31 g-i.
1993 Cibicidoides pachyderma (Rzehak), Sgarella and Moncharmont-Zei, p. 241 and 242, pl. 25, figs. 12-13.

Occurrence: Gulf of Saros; S. 7 (90.00 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 20 (92.00 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m), S. 26 (631.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 54 (94.50 m), S. 57 (52.00 m), S. 59 (98.00 m), S. 68 (210.00 m), S. 69 (72.00 m), S. 72 (500.00 m), S. 74 (200.00 m), S. 80 (98.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m); Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m); Gulf of Kuşadası and Güllük Bay, S. 4 (226.00 m), S. 5 (137.00 m), S. 8 (29.00 m); Gulf of Datça, S. 1 (252.30 m), S. 4 (40.00 m), S. 9 (147.00 m); Marmaris Bay, S. 5 (128.80 m); its occurrence is always frequent. This species recorded rarely in the infralittoral zone. It is reported frequently from upper-lower circalittoral and upper epibathyal zones. It is very rare in the lower epibathyal zone.

Cibicidoides pseudoungerianus (Cushman) (Pl. 26, fig. 10)

1884 Truncatulina ungeriana (d'Orbigny), Brady, p. 664, pl. 94, figs. 9 a-c.
1931 Cibicides pseudoungeriana (Cushman), Cushman, p. 123, pl. 22, figs. 3-7.
1960 Cibicides pseudoungerianus (Cushman), Barker, p. 194, pl. 94, figs. 9 a-c.
1991 Cibicidoides pseudoungerianus (Cushman), Cimerman and Langer, p. 69, pl. 74, figs. 2-3.

Occurrence: Gulf of Saros, S. 23 (383.00 m), S. 25 (188.00 m), S. 26 (631.00 m), S. 27 (144.80 m), S. 40 (77.30 m), S. 69 (72.00 m), S. 72 (500.00 m), S. 74 (200.00 m), S. 75 (42.00 m), S. 80 (98.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 18 (69.00 m), S. 19 (73.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 31 (75.00 m); Gulf of Gökova, S. 7 (198.00 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m), S. 9 (147.00 m); Marmaris Bay, S. 5 (128.80 m): this species occurs rarely in the infralittoral zone. It is reported generally from upper and lower circalittoral zones. It also occurs frequently in the upper epibathyal zone.

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#### Family Discorbinellidae Sigal, 1952 Subfamily Discorbinellinae Sigal, 1952 Genus Discorbinella Cushman and Martin, 1935 Discorbinella bertheloti (d'Orbigny) (Pl. 26, fig. 11; Pl. 27, figs. 1-2)

1839b Rosalina bertheloti, d'Orbigny, p. 135, pl. 1, figs. 28-30.

- 1974 Discorbinella bertheloti (d'Orbigny), Le Calvez., p. 59, pl. 14, figs. 1-4.
- 1988 Discorbinella bertheloti (d'Orbigny), Loeblich and Tappan, p. 577, pl. 630, figs. 4-6.
- 1991 Discorbinella bertheloti (d'Orbigny), Cimerman and Langer, p. 70, pl. 86, figs. 1-4.
- 1993 Discorbinella bertheloti (d'Orbigny), Sgarella and Moncharmont-Zei, p. 216. pl. 16. figs. 11-12.
- 1994 Discorbinella bertheloti (d'Orbigny), Loeblich and Tappan, p. 147 and 148, pl. 309, figs. 13-15.
- 1999 Discorbinella bertheloti (d'Orbigny), Hayward et al., p. 152, pl. 14, figs.
- 2002 Discorbinella bertheloti (d'Orbigny), Avşar, p. 64, pl. 3, figs. 14-15.

Occurrence: Gulf of Saros, S. 57 (52.00 m), S. 62 (110.00 m), S. 64 (75.00 m), S. 66 (65.00 m), S. 72 (500.00 m), S. 78 (63.00 m), S. 79 (29.00 m); Gökçeada, S. 16 (4.00 m), S. 25 (25.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Canakkale triangle, S. 2 (32.40 m), S. 4 (85.50 m), S. 5 (137.50 m), S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 9 (49.60 m), S. 14 (37.70 m), S. 17 (47.40 m), S. 18 (29.00 m); Dikili and Candarlı Bays, S. 2 (39.50 m), S. 7 (35.00 m), S. 11 (52.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 3 (46.00 m); Gulf of Kuşadası and Güllük Bay, S. 3 (113.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 13 (72.50 m), S. 15 (83.70 m); Gulf of Gökova, S. 1 (42.00 m), S. 3 (80.40 m); Gulf of Datça, S. 3 (130.50 m), S. 7 (56.40 m); Marmaris Bay, S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 7 (29.90 m), S. 8 (69.00 m); this species occurs with a higher frequence in the different localities of Eastern Aegean Sea. It is reported mostly from infralittoral to upper circalittoral zones. It is rare in lower circalittoral and upper epibathyal zones.

### Superfamily PLANORBULINACEA Schwager, 1877 Family Planulinidae Bermudez, 1952

Genus Hyalinea Hofker, 1951 Hyalinea halthica (Schröter) (Pl. 27, fig. 3)

1783 Nautilus balthicus, Schröter, p. 20, fig. 2.

1931 Anomalina balthica (Schröter), Cushman, p. 108, pl. 19, fig. 3.

1958 Hyalinea balthica (Schröter), Parker, p. 275, pl. 4, fig. 39.

1960 Hofkerinella baltica (Schröter), Hofker, p. 255, fig. 137.

1971 Hyalinea balthica (Schröter), Murray, p. 173, pl. 72, figs. 5-8.

1974 Hyalinea balthica (Schröter), Colom, p. 151, fig. 37.

1984 Hyalinea balthica (Schröther), Ross and Kennett, pl. 3, figs. 4-5.

1988 Hyalinea balthica (Schröter), Loeblich and Tappan, p. 580, pl. 632, figs. 5-8.

1991 Hyalinea balthica (Schröter), Cimerman and Langer, p. 70, pl. 74, figs. 4, 7; figs. 5-6.

1993 Hyalinea balhtica (Schröter), Sgarella and Moncharmont-Zei, p. 234, pl. 22, fig. 12.

1995 Hyalinea balthica (Schröter), Meric et al., p. 109, pl. 9, figs. 2 a-f.

2002 Hyalinga balthica (Schröter), Kaminski et al., p. 26, pl. 3, fig. 13.

Occurrence: Gulf of Saros, S, 4 (50.90 m), S. 7 (90.00 m), S. 9 (71.80 m), S. 10 (61.50 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 52 (61.10 m), S. 53 (440.00 m), S. 62 (110.00 m), S. 66 (65.00 m), S. 68 (210.00 m), S. 69 (72.00 m), S. 72 (500.00 m), S. 75 (42.00 m), S. 77 (53.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 8 (58.00 m), S. 11 (63.00 m), S. 36 (82.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m); Gulf of Kuşadası and Güllük Bay, S. 5 (137.00 m); this species is poorly recorded in depth-range of between 58.00 m and 334.50 m. It is recorded rarely in the infralittoral zone and frequently in upper and lower circalittoral and upper epibathyal zones.

Genus Planulina d'Orbigny, 1826 Planulina ariminensis d'Orbigny (Pl. 27, figs. 4-5)

1826 Planulina ariminensis, d'Orbigny, p. 280, no. 1, pl. 14, figs. 1-3.

1958 Planulina ariminensis d'Orbigny, Parker, p. 276, pl. 4, fig. 43.

1990 Planulina ariminensis d'Orbigny, Galluzzo et al., pl. 3, fig. 17.

1993 Planulina ariminensis d'Orbigny, Sgarella and Moncharmont-Zei, p. 234, pl. 22, fig. 9.

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 13 (156.00 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m), S. 26 (631.00 m), S. 27 (144.80 m), S. 36 (74.00 m); Gulf of Edremit, S. 3 (230.00 m); Gulf of Kuşadası and Güllük Bay, S. 4 (226.00 m), Gulf of Gökova, S. 7 (198.00 m): this species is rare and occurs in the depth-range of between 74.00 m and 631.00 m in Eastern Aegean Sea. It is frequent in upper and lower circalittoral and also in upper and lower epibathyal zones.

Family Cibicididae Cushman, 1927 Subfamily Cibicidinae Cushman, 1927 Genus Cibicides de Montfort, 1808 Cibicides advenum (d'Orbigny) (Pl. 27, figs. 6-7)

1839a Truncatulina advena, d'Orbigny, p. 87, pl. 6, figs. 3-5.

1958 Cibicides advenum (d'Orbigny), Le Calvez , Y., p. 187.

1977b Cibicides advenum (d'Orbigny), Le Calvez , Y., p. 122, figs. 1-5.

1991 Cibicides advenum (d'Orbigny), Cimerman and Langer, p. 70, pl. 74, figs. 8-10.

1995 Cibicides advenum (d'Orbigny), Meriç et al., p. 109, pl. 9, figs. 4 a-c.

2002 Cibicides advenum (d'Orbigny), Avşar, p. 64, pl. 3, figs. 16-17.

Occurrence: Gulf of Saros, S. 13 (156.00 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 24 (386.00 m), S. 30 (90.50 m), S. 57 (52.00 m), S. 63 (96.00 m), S. 66 (65.00 m), S. 67 (550,00 m), S. 72 (500.00 m); Gökçeada, S. I (0.50 m), S. 2 (0.50 m), S. 4 (0.50 m), S. 11 (0.50 m), S. 13 (13.00 m), S. 21 (15.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Bozcaada, S. 3 (0.50 m), S. 5 (0.50 m), S. 13 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 5 (85.50 m), S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (45.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (50.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m); Gulf of Datça, S. 2 (45.00 m); Marmaris Bay, S. 1 (106.40 m): it occurs abundantly in the depth-range of between 0.50 m and 334.50 m in the various localities of Eastern Aegean Sea. It is reported from infralittoral to upper epibathyal zones.

#### Cibicides refulgens Montfort

1808 Cibicides refulgens, Montfort, p. 123, fig. 122. 1896 Truncatulina refulgens (Montfort), Dezelic, p. 86. 1931 Cibicides refulgens Montfort, Cushman, p. 116, pl. 21, fig. 2.

Figure 63 a. Distribution of *Cibicidoides pachyderma* (Rzehak) in the Eastern Aegean Sea, Turkish Coasts.

Figure 63 b. Distribution of *Cibicidoides pseudoungerianus* (Cushman) in the Eastern Aegean Sea, Turkish Coasts.

Figure 63 c. Distribution of *Discorbinella bertheloti* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.

Figure 63 d. Distribution of Hyalinea balthica (Schröter) in the Eastern Aegean Sea, Turkish Coasts.

+4.4











63 c

#6. h.

63 d

- 1958 Cibicides refulgens Montfort, Le Calvez, Y., p. 189.
- 1960 Cibicides refulgens Montfort, Barker, pl. 92, figs. 7-9.
- 1974 Cibicides refulgens Montfort, Colom, p. 150, figs. 31 o-t.
- 1988 Cibicides refulgens Montfort, Loeblich and Tappan, p. 582, pl. 634, figs. 1-3.
- 1991 Cibicides refulgens Montfort, Cimerman and Langer, p. 70, pl. 75, figs. 5-9.
- 1994 Cibicides refulgens Montfort, Loeblich and Tappan, p. 149, pl. 318, figs. 7-9.
- 2001 Cibicides refulgens Montfort, Debenay et al., pl. 6, fig. 1.

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 23 (383.00 m): it is poorly recorded in the depth-range 214.70 and 383.00 m in northeastern Aegean Sea. It is also found in the upper epibathyal zone.

#### Genus Lobatula Fleming, 1828 Lobatula lobatula (Walker and Jacob) (Pl. 27, figs. 8-11)

- 1798 Nautilus lobatulus, Walker and Jacob, p. 462, pl. 14, fig. 36.
- 1896 Truncatulina lobatula (Walker and Jacob), Dezelic, p. 87.
- 1958 Cibicides lobatulus (Walker and Jacob), Le Calvez, Y., p. 188.
- 1960 Cibicides lobatulus (Walker and Jacob), Barker, pl. 92, fig. 10; pl. 93, figs. 1, 4, 5; pl. 95, figs. 4-5.
- 1970 Cibicides lobatulus (Walker and Jacob), v. Daniels, p. 89, pl. 8, fig. 3.
- 1974 Cibicides lobatulus (Walker and Jacob), Colom, p. 147, figs. 29 a-g, I; fig. 30
- 1979 Cibicides lobatulus (Walker and Jacob), Alfirevic, p. 148, pl. 33, fig. 3.
- 1981 Cibicides lobatulus (Walker and Jacob), Sejrup et al., pl. 1, fig. 4.
- 1984 Cibicides lobatulus (Walker and Jacob), Reiss and Hottinger, fig. G. 29 d.
- 1987 Cibicides lobatulus (Walker and Jacob), Yanko and Troitskaja, pl. 9, fig. 3.
- 1988 Lobatula lobatula (Walker and Jacob), Loeblich and Tappan, p. 583, pl. 637, figs. 10-13.
- 1990 Cibicides lobatulus (Walker and Jacob), Thomas et al., pl. 10, fig. 4.
- 1991 Lobatula lobatula (Walker and Jacob), Cimerman and Langer, p. 71, pl. 75, figs. 1-4.
- 1992 Cibicides lobatulus (Walker and Jacob), Hatta and Ujiie, p. 188-189, pl. 37, figs. 4a-5c.
- 1993 Cibicides lobatulus (Walker and Jacob), Sgarella and Moncharmont-Zei, p. 234, pl. 22, figs. 10-11.
- 1993 Lobatula lobatula (Walker and Jacob), Hottinger et al., p. 117, pl. 154, figs. 5-11.
- 1994 Lobatula lobatula (Walker and Jacob), Loeblich and Tappan, p. 150, pl. 316, figs. 8-11; pl. 319, figs. 1-7.
- 1995 Lobatula lobatula (Walker and Jacob), Meric et al., p. 109, pl. 9, figs. 3 a-d.
- 2001 Lobatula lobatula (Walker and Jacob), Debenay et al., pl. 6, fig. 2.
- 2002 Lobatula lobatula (Walker and Jacob), Kaminski et al., p. 4, figs. 1 a-b and 2

2002 Lobatula lobatula (Walker and Jacob), Avşar, p. 64, pl. 3, figs. 18-19.

Occurrence: Gulf of Saros, S. 1 (27.00 m), S. 3 (34.60 m), S. 4 (50.90 m), S. 5 (43.00 m), S. 6 (70.00 m), S. 7 (90.00 m), S. 8 (55.70 m), S. 9 (71.80 m), S. 10 (68.50 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 17 (33.49 m), S. 18 (88.10 m), S. 19 (96.00 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 25 (188.00 m), S. 26 (631.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 32 (67.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 47 (24.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 52 (61.10 m), S. 53 (440.00 m), S. 54 (94.50 m), S. 55 (22.00 m), S. 57 (52.00 m), S. 62 (110.00 m), S. 66 (65.00 m), S. 67 (550.00 m), S. 70 (13.00 m), S. 72 (500.00 m), S. 75 (42.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 1 (0.50 m), S. 2 (0.50 m), S. 3 (0.50 m), S. 9 (0.50 m), S. 11 (0.50 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 18 (30.00 m), S. 20 (3.00 m), S. 21 (15.00 m), S. 23 (10.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 27 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Bozcaada, S. 2 (0.50 m), S. 3 (0.50 m), S. 5 (0.50 m), S. 9 (0.50 m), S. 10 (0.50 m), S. 11 (7.00 m), S. 13 (0.50 m), S. 14 (0.50 m), S. 17 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 4 (85.50 m), S. 5 (137.50 m), S. 6 (92.00 m), S. 7 (18.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 13 (79.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 20 (71.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (45.00 m), S. 35 (80.00 m); Gulf of Edremit, S. 2 (100.40 m), S. 3 (230.00 m), S. 4 (76.30 m), S. 6 (15.00 m), S. 7 (19.00 m), S. 9 (49.60 m), S. 10 (32.00 m), S. 14 (37.70 m), S. 17 (47.40 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 10 (22.50 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Çeşme, S. 2 (0.50 m), S. 6 (0.50 m), S. 8 (0.50 m), S. 9 (0.50 m), S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 3 (113.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 13 (72.50 m), S. 14 (82.10 m), S. 15 (83.70 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 7 (198.00 m); Gulf of Datça, S. 1

Figure 64 a. Distribution of *Planulina ariminensis* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.

Figure 64 b. Distribution of *Cibicides advenum* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.

1-11

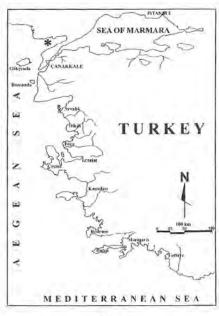
Figure 64 c. Distribution of *Cibicides refulgens* Montfort in the Eastern Aegean Sea, Turkish Coasts.

Figure 64 d. Distribution of *Lobatula lobatula* (Walker and Jacob) in the Eastern Aegean Sea, Turkish Coasts.











64 c

64 d

(252.30 m), S. 2 (45.00 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 6 (56.10 m), S. 7 (56.40 m), S. 8 (246.40 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 8 (69.00 m); this species occurs with higher frequencies in the Eastern Aegean Sea. It is reported mostly from infralittoral to upper circalittoral zones. It is also frequent in lower circalittoral and upper-lower epibathyal zones.

Subfamily Annulocibicidinae Saidova, 1981 Genus Cyclocibicides Cushman, 1927 Cyclocibicides vermiculatus (d'Orbigny) (Pl. 27, figs. 12-13)

1826 Planorbulina vermiculatus, d'Orbigny, p. 280, no. 3.

1927 Cyclocibicides vermiculatus (d'Orbigny), Cushman, p. 93.

1960 Cyclocibicides vermiculatus (d'Orbigny), Barker, pl. 115, figs. 2 a-b.

1988 Cyclocibicides vermiculatus (d'Orbigny), Loeblich and Tappan, p. 586, pl. 640, figs. 15-17.

1991 Cyclocihicides vermiculatus (d'Orbigny), Cimerman and Langer, p. 71, pl. 76, figs. 2-7.

1993 Cyclocibicides vermiculatus (d'Orbigny), Sgarella and Moncharmont-Zei, p. 234-235, pl. 23, fig. 1.

Occurrence: Gulf of Saros, S. 42 (27.50 m), S. 50 (41.00 m); Haramantaşı locality, central part (20.10 m); Line I, S. 7 (40.00 m); Line III, S. 4 (30.00 m); Gökçeada, S. 25 (25.00 m), S. 29 (11.00 m): this species is rare and occurs in the different depths. It is reported from the infralittoral zone.

Family Planorbulinidae Schwager, 1877 Subfamily Planorbulininae Schwager, 1877 Genus Planorbulina d'Orbigny, 1826 Planorbulina mediterranensis d'Orbigny (Pl. 27, fig.14; Pl. 28, figs. 1-5)

1826 Planorbulina mediterranensis, d'Orbigny, p. 280, no. 2.

1896 Planorbulina mediterranensis d'Orbigny, Dezelic, p. 86.

1931 Planorbulina mediterranensis d'Orbigny, Cushman, p. 129, pl. 24, figs. 5-8.

1960 Planorbulina mediterranensis d'Orbigny, Barker, pl. 92, figs. 1-3.

1960 Planorbulina mediterranensis d'Orbigny, Hofker, p. 254, figs. 128-129.

1974 Planorbulina mediterranensis d'Orbigny, Colom, p. 158, figs. 39-40.

1974 Planorbulina mediterranensis d'Orbigny, Le Calvez, Y., p. 43, pl. 11, figs. 1-3.

1979 Planorbulina mediterranensis d'Orbigny, Alfirevic, p. 150, pl. 33, fig. 4.

1988 *Planorbulina mediterranensis* d'Orbigny, Loeblich and Tappan, p. 588, pl. 645, figs. 1-4; pl. 646, figs. 1-2.

1991 *Planorbulina mediterranensis* d'Orbigny, Cimerman and Langer, p. 71-72, pl. 78, figs. 1-8.

1992 Planorbulina mediterranensis d'Orbigny, Hatta and Ujiie, p. 189, pl. 38, figs. 2 a-c.

1993 Planorbulina mediterranensis d'Orbigny, Sgarella and Moncharmont-Zei, p. 235, pl. 23, fig. 4.

1995 Planorbulina mediterranensis d'Orbigny, Meriç et al., p. 109, pl. 10, figs. 2 a-b.

2001 Planorbulina mediterranensis d'Orbigny, Debenay et al., pl. 6, fig. 3.

2002 Planorbulina mediterranensis d'Orbigny, Kaminski et al., p. 28, pl. 4, figs. 3 a-b.

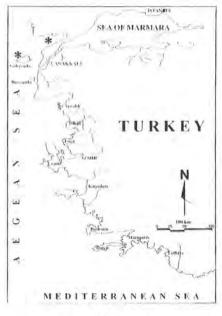
Occurrence: Gulf of Saros, S. 4 (50.90 m), S. 7 (90.00 m), S. 10 (68.50 m), S. 12 (214,70 m), S. 13 (156.00 m), S. 14 (84.00 m), S. 15 (39,50 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 20 (92.00 m), S. 21 (97.40 m), S. 25 (188.00 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m9, S. 32 (67.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 47 (24.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 52 (61.10 m), S. 54 (94.50 m), S. 55 (22.00 m), S. 57 (52.00 m), S. 65 (61.00 m), S. 67 (550.00 m), S. 71 (90.00 m), S. 72 (500.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 15 (3.00 m), S. 16 (4.00 m), S. 17 (4.00 m), S. 19 (40.00 m), S. 21 (15.00 m), S. 23 (10.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Bozcaada, S. 2 (0.50 m), S. 5 (0.50 m), S. 10 (0.50 m), S. 11 (0.50 m), S. 13 (0.50 m), 14 (0.50 m), S. 17 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 5 (137.50 m), S. 6 (92.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 15 (47.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (71.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 2 (100.40 m), S. 3 (230.00 m), S. 4 (76.30 m), S. 6 (15.00 m), S. 7 (19.00 m), S. 8 (49.30 m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 8 (35.80 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 13 (80.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Çeşme, S. 2 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 3 (113.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 13 (72.50 m), S. 14 (82.10 m), S. 15 (83.70 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 1 (252.30 m), S. 2 (45.00 m), S. 4

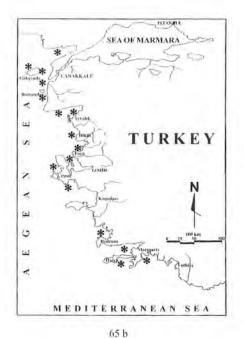
Figure 65 a. Distribution of *Cyclocibicides vermiculatus* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.

Figure 65 b. Distribution of *Planorbulina mediterranensis* d'Orbigny in the Eastern Aegean Sea, Turkish Coasts.

Figure 65 c. Distribution of *Cibicidella variabilis* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.

Figure 65 d. Distribution of *Cymbaloporetta* sp. in the Eastern Aegean Sea, Turkish Coasts.







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65 d

(40.00 m), S. 5 (59.30 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 5 (128.80 m), S. 8 (69.00 m); this species occurs with higher frequencies in the different localities of Eastern Aegean Sea. It is reported mostly in infralittoral and upper circalittoral zones. It is rare in lower circalittoral and upper epibathyal zones.

Genus Cibicidella Cushman, 1927 Cibicidella variabilis (d'Orbigny) (Pl. 28, figs. 6-11)

1839b Truncatulina variabilis, d'Orbigny, p. 135, pl. 2, fig. 29.

1896 Truncatulina variabilis d'Orbigny, Dezelic, p. 87.

1974 Cibicidella variabilis (d'Orbigny), Colom, p. 150, figs. 33-34,

1974 Cibicidella variabilis (d'Orbigny), La Calvez, Y., p. 96, pl. 26, figs. 1-4.

1988 Planorbulina variabilis (d'Orbigny), Loeblich and Tappan, p. 588, pl. 645, figs. 5-6.

1991 Cibicidella variabilis (d'Orbigny), Cimerman and Langer, p. 72, pl. 77, figs. 1-10.

1993 Cibicidella variabilis (d'Orbigny), Sgarella and Moncharmont-Zei, p. 234, pl. 23, figs. 2-3.

Occurrence: Gulf of Saros, S. 35 (195.00 m), S. 36 (74.00 m): Harmantaşı locality, Line II, S. 7 (40.00 m), S. 8 (45.00 m); Gökçeada, S. 17 (4.00 m), S. 25 (25.00 m); Bozcaada, S. S. 15 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m); Gulf of Edremit, S. 3 (230.00 m), S. 6 (15.00 m), S. 7 (19.00 m); Dikili and Candarlı Bays, S. 1 (16.00 m), S. 5 (18.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m); Gulf of Gökova, S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m), S. 5 (59.30 m); Marmaris Bay, S. 6 (64.00 m), S. 8 (69.00 m): it occurs more frequently in depths, between 0.50 m and 230.00 m in the different localities of Eastern Aegean Sea. This species is more frequent in infralittoral and upper circalittoral zones and rare in lower circalittoral and upper epibathyal zones.

Family Cymbaloporidae Cushman, 1927 Subfamily Cymbaloporininae, Cushman, 1927 Genus Cymbaloporetta Cushman, 1928 Cymbaloporetta sp. (Pl. 29, fig. 1)

1987 Cymbaloporetta gr. bradyi (Cushman), Baccaert, pl. 91, figs. 3-5. 1991 Cymbaloporetta sp. 1, Cimerman and Langer, p. 72, pl. 80, figs. 1-5.

1997 Cymbaloporetta sp., Haunold et al, p. 196, fig. 7.

Occurrence: Gulf of Datça, S. 7 (56.40 m): this species occurs only in one sample

in the upper circulittoral zone.

Superfamily ACERVULINACEA Schultze, 1854
Family Acervulinidae Schultze, 1854
Genus Acervulina Schultze, 1854
Acervulina inhaerens Schultze
(Pl. 29, fig. 2)

- 1854 Acervulina inhaerens, Schultze, p. 68, pl. 6, fig. 12
- 1884 Gypsina inhaerens (Schultze), Brady, p. 718, pl. 102, figs. 1-6.
- 1915 Gypsina inhaerens (Schultze), Cushman, p. 74, pl. 21, figs. 6-7.
- 1931 Avervulina inhaerens Schultze, Cushman, p. 134, pl. 25, fig. 2,
- 1954 Acervulina inhaerens Schultze, Cushman, Todd and Post, p. 372, pl. 91, figs. 37-38.
- 1957 Acervulina inhaerens Schultze, Todd, pl. 93, fig. 15.
- 1978 Acervalina inhaerens Schultze, Cheng and Zheng, p. 236, pl. 22, figs. 3-4.
- 1988 Acervulina inhaerens Schultze, Loeblich and Tappan, p. 597, pl. 659, figs. 1-6.
- 1994 Acervulina inhaerens Schultze, Loeblich and Tappan, p. 154, pl. 332, figs. 1-5.
- 1999 Acervulina inhaerens Schultze, Hayward et al., p. 156, pl. 15, figs. 2-3.
- 2001 Acervulina inhaerens Schultze, Debenay et al., pl. 4, fig. 31.

Occurrence: Gulf of Saros, S. 67 (550.00 m), S. 71 (90.00 m); Harmantaşı locality, central part (22.10 m); Gulf of Edremit, S. 6 (15.00 m); Dikili and Çandarlı Bays, S. 5 (18.00 m), S. 8 (35.80 m), S. 14 (21.00 m); Gulf of İzmir and vicinity of Karaburun Peninsula, S. 5 (26.50 m); Marmaris Bay, S. 2 (79.10 m); it is poorly recorded in depth-range of between 15.00 m and 550.00 m. It occurs in infralittoral and upper circalittoral zones. It is also very rare in the lower epibathyal zone.

#### Genus Planogypsina Bermudez, 1952 Planogypsina acervalis (Brady)

1884 Planorbulina acervalis, Brady, p. 657, pl. 92, fig. 4.

2000

- 1949 Planorbulina mediterranensis d'Orbigny, Said, p. 44. pl. 4, fig. 25.
- 1979 Planorbulina acervalis Brady, Pereira, p. 287, pl. 41, figs. L, M.
- 1984 Planorbulina acervalis Brady, Reiss and Hottinger, p. 252, figs. G 32 a-b.
- 1993 Planogypsina acervalis (Brady), Hottinger et al., p. 125, pl. 169, figs. 1-9; pl. 170, figs. 1-8.

Occurrence: Gulf of Saros, Harmantaşı locality, Line IV, S. 3 (35.00 m) and S. 4 (40.00 m); it is poorly recorded in a depth-range of 35.00-40.00 m corresponding to the infralittoral zone.

#### Planogypsina squamiformis (Chapman) (Pl. 29, fig. 3)

- 1901 Gypsina vesicularis var. squamiformis, Chapman, p. 200, pl. 19, fig. 15.
- 1901 Gypsina vesicularis var. monticulus, Chapman, p. 200, pl. 19, fig. 14.
- 1949 Planorbulina acervalis Brady, Said, p. 43, pl. 4, fig. 28.
- 1964 Planogypsina squamiformis (Chapman), Loeblich and Tappan, p. C 698, fig. 568.
- 1979 Planorbulina aff. P. acervalis Brady, Pereira, p. 288, pl. 41, figs. N-Q.
- 1984 Acervulina inhaerens Schultze, Reiss and Hottinger, p. 252, figs. G 1e, G 32
- 1993 Planogypsina cf. P. squamiformis (Chapman), Hottinger et al., p. 126, pl. 171, figs. 1-9.

Occurrence: Gulf of Saros, Harmantaşı locality, Line I, S. 9 (50.00 m); Line IV, S. 6 (50.00 m), S. 7 (60.00 m), S. 8 (70.00 m) and S. 9 (80.00 m); Dikili and Çandarlı Bays, S. 5 (18.00 m), S. 8 (35.80 m): this species is very rare in Eastern Aegean Sea and is reported from the upper circalittoral zone.

#### Genus Sphaerogypsina Galloway, 1933 Sphaerogypsina globula (Reuss) (Pl. 29, fig. 4)

- 1848 Ceriopora globulus, Reuss, p. 33, pl. 5, fig. 7.
- 1896 Gypsina globulus (Reuss), Dezelic, p. 89.
- 1960 Sphaerogypsina globulus (Reuss), Barker, pl. 101, fig. 8.
- 1974 Sphaerogypsina globula (Reuss), Colom, p. 160, fig. 42 b.
- 1988 Sphaerogypsina globula (Reuss), Loeblich and Tappan, p. 598, pl. 662, figs. 4-6.
- 1991 Sphaerogypsina globula (Reuss), Cimerman and Langer, p. 72, pl. 80, figs. 6-9.
- 1992 Sphaerogypsina globulus (Reuss), Hatta and Ujüe, p. 192-193, pl. 41, figs. 7-8.
- 1993 Sphaerogypsina globula (Reuss), Sgarella and Moncharmont-Zei, p. 235, pl. 23, fig. 6.
- 1993 Sphaerogypsina globulus (Reuss), Hottinger et al., p. 128, pl. 173, figs. 1-10.
- 1994 Sphaerogypsina globula (Reuss), Loeblich and Tappan, p. 154, pl. 334, figs. 4-6.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 30 (90.50 m), S. 35 (195.00 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 54 (94.50 m); Gökçeada, S. 3 (0.50 m), S. 16 (4.00 m); Bozcaada, S. 2 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50m), S. 13 (79.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 28 (39.00 m), S. 31 (75.00 m), S. 34 (38.00 m); Dikili and Çandarlı

Bays, S. 9 (49.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 3 (31.30 m); Gulf of Gökova, S. 3 (80.40 m), S. 5 (34.50 m), S. 6 (65.00 m); Gulf of Datça, S. 4 (40.00 m), S. 5 (59.30 m); Marmaris Bay, S. 1 (106.40 m), S. 3 (98.30 m), S. 5 (128.80 m): it occurs frequently at depths between 0.50 m and 195.00 m and is reported mostly from infralittoral to upper circalittoral zones. It is rare in the lower circalittoral zone.

Superfamily ASTERIGERINACEA d'Orbigny, 1839
Family Asterigerinatidae Reiss, 1963
GenusAsterigerinata Bermudez, 1949
Asterigerinata adriatica Haake

1991 Asterigerinata sp. 1, Cimerman and Langer, p. 73, pl. 82, figs. 5-6.
1993 Asterigerinata adriatica Haake, Sgarella and Moncharmont-Zei, p. 224, pl. 19, figs. 11-12.

Occurrence: Gulf of Saros, Harmantaşı locality, Line II, S. 7 (40,00 m): its occurrence is always rare in the infralittoral zone.

## Asterigerinata mamilla (Williamson) (Pl. 29, figs. 5-6)

1858 Rosalina mamilla, Williamson, p. 54, pl. 4, figs. 109-111.

1931 Discorbis mamilla (Williamson), Cushman, p. 23, pl. 5, fig. 11.

1958 Discorbis mamilla (Williamson), Le Calvez, Y., p. 182.

1970 Asterigerinata mamilla (Williamson), v. Daniels, p. 86, pl. 6, fig. 11.

1972 Asterigerinata mamilla (Williamson), Rosset-Moulinier, p. 172, pl. 10, figs. 6-7; pl. 13, figs. 1-9.

1974 Discorbis mamilla (Williamson), Colom, p. 124, figs. 21 x, y.

1979 Asterigerinata mamilla (Williamson), Alfirevic, p. 125, pl. 25, fig. 4.

1991 Asterigerinata mamilla (Williamson), Cimerman and Langer, p. 73, pl. 82, figs. 1-4.

1993 Asterigerinata mamilla (Williamson), Sgarella and Moncharmont-Zei, p. 224, pl. 19, figs. 9-10.

1995 Asterigerinata mamilla (Williamson), Meriç et al., p. 109, pl. 10, figs. 4 a-b.

2001 Asterigerinata mamilla (Williamson), Debenay et al., pl. 4, figs. 20-21.

2002 Asterigerinata mamilla (Williamson), Avşar, p. 64, pl. 3, fig. 20; pl. 4, fig. 1.

Figure 66 a. Distribution of Acervulina inhaerens Schultze in the Eastern Aegean Sea, Turkish Coasts.

Figure 66 b. Distribution of *Planogypsina acervalis* (Brady) in the Eastern Aegean Sea, Turkish Coasts.

Figure 66 c. Distribution of *Planogypsina squamiformis* (Chapman) in the Eastern Aegean Sea, Turkish Coasts.

Figure 66 d. Distribution of *Sphaerogypsina globula* (Reuss) in the Eastern Aegean Sea, Turkish Coasts.











66 c

66 d

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 17 (33.90 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 53 (440.00 m), S. 55 (22.00 m), S. 63 (96.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 3 (0.50 m), S. 11 (0.50 m), S. 16 (4.00 m), S. 23 (10.00 m), S. 25 (25.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 3 (59.60 m), S. 5 (137.50 m), S. 6 (92.00 m), S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m). S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 36 (82.00 m); Gulf of Edremit, S. 2 (100.40 m), S. 7 (19.00 m), S. 10 (32.00 m), S. 14 (37.70 m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 11 (52.00 m), S. 12 (25.50 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m); Cesme, S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 3 (113.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 9 (67.00 m), S. 11 (47.00 m), S. 14 (82.10 m); Gulf of Gökova, S. 3 (80.40 m), S. 6 (65.00 m); Gulf of Datça, S. 2 (45.00 m), S. 3 (139.50 m), S. 5 (59.30 m); Marmaris Bay, S. 1 (106.40 m), S. 3 (98.30 m), S. 8 (69.00 m); this species occurs abundantly in different localities of Eastern Aegean Sea. It is reported mostly from infralittoral to upper circulittoral zones. It is also recorded rarely in lower circalittoral-upper epibathyal zones.

> Family Amphisteginidae Cushman, 1927 Genus Amphistegina d'Orbigny, 1826 Amphistegina lobifera Larsen (Pl. 29, figs. 7-10)

1880 Amphistegina lessonii d'Orbigny, Möbius, p. 99, pl. 10, figs. 11-14; pl. 11, figs. 1-3.

1972 Amphistegina cf. radiata Terquem, Hansen and Reiss, pl. 10, figs. 3-4.

1976 Amphistegina lobifera, Larsen, p. 4, pl. 3, figs. 1-5; pl. 7, fig. 3; pl. 8, fig. 3.

1977 Amphistegina lobifera Larsen, Larsen and Drooger, p. 225, fig. 1/1ab.

1984 Amphistegina lobifera Larsen, Reiss and Hottinger, p. 217, fig. G 11, G 12 a-c.

1988 Amphistegina lobifera Larsen, Morariu and Hottinger, p. 695, fig. 1 A, B, fig. 2.

1993 Amphistegina lobifera Larsen, Hottinger et al., p. 133, pl. 188, figs. 1-6.

1997 Amphistegina lobifera Larsen, Haunold et al., p. 196, fig. 7.

+5.2

Occurrence: Gökçeada, S. 30 (3.00 m); Gulf of Gökova, S. 2 (27.00 m), S. 5 (34.50 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m); Marmaris Bay, S. 4 (71.80 m), S. 6 (64.00 m), S. 8 (69.00 m); it is poorly recorded in depth-range of between 3.00 m and 71.80 m. It is also reported from the infralittoral to upper circalittoral zones.

Superfamily NONIONACEA Schultze, 1854
Family Nonionidae Schultze, 1854
Subfamily Nonioninae Schultze, 1854
Genus Nonion de Montfort, 1808
Nonion depressulum (Walker and Jacob)
(Pl. 29, figs. 11-12)

1798 Nautilus depressulus, Walker and Jacob, p. 641, pl. 14, fig. 33.

1972 Nonion depressulum (Walker and Jacob), Rosset-Moulinier, p. 186, pl. 21, figs. 1-4; pl. 22, figs. 1-2.

1976 Nonion depressulum (Walker and Jacob), Hansen and Lykke-Andersen, p. 21, pl. 19, figs. 3, 6.

1978 Haynesina depressula (Walker and Jacob), Banner and Culver, p. 200, pl. 10, figs. 1-8.

1991 Haynesina depressula (Walker and Jacob), Cimerman and Langer, p. 81, pl. 83, figs. 1-4.

1993 Nonion depressulum (Walker and Jacob), Sgarella and Moncharmont-Zei, p. 238, pl. 24, figs. 3-4.

1999 Haynesina depressula (Walker and Jacob), Hayward et al., p. 158, pl. 15, figs. 10-11.

2001 Haynesina depressula (Walker and Jacob), Debenay et al., pl. 6, fig. 13.

2002 Haynesina depressula (Walker and Jacob), Kaminski et al., p. 26, pl. 4, figs. 4-5.

Occurrence: Gulf of Saros, S. 53 (440.00 m), S. 63 (96.00 m); Harmantaşı locality; Line I, S. 1 (5.00 m), Line II, S. 4 (25.00 m), S. 10 (60.00 m); Gökçeada, S. 3 (0.50 m), S. 5 (0.50 m), S. 27 (9.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanaakkale triangle, S. 7 (18.00 m), S. 10 (57.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 22 (45.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m); Gulf of Edremit, S. 3 (230.00 m): this species is rare and occurs in depth-range of between 0.50 m and 440.00 m. It is reported mainly from infralittoral-upper circalittoral zones. It also occurs rarely in lower circalittoral-upper epibathyal zones.

#### Genus Nonionella Cushman, 1926 Nonionella turgida (Williamson)

1858 Rotalina turgida, Williamson, p. 50, pl. 4, figs. 95-97.

1939 Nonionella turgida (Williamson), Cushman, p. 32, pl. 9, figs. 2-3.

1960 Nonionella turgida (Williamson), Hofker, p. 262, figs. 181-182.

1960 Nonionella turgida (Williamson), Barker, p. 109, figs. 17-19.

1971 Nonionella turgida (Williamson), Murray, p. 193, pl. 81, figs. 1-5.

1987 Nonionella turgida (Williamson), Jorissen, pl. 4, figs. 11-13.

1991 Nonionella turgida (Williamson), Cimerman and Langer, p. 74, pl. 84, figs. 6-8.

1993 Nonionella turgida (Williamson), Sgarella and Moncharmont-Zei, p. 240, pl. 24, fig. 5.

1995 Nonionella turgida (Williamson), Meriç et al., p. 109, pl. 11, figs. 3 a-c, 1999 Nonionella turgida (Williamson), Hayward et al., p. 159, pl. 15, figs. 16-17. 2001 Nonionella turgida (Williamson), Debenay et al., pl. 6, fig. 14.

Occurrence: Gulf of Saros, S. 55 (22.00 m), S. 76 (53.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (18.00 m), S. 8 (58.00 m), S. 14 (47.00 m), S. 22 (47.00 m), S. 23 (45.00 m), S. 29 (50.00 m), S. 32 (46.00 m), S. 35 (80.00 m), S. 36 (82.00 m); it is poorly recorded in depth-range of between 18.00 m and 82.00 m in infralittoral and upper circalittoral zones.

Subfamily Astrononioninae Saidova, 1981 Genus Astrononion Cushman and Edwards, 1937 Astrononion stelligerum (d'Orbigny) (Pl. 29, figs. 13-14; Pl. 30, figs. 1-2)

1839b Nonionina stelligera, d'Orbigny, p. 128, pl. 3, fig. 12.

- 1930 Nonion stelligerum (d'Orbigny), Cushman, p. 7, pl. 8, figs. 8-12; pl. 3, figs. 1-3.
- 1937 Astrononion stelligerum (d'Orbigny), Cushman and Edwards, p. 31, pl. 3, fig. 7 a.
- 1960 Astrononion stelligerum (d'Orbigny), Barker, pl. 109, figs. 3-4.
- 1974 Astrononion stelligerum (d'Orbigny), Le Calvez, Y., p. 37, pl. 9, figs. 1-4.
- 1991 Astrononion stelligerum (d'Orbigny), Cimerman and Langer, p. 74, pl. 84, figs. 13-15.
- 1993 Astrononion stelligerum (d'Orbigny), Sgarella and Moncharmont-Zei, p. 238, pl. 24, fig. 10.
- 1994 Astrononion stelligerum (d'Orbigny), Loeblich and Tappan, p. 158, pl. 344, figs. 11-14.

Occurrence: Gulf of Saros, S. 67 (550.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 25 (25.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 7 (18.00 m), S. 13 (79.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 3 (230.00 m), S. 7 (19.00 m), S. 9 (49.60 m), S. 17 (47.40

Figure 67 a. Distribution of Asterigerinata adriatica Haake in the Eastern Aegean Sea, Turkish Coasts.

100

- Figure 67 b. Distribution of Asterigerinata mamilla (Williamson) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 67 c. Distribution of Amphistegina lobifera Larsen in the Eastern Aegean Sea, Turkish Coasts.
- Figure 67 d. Distribution of *Nonion depressulum* (Walker and Jacob) in the Eastern Aegean Sea, Turkish Coasts.











67 c

K-1

67 d

m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 3 (113.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 9 (67.00 m), S. 11 (47.00 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 5 (34.50 m); Gulf of Datça, S. 2 (45.00 m), S. 5 (59.30 m); Marmaris Bay, S. 3 (98.30 m), S. 5 (128.80 m), S. 8 (69.00 m): it occurs abundantly in depth-range of between 3.00 m and 550.00 m. This species is reported mostly from infralittoral to upper circalittoral zones. It is also recorded in lower circalittoral and upper epibathyal zones.

Subfamily Pulleniinae Schwager, 1877 Genus Melonis de Montfort, 1808 Melonis pompilioides (Fichtel and Moll) (Pl. 30, figs. 3-6)

1798 Nautilus pompilioides, Fichtel and Moll, p. 31, pl. 2, figs. a-c.

1808 Melonis etruscus (Fichtel and Moll), Montfort, p. 66.

1959 Nonion pompilioides (Fichtel and Moll), Norvang, p. 145, figs. 1-6.

1976 Melonis pompilioides (Fichtel and Moll), Hansen and Lykke-Andersen, p. 24, pl. 22, figs. 10-13.

1984 Melonis barleanus (Fichtel and Moll), Roegel and Hansen, p. 30, pl. 2, figs. 1-2.

1988 Melonis pompilioides (Fichtel and Moll), Loeblich and Tappan, p. 621, pl. 696, figs. 7-8.

1990 Melonis pompilioides (Fichtel and Moll), Galluzzo et al., pl. 4, figs. 6-7.

1990 Melonis pompilioides (Fichtel and Moll), Thomas et al., pl. 10, fig. 16.

1991 Melonis pompilioides (Fichtel and Moll), Cimerman and Langer, p. 74, pl. 85, figs. 1-4.

1994 Melonis pompilioides (Fichtel and Moll), Loeblich and Tappan, p. 159, pl. 347, figs. 8-10.

2002 Melonis pompilioides (Fichtel and Moll), Avşar, p. 65, pl. 4, figs. 2-3.

Occurrence: Gulf of Saros, S. 2 (15.50 m), S. 3 (34.60 m), S. 4 (50.90 m), S. 5 (43.00 m), S. 6 (70.00 m), S. 7 (90.00 m), S. 8 (55.70 m), S. 9 (71.80 m), S. 10 (68.50 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 12 (156.00 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 33 (70.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 45 (33.50 m), S. 50 (41.00 m), S. 52 (61.10 m), S. 53 (440.00 m), S. 54 (94.50 m), S. 57 (52.00 m), S. 59 (98.00 m), S. 60 (55.00 m), S. 61 (70.00 m), S. 62 (110.00 m), S. 63 (96.00 m), S. 64 (75.00 m), S. 65 (61.00 m), S. 66 (65.00 m), S. 68 (210.00 m), S. 69 (72.00 m), S. 70 (13.00 m), S. 71 (90.00 m), S. 72 (500.00 m), S. 73 (600.00 m), S. 75 (42.00 m), S. 77 (53.00 m), S. 78 (63.00 m), S.

Legal.

80 (98.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 4 (85.50 m), S. 5 (137.50 m), S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (45.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m), S. 3 (230.00 m), S. 16 (82.00 m); Dikili and Çandarlı Bays, S. 8 (35.80 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m); Gulf of Kuşadası and Güllük Bay, S. 4 (226.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 12 (62.10 m), S. 13 (72.50 m), S. 15 (83.70 m); Gulf of Gökova, S. 3 (80.40 m), S. 5 (34.50 m), S. 8 (78.30 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 5 (128.80 m), S. 6 (64.00 m); its occurrence is always abundant in the different localities of Eastern Aegean Sea. This species occurs mostly in infralittoral and upper circalittoral zones. It is rare in lower circalittoral, upper and lower epibathyal zones.

> Genus Pullenia Parker and Jones, 1862 Pullenia quinqueloba (Reuss) (Pl. 30, figs. 7-8)

1851 Nonionina quinqueloba, Reuss, p. 71, pl. 5, fig. 31.

1958 Pullenia quinqueloba (Reuss), Parker, p. 273, pl. 4, figs. 32-33.

1990 Pullenia quinqueloba (Reuss), Akimoto, p. 208, pl. 17, fig. 13.

1990 Pullenia quinqueloba (Reuss), Thomas et al., pl. 7, fig. 11; Pl. 10, fig. 19.

1993 Pullenia quinqueloba (Reuss), Sgarella and Moncharmont-Zei, p. 240, pl. 24, figs. 8-9.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 27 (70.00 m): this species is very rare in the upper circalittoral zone.

Superfamily CHILOSTOMELLACEA Brady, 1881
Family Chilostomellidae Brady, 1881
Subfamily Chilostomellinae Brady, 1881
Genus Chilostomella Reuss, 1849
Chilostomella mediterranensis Cushman and Todd
(Pl. 30, fig. 9)

- 1958 Chilostomella mediterranensis Cushman and Todd, Parker, p. 273, pl. 4, fig. 24.
- 1984 Chilostomella mediterranensis Cushman and Todd, Ross and Kennett, pl. 1, figs. 7-8.
- 1993 Chilostomella mediterranensis Cushman and Todd, Sgarella and Moncharmont-Zei, p. 238, pl. 24, fig. 11.
- 1995 Chilostomella mediterranensis Cushman and Todd, Meric et al., p. 109, pl.

Occurrence: Gulf of Saros, S. 7 (90.00 m), S. 12 (214.70 m), S. 13 (156.00 m), S. 16 (71.10 m), S. 18 (88.10 m), S. 23 (383.00 m), S. 27 (144.80 m), S. 29 (92.00 m), S. 62 (110.00 m), S. 75 (42.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 27 (70.00 m), S. 36 (82.00 m): its occurrence is always rare in infralittoral, upper-lower circalittoral and upper epibathyal zones.

Family Gavellinidae Hofker, 1956 Subfamily Gyroidinoidinae Saidova, 1981 Genus Gyroidinoides Brotzen, 1942 Gyroidinoides soldanii (d'Orbigny) (Pl. 30, figs. 10-11)

1826 Gyroidina soldanii, d'Orbigny, p. 278, no. 5.

1846 Rotalia soldanii (d'Orbigny), d'Orbigny, p. 155, pl. 8, figs. 10-12.

1984 Gyroidina soldanii (d'Orbigny), Ross and Kennett, pl. 3, figs. 9-10.

1985 Gyroidina soldanii d'Orbigny, Papp and Schmid, p. 60, pl. 50, figs. 4-9.

1990 Gyroidina soldanii d'Orbigny, Galluzzo et al., pl. 4, figs. 18-19.

1990 Gyroidina soldanii d'Orbigny, Thomas et al., pl. 10, fig. 22.

1991 Gyroidinoides soldanii (d'Orbigny), Cimerman and Langer, p. 75, pl. 85, figs. 5-6.

1993 Gyroidinoides cf. G. soldanii (d'Orbigny), Hottinger et al., p. 139, pl. 198, figs. 1-9.

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 13 (156.00 m), S. 19 (96.50 m), S. 22 (118.50 m), S. 23 (383.00 m), S. 24 (386.00 m), S. 25 (188.00 m), S. 26 (631.00 m), S. 27 (144.80 m), S. 28 (115.50 m), S. 35 (195.00 m), S. 62 (110.00 m), S. 66 (65.00 m), S. 68 (210.00 m), S. 70 (13.00 m), S. 73 (600.00 m), S. 74 (200.00 m), S. 75 (42.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m); Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m); Gulf of Kuşadası and Güllük Bay, S. 4 (226.00 m), S. 5 (137.00 m), S. 8 (29.00 m); Gulf of Gökova, S. 5 (34.50 m), S. 7 (198.00 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m), S. 8 (246.40 m), S. 9 (147.00 m); Marmaris Bay, S. 5 (128.80 m): it is poorly recorded in the depth-range of 29.00-631.00 m, and frequently in infralittoral and upper circalittoral zones. It is reported rarely in lower circalittoral-lower epibathyal zones.

- Figure 68 a. Distribution of *Nonionella turgida* (Williamson) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 68 b. Distribution of Astrononion stelligerum (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 68 c. Distribution of *Melonis pompilioides* (Fichtel and Moll) in the Eastern aegean Sea, Turkish Coasts.
- Figure 68 d. Distribution of *Pullenia quinqueloba* (Reuss) in the Eastern Aegean Sea, Turkish Coasts.











68 c

68 d

#### Subfamily Gavellininae Hofker, 1956 Genus Gyroidina d'Orbigny, 1826 Gyroidina umbonata (Silvestri)

1958 Gyroidina umbonata (Silvestri), Parker, p. 266, pl. 3, figs, 19-20.
1990 Gyroidina umbonata (Silvestri), Galluzzo et al., pl. 4, figs. 20-21.
1993 Gyroidina umbonata (Silvestri), Sgarella and Moncharmont-Zei, p. 241, pl. 25, figs. 1-2.
2002 Gyroidina umbonata (Silvestri), Avsar, p. 65, pl. 4, fig. 4.

Occurrence: Gökçeada-Bozcaada-Çanakkale triangle, S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m): its occurrence is always rare in the Eastern Aegean Sea and is reported from infralittoral and upper circalittoral zones.

Superfamily ROTALIACEA Ehrenberg, 1839
Family Rotaliidae Ehrenberg, 1839
Subfamily Pararotaliinae Reiss, 1963
Geneus Pararotalia Le Calvez, Y., 1949
Pararotalia spinigera (Le Calvez)

1949 Pararotalia spinigera, Le Calvez, Y., p. 32.

Occurrence: Gulf of Saros, Harmantaşı locality, Line III, S. 1 (10.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 13 (79.00 m), S. 16 (47.00 m): it occurs only in three samples collected from depth-range between 10.00 m and 79.00 m. Corresponding to infralittoral and upper circalittoral zones.

Subfamily Ammoniinae Saidova, 1981 Genus Ammonia Brünnich, 1772 Ammonia compacta Hofker (Pl. 30, figs. 12-15; Pl. 31, figs. 1-2)

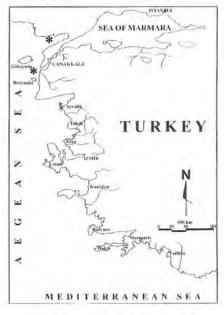
1960 Ammonia gaimardi (d'Orbigny), Barker, pl. 106, figs. 9 a-c. 1969 Streblus compactus, Hofker, p. 99, figs. 242, 243. 1987 Ammonia compacta (Hofker), Yanko and Troitskaja, p. 44, pl. 11, figs. 1-10.

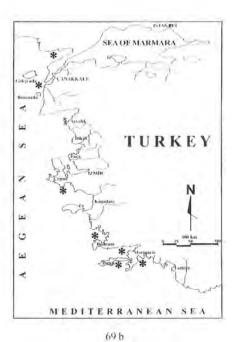
Figure 69 a. Distribution of *Chilostomella mediterranensis* Cushman and Todd in the Eastern Aegean Sea, Turkish Coasts.

Figure 69 b. Distribution of *Gyroidinoides soldanii* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.

Figure 69 c. Distribution of *Gyroidina umbonata* (Silvestri) in the Eastern Aegean Sea, Turkish Coasts.

Figure 69 d. Distribution of *Pararotalia spinigera* (Le Calvez ) in the Eastern Aegean Sea, Turkish Coasts.









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1993 Ammonia gaimardi (d'Orbigny), Sgarella and Moncharmont-Zei, p. 228, pl. 20, figs. 7-8.

1995 Ammonia compacta (Hofker), Meriç et al., p. 109, pl. 12, 3 a-c.

2002 Ammonia compacta (Hofker), Kaminski et al., p. 22, pl. 5, fig. 8.

2002 Ammonia compacta (Hofker), Avşar, p. 65, pl. 4, figs. 7-9.

Occurrence: Gulf of Saros, S. 1 (27.00 m), S. 2 (15.50 m), S. 3 (34.60 m), S. 4 (50.90 m), S. 5 (43.00 m), S. 6 (70.00 m), S. 7 (90.00 m), S. 8 (55.70 m), S. 9 (71.80 m), S. 10 (68.50 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 23 (383.00 m), S. 27 (144.80 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 33 (70.00 m), S. 34 (82.00 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 46 (40.20 m), S. 47 (24.50 m), S. 48 (40.00 m), S. 49 (45.00 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 52 (61.10 m), S. 53 (440.00 m), S. 55 (22.00 m), S. 56 (41.00 m), S. 57 (52.00 m), S. 58 (60.00 m), S. 60 (55.00 m), S. 63 (96.00 m), S. 65 (61.00 m), S. 67 (550.00 m), S. 68 (210.00 m), S. 70 (13.00 m), S. 71 (90.00 m), S. 72 (500.00 m), S. 76 (53.00 m), S. 77 (53.00 m), S. 78 (63.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 3 (0.50 m), S. 16 (4.00 m), S. 17 (4.00 m), S. 19 (40.00 m), S. 21 (15.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 32 (16.00 m); Bozcaada, S. 1 (0.50 m), S. 2 (0.50 m), S. 8 (0.50 m), S. 10 (0.50 m), S. 11 (7.00 m), S. 16 (0. 50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 3 (59.60 m), S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 12 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (45.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m), S. 6 (15.00 m), S. 10 (32.00 m), S. 11 (55.60 m), S. 12 (64.20 m), S. 13 (31.00 m), S. 14 (37.70 m), S. 16 (82.00 m), S. 17 (47.40 m), S. 18 (29.00 m); Dikili and Candarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 4 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 10 (32.50 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 4 (40.00 m), S. 5 (26.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 6 (45.630 m), S. 7 (305.20 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 14 (82.10 m), S. 15 (83.70 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m); Gulf of Datça, S. 2 (45.00 m), S. 6 (56.10 m), S. 7 (56.40 m); Marmaris Bay, S. 2 (79.10 m), S. 6 (64.00 m), S. 8 (69.00 m): this species is generally abundant in the different localities of Aegean Sea, It is reported mostly from infralittoral to upper circalittoral zones. It occurs frequently in lower circalittoral, upper and lower epibathyal zones.

#### Ammonia parkinsoniana (d'Orbigny) (Pl. 31, figs. 3-7)

1839a Rosalina parkinsoniana, d'Orbigny, p. 99, pl. 4, figs. 25-27.

1977b Ammonia parkinsoniana (d'Orbigny), Le Calvez, Y., p. 92, pl. 11, figs. 1-3.

1990 Ammonia parkinsoniana (d'Orbigny), Debenay, pl. 2, figs. 1-2.

1991 Ammonia parkinsoniana (d'Orbigny), Cimerman and Langer, p. 76, pl. 87, figs. 7-9.

1993 Ammonia parkinsoniana (d'Orbigny), Sgarella and Moncharmont-Zei, p. 228, pl. 20, figs. 3-4.

1994 Ammonia parkinsoniana (d'Orbigny), Loeblich and Tappan, p. 165, pl. 368, figs. 7-16.

1995 Ammonia parkinsoniana (d'Orbigny), Meriç et al., p. 109, pl. 12, figs. 5 a-c.

2002 Ammonia parkinsoniana (d'Orbigny), Kaminski et al., p. 22,

2002 Ammonia parkinsoniana (d'Orbigny), Avşar, p. 65, pl. 4, figs. 7-9.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 7 (90.00 m), S. 12 (214.70 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 27 (144.80 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 38 (53.40 m9, S. 39 (37.70 m), S. 40 (77.30 m), S. 42 (27.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 46 (40.20 m), S. 47 (24.50 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 53 (440.00 m), S. 54 (94.50 m), S. 67 (550.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 1 (0.50 m), S. 3 (0.50 m), S. 5 (0.50 m), S. 6 (0.50 m), S. 8 (0.50 m), S. 11 (0.50 m), S. 13 (13.00 m), S. 14 (55.00 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 17 (4.00 m), S. 18 (30.00 m), S. 19 (40.00 m), S. 20 (3.00 m), S. 21 (15.00 m), S. 22 (3.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 27 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 32 (16.00 m), S. 33 (28.00 m), S. 34 (41.00 m); Bozcaada, S. 1 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 7 (0.50 m), S. 8 (0.50 m), S. 9 (0.50 m), S. 10 (0.50 m), S. 11 (7.00 m), S. 12 (0.50 m), S. 13 (0.50 m), S. 14 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 3 (59.60 m), S. 4 (85.50 m), S. 5 (137.50 m), S. 6 (92.00 m), S. 7 (18.00 m), S. 8 (58.00 m), S. 13 (79.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (45.00 m), S. 33 (39.00 m), S. 34 (38.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m), S. 6 (15.00 m), S. 7 (19.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 4 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m), S. 4 (40.00 m), S. 5 (26.50 m); Çeşme, S. 1 (0.50 m), S. 2 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 7 (0.50 m), S. 8 (0.50 m), S. 9 (0.50 m), S. 10 (0.50 m), S. 11 (0.50 m), S. 12 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 12 (62.10 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 5 (34.50 m); Gulf of Datça, S. 1 (252.30 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 5 (59.30 m); this species occurs abundantly in the different localities of Eastern Aegean Sea. It is generally recorded from infralittoral to upper circalittoral zones. It is rare in lower circalittoral, upper and lower epibathyal zones.

## Ammonia tepida Cushman (Pl. 31, figs. 8-11)

1926 Rotalia beccarii (Linné) var. tepida, Cushman, p. 79, pl. 1.

1931 Rotalia beccarii (Linnaeus) var. tepida Cushman, Cushman, p. 61, pl. 13, figs. 3 a-c.

1965 Streblus beccarii tepida (Cushman), Todd, p. 29, pl. 6, fig. 1; pl. 7, fig. 2.

1972 Ammonia beccarii (Linné) var. tepida Cushman, Rosset-Moulinier, p. 174.

1978 Ammonia tepida (Cushman), Cheng and Zheng, p. 221, pl. 24, figs. 10-11; pl. 32, fig. 7.

1987 Anunonia tepida (Cushman), Yanko and Troitskaja, pl. 12, figs. 7-12.

1991 Ammonia tepida (Cushman), Cimerman and Langer, p.76, pl. 87, figs. 10-12.

1993 Ammonia beccarii var. tepida (Cushman), Sgarella and Moncharmont-Zei, p. 226, pl. 20, figs. 5-6.

1994 Ammonia tepida (Cushman), Loeblich and Tappan, p. 166, pl. 371, figs. 1-10.

2002 Ammonia tepida Cushman, Kaminski et al., p. 22, pl. 5, fig. 7.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 32 (67.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 41 (81.00 m), S. 47 (24.50 m), S. 48 (40.00 m), S. 50 (41.00 m), S. 52 (61.10 m), S. 55 (22.00 m), S. 57 (52.00 m), S. 60 (55.00 m), S. 61 (70.00 m), S. 67 (550.00 m), S. 71 (90.00 m), S. 72 (500.00 m); Gökçeada, S. 7 (0.50 m), S. 16 (4.00 m), S. 28 (10.00 m), S. 30 (3.00 m); Bozcaada, S. 2 (0.50 m), S. 10 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 7 (18.00 m), S. 15 (47.00 m), S. 17 (39.00 m), S. 22 (45.00 m), S. 33 (39.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 10 (32.00 m), S. 18 (29.00 m); Dikili and Candarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 4 (18.50 m), S. 5 (18.00 m), S. 7 (35.00 m), S. 8 (35.80 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m), S. 3 (44.00 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.20 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 13 (72.50 m); Gulf of Gökova, S. 2 (27.00 m), S. 8 (78.30 m); Gulf of Datca, S. 2 (45.00 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 8 (69.00 m); it occurs frequently in infralittoral and upper circalittoral zones of the different localities of Eastern Aegean Sea. It is rare in lower circalittoral, upper and lower epibathyal zones.

> Genus Challengerella Billman, Hottinger and Oesterle, 1980 Challengerella bradyi Billman, Hottinger and Oesterle (Pl. 31, figs. 12-15)

1949 Rotalia beccarii (Linné), Said, p. 37, pl. 4, fig. 5.
1971 Ammonia beccarii (Linné), Hansen and Reiss, p. 331, pl. 1, figs. 1-3, pl. 3, figs. 3-6; pl. 5, figs. 1-4.

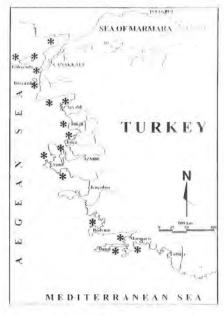
F1.4

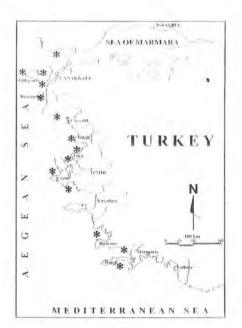
- 1980 Challengerella bradyi, Billman, Hottinger and Oesterle, p. 91, pl. 12, figs. 1-6, 8-10, 13-14.
- 1984 Challengerella bradyi Billman, Hottinger and Oesterle, Reiss and Hottinger, p. 244., fig. G 28 a-d.
- 1993 Challengerella bradyi Billman, Hottinger and Oesterle, Hottinger et al., p. 144, pl. 204, figs. 1-13; pl. 205, figs. 2-7.
- 1997 Challengerella bradyi Billman, Hottinger and Oesterle, Haunold et al., p. 202, fig. 13.
- 2002 Challengerella bradyi Billman, Hottinger and Oesterle, Avşar, p. 65, pl. 4, figs. 10-11.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 17 (33.90 m), S. 58 (60.00 m); Gökçeada, S. 1 (0.50 m), S. 6 (0.50 m), S. 19 (40.00 m), S. 29 (11.00 m); Bozcaada, S. 2 (0.50 m), S. 8 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 7 (18.00 m), S. 13 (79.00 m), S. 22 (45.00 m), S. 25 (74.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 32 (46.00 m); Gulf of Edremit, S. 8 (49.30 m), S. 10 (32.00 m); Dikili and Çandarlı Bays, S. 2 (39.50 m), S. 3 (18.50 m), S. 7 (35.00 m), S. 9 (49.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m); Çeşme, S. 1 (0.50 m), S. 2 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 6 (0.50 m), S. 7 (0.50 m), S. 8 (0.50 m), S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 6 (65.60 m), S. 7 (305.20 m), S. 9 (67.00 m), S. 11 (47.00 m), S. 13 (72.50 m); Gulf of Datça, S. 1 (252.30 m), S. 2 (45.00 m), S. 7 (56.40 m); Marmaris Bay, S. 7 (29.90 m): it occurs frequently in the many localities and is reported mostly from infralittoral to upper circalittoral zones. It is very rare in the upper epibathyal zone.

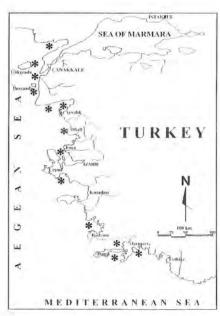
Family Elphidiidae Galloway, 1933 Subfamily Elphidiinae Galloway, 1933 Genus Cribroelphidium Cushman, 1948 Cribroelphidium poeyanum (d'Orbigny) (Pl. 32, figs. 1-2)

- 1987 Cribroelphidium poeyanum (d'Orbigny), Yanko and Troitskaja, pl. 21, figs. 4-6.
- 1995 Cribroelphidium poeyanum (d'Orbigny), Meriç et al., p. 109, pl. 12, fig. 6. 2002 Cribroelphidium poeyanum (d'Orbigny), Avşar, p. 65, pl. 4, figs. 12-13.
- Figure 70 a. Distribution of *Ammonia compacta* Hofker in the Eastern Aegean Sea, Turkish Coasts.
- Figure 70 b. Distribution of Ammonia parkinsoniana (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 70 c. Distribution of Ammonia tepida Cushman in the Eastern Aegean Sea, Turkish Coasts.
- Figure 70 d. Distribution of *Challengerella bradyi* Billman, Hottinger and Oesterle in the Eastern Aegean Sea, Turkish Coasts.











70 c

70 d

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 15 (39.50 m), S. 17 (33.90 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 43 (51.50 m), S. 45 (33.50 m), S. 47 (24.50 m), S. 48 (40.00 m), S. 55 (22.00 m), S. 60 (55.00 m), S. 77 (53.00 m), S. 80 (98.00 m); Gökçeada, S. 16 (4.00 m), S. 29 (11.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 4 (85.50 m), S. 23 (58.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 29 (50.00 m), S. 32 (46.00 m), S. 34 (38.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 7 (19.00 m); Dikili and Çandarlı Bays, S. 5 (18.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 12 (25.50 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 3 (44.00 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 13 (72.50 m), S. 14 (82.10 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 6 (65.00 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m); Marmaris Bay, S. 6 (64.00 m): this species occurs frequently in the Eastern Aegean Sea, and is reported more frequently in infralittoral and upper circalittoral zones. It occurs also rarely in the upper epibathyal zone.

Genus Porosononion Putrya, 1956 Porosononion subgranosum (Egger) (Pl. 32, figs, 3-4)

1987 Porosononion subgranosus (Egger), Yanko and Troitskaja, pl. 19, figs. 1-3. 1995 Porosononion subgranosum (Egger), Meriç et al., p. 109, figs. 2 a-c. 2002 Porosononion subgranosum (Egger), Avşar, p. 65, pl. 4, figs. 14-15.

Occurrence: Gulf of Saros, S. I (27.00 m), S. 3 (34.60 m), S. 17 (33.40 m), S. 40 (77.30 m), S. 56 (41.00 m), S. 60 (55.00 m), S. 64 (75.00 m), S. 72 (500.00 m), S. 76 (53.00 m), S. 80 (98.00 m); Gökçeada, S. 8 (0.50 m), S. 16 (4.00 m), S. 28 (10.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 5 (137.50 m), S. 7 (18.00 m), S. 8 (58.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 23 (47.00 m), S. 24 (56.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (46.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Dikili and Candarlı Bays, S. 2 (39.50 m), S. 3 (18.50 m), S. 4 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m), S. 4 (40.00 m); Çeşme, S. 1 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 12 (62,10 m); Gulf of Gökoya, S. 3 (80,40 m), S. 4 (46,20 m); Gulf of Datca, S. 2 (45.00 m), S. 4 (40.00 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 8 (69.00 m); its occurrence is always frequent in the infralittoral and upper circulittoral zones. It is recorded rarely from lower circalittoral and upper epibathyal zones.

#### Genus Elphidium de Montfort, 1808 Elphidium aculeatum (d'Orbigny) (Pl. 32, figs. 5-8)

1846 Polystomella aculeata, d'Orbigny, p. 131, pl. 6, figs. 27-28.

1972 Elphidium aculeatum (d'Orbigny), Rosset-Moulinier, p. 175.

1979 Elphidium aculeatum (d'Orbigny), Alfirevic, p. 127, pl. 27, fig. 2.

1991 Elphidium aculeatum (d'Orbigny), Cimerman and Langer, p. 77, pl. 89, figs. 1-4.

2002 Elphidium aculeatum (d'Orbigny), Avşar, p. 65, pl. 4, figs. 16-17.

Occurrence: Gulf of Saros, S. 13 (156.00 m), S. 17 (33.90 m), S. 30 (90.50 m), S. 51 (12.30 m), S. 67 (550.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 1 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 7 (0.50 m), S. 10 (0.50 m), S. 11 (0.50 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 18 (30.00 m), S. 20 (3.00 m), S. 21 (15.00 m), S. 22 (3.00 m), S. 23 (10.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Bozcaada, S. 4 (0.50 m), S. 14 (0.50 m), S. 16 (0.50 m), S. 17 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 5 (137.50 m), S. 6 (92.00 m), S. 7 (18.00 m), S. 9 (72.00 m), S. 14 (47.00 m), S. 15 (47.00 m), S. 17 (39.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 28 (39.00 m); Gulf of Edremit, S. 6 (15.00 m), S. 7 (19.00 m); Dikili and Candarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 8 (35.80 m), S. 12 (25.50 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 3 (44.00 m), S. 5 (26.50 m); Ceşme, S. 2 (0.50 m), S. 4 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 5 (137.00 m); Gulf of Gökova, S. 2 (27.00 m), S. 5 (34.50 m): it is abundant in the Eastern Aegean Sea and is reported from infralittoral to upper circalittoral zones. It is recorded rarely in lower circalittoral and lower epibathyal zones.

# Elphidium advenum (Cushman) (Pl. 32, figs. 9-10)

1922b cf. Polystomella advena, Cushman, p. 56, pl. 9, figs. 11-12.

1939 cf. Elphidium advenum (Cushman), Cushman, p. 60, pl. 16, figs. 31-35.

1949 cf. Elphidium advenum (Cushman), Said, p. 23, pl. 2, fig. 33.

1987 Elphidium advenum (Cushman), Baccaert, p. 248, pl. 102, figs. 1-2.

1991 Elphidium cf. E. advenum (Cushman), Cimerman and Langer, p. 77, pl. 89, figs. 5-7.

1992 Elphidium advenum (Cushman), Hatta and Ujiie, p. 203, pl. 49, figs. 3a-4b.

1994 Elphidium advenum (Cushman), Loeblich and Tappan, p. 168, pl. 379, figs. 1-4.

1995 Elphidium advenum (Cushman), Meric et al., p. 109, pl. 13, fig. 3.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 12 (214.70 m), S. 15 (39.50 m), S. 17 (33.90 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 38 (53.50 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 50

(41.00 m), S. 54 (94.50 m), S. 57 (52.00 m), S. 60 (55.00 m), S. 72 (500.00 m), S. 79 (29.00 m); Gökçeada, S. 3 (0.50 m), S. 16 (4.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 2 (32.40 m), S. 3 (59.60 m), S. 6 (92.00 m), S. 7 (18.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 15 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (45.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 3 (230.00 m), S. 6 (15.00 m), S. 8 (49.30 m), S. 10 (32.00 m), S. 14 (37.70 m), S. 15 (49.70 m), S. 18 (29.00 m); Dikili and Candarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 4 (18.50 m), S. 5 (18.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 10 (22.50 m), S. 11 (52.00 m), S. 12 (25.50 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 3 (113.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 9 (67.00 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 13 (72.50 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27,00 m), S. 4 (46.20 m), S. 5 (34.50 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m), S. 7 (56.40 m); Marmaris Bay, S. 3 (98.30 m), S. 6 (64.00 m), S. 8 (69.00 m); it occurs with higher frequencies in the Eastern Aegean Sea. This species is recorded mostly in infralittoral and upper circalittoral zones. It is rare in lower circalittoral and upper-lower epibathyal zones.

### Elphidium complanatum (d'Orbigny) (Pl. 32, figs. 11-12)

1839b Polystomella complanata, d'Orbigny, p. 129, pl. 2, figs. 35-36.

1939 Elphidium complanatum (d'Orbigny), Cushman, p. 56, pl. 15, figs. 18-19.

1958 Elphidium complanatum (d'Orbigny), Parker, p. 270, pl. 4, fig. 5.

1993 Elphidium complanatum (d'Orbigny), Sgarella and Moncharmont-Zei, p. 228, pl. 20, figs. 9-10.

1995 Elphidium complanatum (d'Orbigny), Meriç et al., p. 109, pl. 13, figs. 4 a-b.

2002 Elphidium complanatum (d'Orbigny), Avşar, p. 65, pl. 4, figs. 18-19.

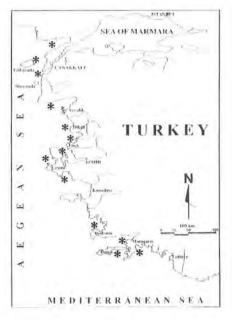
Occurrence: Gulf of Saros, S. 33 (70.00 m), S. 51 (12.30 m), S. 67 (550.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 16 (4.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m); Bozcaada, S. 2 (0.50 m), S. 10 (0.50 m), S. 11 (7.00 m),

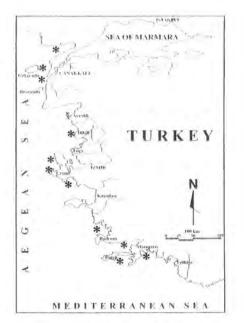
Figure 71 a. Distribution of *Cribroelphidium poeyanum* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.

Figure 71 b. Distribution of Porosononion subgranosum (Egger) in the Eastern Aegean Sea, Turkish Coasts.

Figure 71 c. Distribution of *Elphidium aculeatum* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.

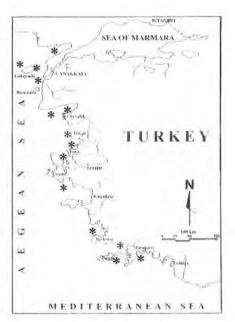
Figure 71 d. Distribution of *Elphidium advenum* (Cushman) in the Eastern Aegean Sea, Turkish Coasts.











71 c

71 d

S. 14 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (18.00 m), S. 13 (79.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 31 (75.00 m), S. 32 (45.00 m), S. 36 (82.00 m); Gulf of Edremit, S. 3 (230.00 m), S. 6 (15.00 m), S. 7 (19.00 m), S. 10 (32.00 m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 8 (35.80 m), S. 12 (25.50 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 2 (63.50 m), S. 5 (26.50 m); Çeşme, S. 11 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 2 (31.30 m), S. 6 (45.650 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 13 (72.50 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 6 (65.00 m); Gulf of Datça, S. 2 (45.00 m), S. 4 (40.00 m), S. 5 (59.30 m); Marmaris Bay, S. 4 (71.80 m), S. 8 (69.00 m): its occurrence is always frequent. This species is reported abundantly from infralittoral to upper circalittoral zones. It occurs also in lower circalittoral and lower epibathyal zones.

# Elphidium crispum (Linné) (Pl. 33, figs. 3-6)

1758 Nautilus crispus, Linné, p. 709.

1960 Elphidium crispum (Linné), Barker, pl. 110, figs. 6-7.

1970 Elphidium crispum (Linné), v. Daniels, p. 87, pl. 7, fig. 7.

1974 Elphidium crispum (Linné), Colom, p. 143, figs. 26 e-j, m, n.

1976 Elphidium crispum (Linné), Hansen and Lykke-Andersen, p. 6, pl. 1, figs. 10-12; pl. 2, figs. 1-2.

1981 Elphidium crispum (Linné), Chasens, pl. 1, fig. 4.

1991 Elphidium crispum (Linné), Cimerman andr Langer, p. 77-78, pl. 90, figs. 1-6.

1992 Elphidium crispum (Linné), Hatta and Ujiie, p. 203, pl. 49, figs. 5 a-b.

1993 Elphidium crispum (Linné), Sgarella and Moncharmont-Zei, p. 228, pl. 20, fig. 11.

1994 Elphidium crispum (Linné), Loeblich and Tappan, p. 168, 169, pl. 378, figs. 4-6.

1995 Elphidium crispum (Linné), Meriç et al., p. 109, pl. 13, figs. 5 a-c.

1999 Elphidium crispum (Linné), Hayward et al., p. 165, pl. 17, figs. 9-10.

2000 Elphidium crispum (Linné), Cann et al., pl. 7, figs. f, g.

2002 Elphidium crispum (Linné), Ayşar, p. 65, pl. 4, fig. 20.

Occurrence: Gulf of Saros, S. I (27.00 m), S. 2 (15.50 m), S. 3 (34.60 m), S. 4 (50.90 m), S. 5 (43.00 m), S. 6 (70.00 m), S. 7 (90.00 m), S. 8 (55.70 m), S. 9 (71.80 m), S. 10 (68.50 m), S. 11 (79.60 m), S. 12 (214.70 m), S. 14 (84.00 m), S. 15 (39.50 m), S. 16 (71.10 m), S. 17 (33.90 m), S. 18 (88.10 m), S. 19 (96.50 m), S. 21 (97.40 m9, S. 23 (383.00 m), S. 24 (386.00 m), S. 29 (92.00 m), S. 30 (90.50 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 33 (70.00 m), S. 34 (82.00 m9, S. 35 (195.00 m), S. 36 (74.00 m), S. 37 (59.00 m), S. 38 (53.40 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 43 (51.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 46 (40.20 m), S. 47 (24.50 m), S. 48 (40.00 m), S. 49 (45.00 m), S. 50 (41.00 m), S.

51 (12.30 m), S. 52 (61.10 m), S. 53 (440.00 m), S. 54 (94.50 m), S. 55 (22.00 m), S. 56 (41.00 m), S. 57 (52.00 m), S. 58 (60.00 m), S. 60 (55.00 m), S. 61 (70.00 m), S. 63 (56.00 m), S. 64 (75.00 m), S. 67 (550.00 m), S. 69 (72.00 m), S. 70 (13.00 m), S. 71 (90.00 m), S. 72 (500.00 m), S. 76 (53.00 m), S. 77 (53.00 m), S. 78 (63.00 m), S. 79 (29.00 m), S. 80 (98.00 m); Gökçeada, S. 1 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 6 (0.50 m), S. 7 (0.50 m), S. 9 (0.50 m), S. 10 (0.50 m), S. 11 (0.50 m), S. 12 (0.50 m), S. 14 (55,00 m), S. 15 (3.00 m), S. 16 (4.00 m), S. 17 (4.00 m), S. 18 (30.00 m), S. 19 (4.00 m), S. 20 (3.00 m), S. 21 (15.00 m), S. 22 (3.00 m), S. 23 (10.00 m), S. 24 (68.00 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 27 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 31 (13.00 m), S. 33 (28.00 m); Bozcaada, S. 1 (0.50 m), S. 2 (0.50 m), S. 3 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 7 (0.50 m), S. 8 (0.50 m), S. 10 (0.50 m), S. 11 (7.00 m), S. 12 (0.50 m), S. 13 (0.50 m), S. 14 (0.50 m), S. 15 (0.50 m), S. 16 (0.50 m), S. 17 (0.50 m); Gökçeada-Bozcaada-Canakkale triangle, S. 1 (49.50 m), S. 2 (32.40 m), S. 3 (59.60 m), S. 4 (85.50 m), S. 5 (137.50 m), S. 6 (92.00 m), S. 7 (18.00 m), S. 9 (72.00 m), S. 10 (57.00 m), S. 11 (63.00 m), S. 13 (79.00 m), S. 14 (47.00 m), S. 16 (47.00 m), S. 17 (39.00 m), S. 18 (69.00 m), S. 19 (73.00 m), S. 20 (71.00 m), S. 21 (47.00 m), S. 22 (45.00 m), S. 23 (58.00 m), S. 24 (56.00 m), S. 25 (74.00 m), S. 26 (72.00 m), S. 27 (70.00 m), S. 28 (39.00 m), S. 29 (50.00 m), S. 31 (75.00 m), S. 32 (45.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 35 (80.00 m), S. 36 (82.00 m), S. 37 (81.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m), S. 3 (230.00 m), S. 4 (76.30 m), S. 5 (125.00 m), S. 6 (15.00 m), S. 7 (19.00 m), S. 8 (49.30 m), S. 9 (49.60 m), S. 11 (55.60 m), S. 12 (64.20 m), S. 13 (31.00 m), S. 14 (37.70 m), S. 15 (49.70 m), S. 16 (82.00 m), S. 17 (47.40 m), S. 18 (29.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 6 (34.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 9 (49.00 m), S. 10 (22.50 m), S. 11 (52.00 m), S. 12 (25.50 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m), S. 5 (26.50 m); Çeşme, S. 2 (0.50 m), S. 4 (0.50 m), S. 5 (0.50 m), S. 6 (0.50 m), S. 7 (0.50 m), S. 8 (0.50 m), S. 9 (0.50 m), S. 11 (0.50 m), S. 12 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 1 (73.00 m), S. 2 (31.30 m), S. 3 (113.00 m), S. 5 (137.00 m), S. 6 (45.60 m), S. 7 (305.20 m), S. 8 (29.00 m), S. 9 (67.00 m), S. 10 (66.40 m), S. 11 (47.00 m), S. 12 (62.10 m), S. 13 (72.50 m), S. 14 (82.10 m), S. 15 (83.70 m); Gulf of Gökova, S. 1 (42.00 m), S. 2 (27.00 m), S. 3 (80.40 m), S. 4 (46.20 m), S. 5 (34.50 m), S. 6 (65.00 m), S. 8 (78.30 m); Gulf of Datca, S. 2 (45.00 m), S. 3 (139.50 m), S. 4 (40.00 m), S. 5 (59.30 m), S. 6 (56.10 m), S. 7 (56.40 m), S. 9 (147.00 m); Marmaris Bay, S. 1 (106.40 m), S. 2 (79.10 m), S. 3 (98.30 m), S. 4 (71.80 m), S. 5 (128.80 m), S. 6 (64.00 m), S. 7 (29.90 m), S. 8 (69.00 m). This species occurs more abundantly in the different gulfs and bays of Eastern Aegean Sea. It is reported abundantly from infralittoral to upper circalittoral zones. It occurs frequently in lower circalittoral and upper epibathyal zones.

Elphidium depressulum Cushman (Pl. 33, figs. 7-8)

1933 Elphidium advenum Cushman var, depressulum, Cushman, p. 51, pl. 12,

fig. 4.

1964 Elphidium advena (Cushman) var. depressula Cushman, LeRoy, p. F-28, pl. 10, figs. 6-7.

1991 Elphidium depressulum Cushman, Cimerman and Langer, p. 78, pl. 90, figs.

1994 Elphidium depressulum Cushman, Loeblich and Tappan, p. 169, pl. 379, figs. 5-11, pl. 386, figs. 9-10.

Occurrence: Gulf of Saros, S. 3 (34.60 m), S. 14 (84.00 m), S. 79 (29.00 m); Gökçeada, S. 3 (0.50 m), S. 7 (0.50 m), S. 9 (0.50 m), S. 10 (0.50 m), S. 25 (25.00 m), S. 26 (9.00 m), S. 27 (9.00 m), S. 28 (10.00 m), S. 29 (11.00 m), S. 30 (3.00 m), S. 32 (16.00 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 7 (18.00 m), S. 13 (79.00 m), S. 15 (47.00 m), S. 17 (39.00 m), S. 19 (73.00 m), S. 22 (45.00 m), S. 24 (56.00 m), S. 29 (50.00 m), S. 33 (39.00 m), S. 34 (38.00 m), S. 36 (82.00 m); Dikili and Çandarlı Bays, S. 1 (16.00 m), S. 2 (39.50 m), S. 3 (18.50 m), S. 5 (18.00 m), S. 7 (35.00 m), S. 8 (35.80 m), S. 10 (22.50 m9, S. 12 (25.50 m), S. 14 (21.00 m); Gulf of Izmir and vicinity of Karaburun Peninsula, S. 1 (51.50 m), S. 2 (63.50 m), S. 3 (44.00 m), S. 4 (40.00 m); Çeşme, S. 1 (0.50 m), S. 5 (0.50 m); Gulf of Kuşadası and Güllük Bay, S. 7 (305.20 m), S. 9 (67.00 m), S. 10 (66.40 m); Gulf of Gökova, S. 1 (42.00 m), S. 4 (46.20 m), S. 6 (65.00 m); Gulf of Datça, S. 4 (40.00 m); Marmaris Bay, S. 4 (71.80 m): it occurs frequently in Eastern Aegean Sea. This species is reported from infralittoral and upper circalittoral zones. It occurs rarely in the upper epibathyal zone.

### Elphidium jenseni (Cushman)

1924 Elphidium jenseni, Cushman, p. 49, pl. 16, figs. 4, 6.

1933 Elphidium jenseni Cushman, Cushman, p. 48, pl. 11, figs. 6-7.

1939 Elphidium jenseni Cushman, Cushman, p. 62, pl. 17, figs. 14-15.

1954 Elphidium jenseni Cushman, Todd and Post, p. 346, pl. 86, fig. 32.

1987 Elphidium jenseni Cushman, Baccaert, p. 254, pl. 103, figs. 6 a-b.

1991 Elphidium jenseni Cushman, Cimerman and Langer, p. 78, pl. 92, figs. 1-3.

1992 Elphidium jenseni Cushman, Hatta and Ujiie, p. 203, pl. 49, figs. 6 a-b,

1994 Elphidium jenseni Cushman, Loeblich and Tappan, p. 169, pl. 381, figs. 1-5.

1997 Elphidium jenseni Cushman, Haunold et al., p. 202, fig. 13.

Occurrence: Dikili and Çandarlı Bays, S. 4 (18.50 m): this species is very rare. It occurs only in one sample coming from the infralittoral zone.

Elphidium macellum (Fichtel and Moll) (Pl. 33, fig. 9)

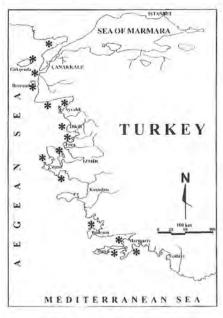
1798 Elphidium macellus var. beta, Fichtel and Moll, p. 66, pl. 10, figs. h-k. 1939 Elphidium macellum (Fichtel and Moll), Cushman, p. 51-52, pl. 14, figs. 1-3; pl. 15, figs. 9-10.

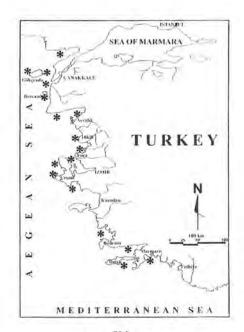
- 1984 Elphidium macellum (Fichtel and Moll), Rögel and Hansen, p. 50, pl. 14, fig. 4; pl. 15, figs. 1-2.
- 1987 Elphidium crispum forma macellum (Fichtel and Moll), Jorissen, pl. 3, figs. 9 a-b.
- 1991 Elphidium macellum (Fichtel and Moll), Cimerman and Langer, p. 78-79, pl. 89, fig. 9.
- 1993 Elphidium macellum (Fichtel and Moll), Sgarella and Moncharmont-Zei, p. 229, pl. 20, fig. 12.
- 1995 Elphidium macellum (Fichtel and Moll), Meriç et al., p. 109, pl. 13, figs. 6 a-b.
- 2000 Elphidium macellum (Fichtel and Moll), Cann et al., pl. 7, figs. j, k.
- 2002 Elphidium macellum (Fichtel and Moll), Kaminski et al., p. 25, pl. pl. 5, fig. 11.

Occurrence: Gulf of Saros, S. 12 (214.70 m), S. 14 (84.00 m), S. 19 (96.50 m), S. 21 (97.40 m), S. 23 (383.00 m), S. 28 (115.50 m), S. 29 (92.00 m), S. 31 (83.80 m), S. 32 (67.00 m), S. 34 (82.00 m), S. 35 (195.00 m), S. 36 (74.00 m), S. 39 (37.70 m), S. 40 (77.30 m), S. 41 (81.00 m), S. 42 (27.50 m), S. 44 (26.20 m), S. 45 (33.50 m), S. 46 (40.20 m), S. 48 (40.00 m), S. 49 (45.00 m), S. 50 (41.00 m), S. 51 (12.30 m), S. 53 (440.00 m), S. 54 (94.50 m); Gökçeada, S. 3 (0.50 m), S. 8 (0.50 m), S. 11 (0.50 m), S. 26 (9.00 m), S. 29 (11.00 m), S. 32 (16.00 m); Bozcaada, S. 2 (0.50 m); Gökçeada-Bozcaada-Çanakkale triangle, S. 4 (85.50 m), S. 10 (57.00 m), S. 21 (47.00 m), S. 24 (56.00 m), S. 27 (70.00 m), S. 29 (50.00 m), S. 34 (38.00 m); Gulf of Edremit, S. 1 (334.50 m), S. 2 (100.40 m), S. 4 (76.30 m), S. 8 (49.30 m), S. 17 (47.40 m); Gulf of Kuşadası and Güllük Bay, S. 9 (67.00 m), S. 13 (72.50 m), S. 15 (83.70 m): it is reported frequently from infralittoral and upper circalittoral zones. It is rare in lower circalittoral and upper epibathyal zones.

#### Elphidium maioricense Colom

- 1942 Elphidium maioricensis, Colom, p. 34, pl. 10, figs. 189-193.
- 1974 Elphidium maioricensis Colom, Colom, p. 144, figs. 26 a-d.
- 1991 Elphidium maioricensis Colom, Cimerman and Langer, p. 79, pl. 91, fig. 7,
- 1993 Elphidium maioricense Colom, Sgarella and Moncharmont-Zei, p. 229, pl. 21, figs. 10-13.
- Figure 72 a. Distribution of *Elphidium complanatum* (d'Orbigny) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 72 b. Distribution of *Elphidium crispum* (Linné) in the Eastern Aegean Sea, Turkish Coasts.
- Figure 72 c. Distribution of *Elphidium depressulum* Cushman in the Eastern Aegean Sea, Turkish Coasts.
- Figure 72 d. Distribution of *Elphidium jenseni* (Cushman) in the Eastern Aegean Sea, Turkish Coasts.





72 a





72 c

200

72 d

Occurrence: Gulf of Saros, S. 63 (96.00 m): this species is recorded only in one sample in northeastern Aegean Sea. It is rare in the upper circalittoral zone.

## Elphidium cf. pulvereum Todd (Pl. 33, fig. 10)

1958 Elphidium pulvereum Todd, Parker, p. 271, pl. 4, fig. 6.

1991 Elphidium sp., Cimerman and Langer, p. 80, pl. 93, figs. 8-9.

1993 Elphidium pulvereum Todd, Sgarella and Moncharmont-Zei, p. 230, pl. 21, fig. 6.

2001 Elphidium pulvereum Todd, Debenay et al., pl. 6, fig. 6.

Occurrence: Gulf of Saros, Harmantaşı locality, central part (20.10 m); Gökçeada, S. 28 (10.00 m): its occurrence is always very rare in the infralittoral zone.

Figure 73 a. Distribution of *Elphidium macellum* (Fichtel and Moll) in the Eastern Aegean Sea, Turkish Coasts.

Figure 73 b. Distribution of *Elphidium maioricense* Colom in the Eastern Aegean Sea, Turkish Coasts.

Figure 73 c. Distribution of *Elphidium pulvereum* Todd in the Eastern Aegean Sea, Turkish Coasts.





73 b



73 c

#### CONCLUSIONS

Of the 244 benthic foraminifers in the Eastern Aegean Sea, along the Turkish Coasts, the dominant species include Elphidium crispum (Linné) (264 stations), Lobatula lobatula (Walker and Jacob) (215 stations), Rosalina bradyi Cushman (193 stations), Textularia bocki Höglund (189 stations), Ammonia compacta Hofker (188 stations), Triloculina marioni Schlumberger (183 stations), Adelosina cliarenesis (Heron-Allen and Earland) (165 stations), Planorbulina mediterraneensis (d'Orbigny) (164 stations), Quinqueloculina seminula (Linné) (161 stations), Ammonia parkinsoniana (d'Orbigny) (149 stations), Miliolinella subrotunda (Montagu) (141 stations), Adelosina mediterranensis (Le Calvez J. and Y.) (140 stations), Spiroloculina excavata d'Orbigny (132 stations), Melonis pompilioides (Fichtel and Moll) (129 stations), Adelosina pulchella d'Orbigny (112 stations); the recessesive species include Hyperammina friabilis Haake, Reophax Haplophragmoides dentaliniformis (Brady). canariensis Alveophragmium scitulum (Brady), Patellina corrugata Williamson, Trisegmentina Wiesner, Wiesnerella auriculata (Egger), Edentostomina cultrata (Brady), Adelosina carinata-striata Wiesner, A. italica (Terquem), Quinqueloculina neapolitana Sgaerella and Moncharmont-Zei, Q. poeyana d'Orbigny, Q. vulgaris d'Orbigny, Miliolinella labiosa (d'Orbigny), Pyrgo comata (Brady), Triloculina ef. fichteliana d'Orbigny, Wellmanellinella striata (Sidebottom), Articulina tubulosa (Seguenza), Dentalina albatrossi (Cushman), D. mucronata Laevidentalina inflexa (Reuss), Lenticulina gibba (d'Orbigny), Saracenaria italica Defrance, Astacolus insolithus (Schwager), Lagena nebulosa Cushman, L. semistriata Williamson, Globulina punctata d'Orbigny, Favulina squamosa (Montagu), Fissurina lucida (Williamson), F. neptunii (Buchner), F. orbignyana Seguenza, Rectobolivina columellaris (Brady), Planopulvinulina dispansa (Brady), (Terquem), Conorbella (Sidebottom), Neoconorbina orbicularis erecta Asterigerinata adriatica Haake, Pullenia quinqueloba (Reuss), Elphidium jenseni (Cushman), E. maioricense Colom (1 station); Psammosphaera fusca Schulze, Lagenammina atlantica (Cushman), Bigenerina cylindrica Cushman, Spiroloculina pellucida Said, S. rostrata Reuss, Siphonaperta dilatata (Le Calvez J. and Y.), S. irregularis (d'Orbigny). Quinqueloculina stalkeri Loeblich and Biloculinella elongata (Wiesner), Triloculina cf. ornata Le Calvez J. and Y., T. serrulata McCulloch, Sigmoilinita tenuis (Czjzek), Articulina alticostata Rhumbler, Lenticulina calcar (Linné), Astacolus sublegumen (Parr), Globulina myristiformis (Williamson), Fissurina sidebottomi (Buchner), Parafissurina lateralis (Cushman), P. staphyllearia (Schwager), Glandulina laevigata (d'Orbigny), Brizalina striatula (Cushman), Cibicides refulgens Montfort, Planogypsina acervalis Elphidium pulvereum Todd (2 stations); Trochammina inflata (Montagu), Eggerelloides udvenus (Cushman), Adelosina elegans (Williamson), Stainforthia complanata (Egger), Fursenkoina acuta (d'Orbigny), Cancris sagra (d'Orbigny) (3 stations).

Another significance of this foraminifer population is the existence of Astacolus insolithus (Schwager), A. sublegumen (Parr), Stomatorbina sp., Planogypsina acervalis (Brady), P. squamiformis (Chapman) and Amphistegina

lobifera Larsen in various locations in the Eastern Aegean Sea. Genera and species such as Astacolus insolithus (Schwager), A. sublegumen (Parr) and Stomatorbina sp. are recently found in the Pacific Ocean (Hatta and Ujiie, 1992). On the other hand, Planogypsina acervalis (Brady), P. squamiformis (Chapman) and Amphistegina lobifera Larsen have commonly been found in the Red Sea (Hottinger et al., 1993). Amphistegina lobifera Larsen, commonly known as "Lessepsian Migrants" (Reiss and Hottinger, 1984) have been previously been reported from the Eastern Mediterranean (Alavi, 1988; Yanko, 1995; Avşar, 1997; Avşar et al., 2001). This species is also found within several gulfs in the Aegean Sea including Gulf of Gökova (stations 2 and 5), Gulf of Datça (stations 2 and 4), and Marmaris Bay (stations 4, 6, and 8) as well as in the southeastern shores of Gökçeada Island (station 30) (Meric and Avşar, 2001). Found at least in 4 different locations along the Turkish Coasts in Eastern Mediterranean, this species is hypothesized to have migrated northward from Northern Red Sea into Mediterranean, following the opening of the Suez Canal, and consequently settled in the Haifa Bay, Gulfs of Iskenderun and Antalya, later moving east to the Marmaris Bay, Gulf of Datça, Gulf of Gökova, as well as to the eastern shores of Gökçeada Island (Meriç et al., 2002). Astacolus insolithus (Schwager) is found in only in one sample in the Gulf of Gökova (station 3). Similarly, Astacolus sublegumen (Parr) is found only in one sample collected from the Gulf of Edremit (station 18) further north. An interesting finding is the discovery of a yet unnamed Stomatorbina sp. (Hatta and Ujiie, 1992) in large quantities in all five samples recovered from the Marmaris Bay (stations 1. 2, 3, 4, and 5). Moreover, species Planogypsina acervalis (Brady) and P. squamiformis (Chapman), belonging to the genus Planogypsina were found for the first time, around submarine freshwater springs located on a submerged hill called "Harmantaşı" at 20.10 m depth in northern Gulf of Saros (Meric et al., 2002).

Species such as Coscinospira hemprichii Ehrenberg, Laevipeneroplis karreri (Wiesner), Peneroplis pertusus (Forskal), P. planatus (Fichtel and Moll), and Sorites orbiculus Ehrenberg, that are observed in various locations in the Eastern Aegean Sea, also have significance in the region. For instance, Coscinospira hemprichii Ehrenberg was found in the Ilica Bay, in the vicinity of Cesme on the Karaburun Peninsula. Here, the species is present around submarine thermal springs at 58-60 °C temperature and at a depth of 2.50 meters. This indicates that the species is able to survive only here because of different ecological environment conditions created around submarine thermal springs in various locations in the Eastern Aegean (Avşar and Meric, 2001). Another species, Laevipeneroplis karreri (Wiesner), was found in several locations and depths around east and northwest of the Gökçeada Island (stations 26 and 29), southwest of the Bozcaada Island (station 10), Gulf of Kuşadası (station 2), and in the Gulf of Datça (stations 2 and 4). Furthermore, it should be noted that, large quantities of Peneroplis pertusus (Forskal) and P. planatus (Fichtel ve Moll) were found in samples obtained from the east of Gökçeada Island, east and southwest of Bozcaada Island, north of Gulf of Edremit, Dikili Bay, vicinitiy of Karaburun Peninsula, Çeşme (Ilıca Bay) and in the Güllük Bay, Gulfs of Gökova, Datça and Marmaris Bay. In particular, red-brownish coloration of Peneroplis tests obtained from the vicinity of Gökçeada and Bozcaada Islands is due to dissolved iron minerals commonly found in thermal springs that

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change the ecological setting of the region (Meriç and Avşar, 2001; Meriç et al., 2002a). As an addition, the very existence of *Sorites orbiculus* Ehrenberg in east of Gökçeada (station 30), Çeşme (Ilica Bay) (in 5 samples), in the Gulf of Gökova (stations 2 and 5) and around the Marmaris Bay (station 8) can be submitted as evidence for altered ecological settings following the development of faulting related submarine hot springs. Existence of these four genera and species, typical of the Eastern Mediterranean, under pointwise changing ecological setting, is interpreted to be existence of many hot springs in the tectonically active Aegean Sea.

The peninsula in the east of Gulf of Kolpos, which is located in the southeastern corner of the Lesbos Island, contains numerous thermal springs. These are brackish springs and their temperature vary in the range of 39.7-69.0 °C (Meriç et al., 2002b). On the other hand, hot springs located in south of Milos Island (western Aegean) are only at 10.00 meters depth and contain a variety of species (Thiermann et al., 1997). This environment resembles the concept of an oasis that contain many different lifeforms in the middle of a desert. Similarly, hydrothermal springs on many gulfs of the Methana Peninsula, located on the Hellenic Volcanic Arc, as well as on several other localities off the coast of Milos, Kos and Yali Islands have been documented by Varnavas et al. (1999).

As a conclusion, it is hypothesized that the larva of a species of lifeforms, including foraminifers, most of which has originated in the Mediterranean Sea, Atlantic and Indian Oceans, as well as in Red Sea, found new living environments in the hot spots of the Aegean as they drifted from south to north. The hot springs of the Aegean most probably formed as a result of young faulting in the region.

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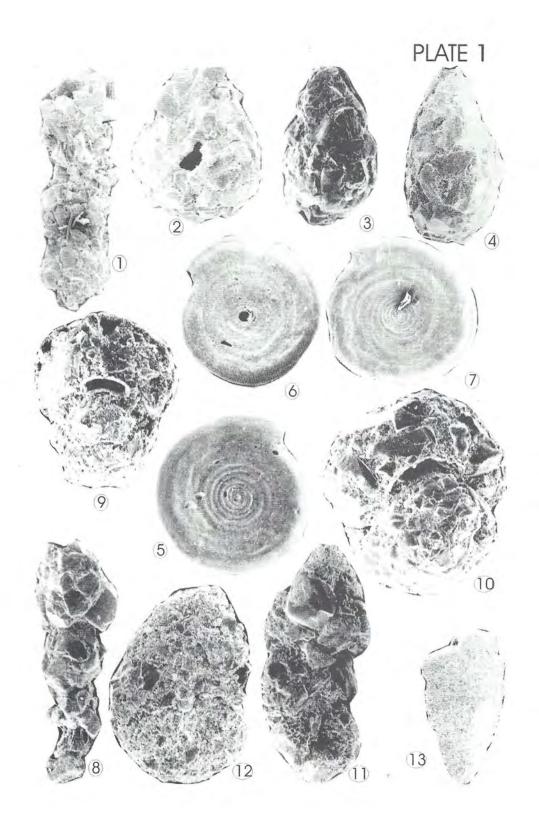
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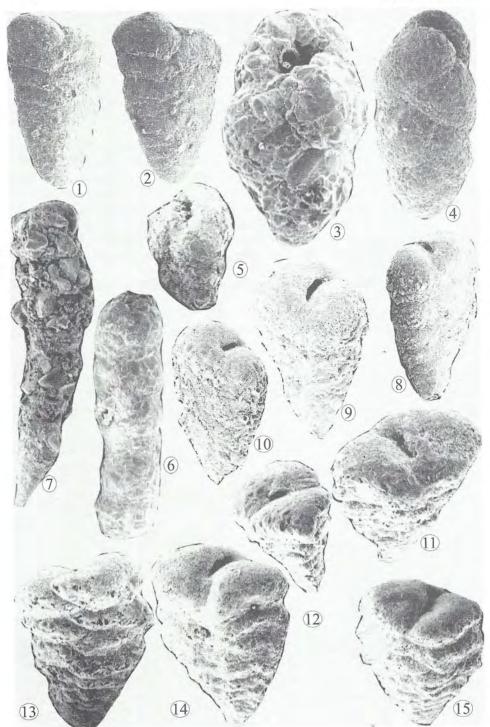
(1-33)

- 1. Rhabdammina abyssorum Sars. External view, x 75, Gulf of Saros, S. 16.
- 2. Psammosphaera fusca Schulze. External view, x 50, Gulf of Saros, S. 29.
- 3. Lagenammina fusiformis (Willamson). External view, x 100, Gulf of Saros, S. 11.
- 4. Lagenammina fusiformis (Willamson). External view, x 90, Dikili Bay, S. 2.
- 5. Ammodiscus planorbis Höglund. External view, x 150, Gulf of Saros, S. 19.
- Ammodiscus planorbis Höglund. External view, x 85, Gökçeada-Bozcaada-Çanakkale triangle, S. 5.
- Ammodiscus planorbis Höglund. External view, x 100, Gulf of Gökova, S. 10.
- 8. Reophax scorpiurus Montfort. External view, x 75, Gulf of Saros, S. 4.
- 9-10. Labrospira subglobosa (Sars). External views, x 150, Gulf of Datça, S. 6.
  - 11. Ammoscalaria pseudospiralis (Williamson). External view, x 60, Gulf of Saros, S. 20.
  - 12. Discammina compressa (Goes). External view, x 75, Dikili Bay, S. 8.
  - 13. Spiroplectinella sagittula (d'Orbigny). External view, x 70, Dikili Bay, S. 8.



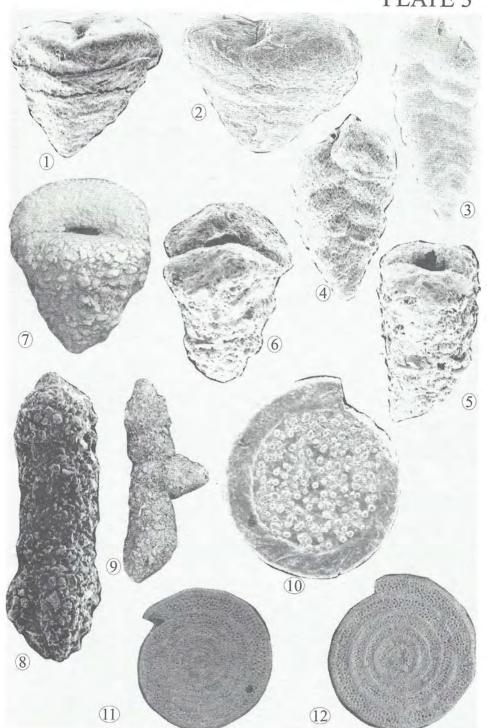
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- 1-2. Spiroplectinella sagittula (d'Orbigny). External views, x 75, Gökçeada, S. 32.
  - Eggerelloides scabrus (Williamson). External view, x 130, Gulf of Saros, S. 17.
  - Eggerelloides scabrus (Williamson). External view, x 120, Gökçeada, S. 28.
  - 5. Eggerelloides scabrus (Williamson). External view, x 65, Gulf of Edremit, S. 18.
  - 6. Bigenerina cylindrica Cushman. External view, x 75, Gulf of Saros, S. 26.
  - 7. Bigenerina nodosaria d'Orbigny. External view, x 75, Gulf of Saros, S. 4.
  - 8. Textularia bocki Höglund. External view, x 80, Dikili Bay, S. 6.
  - 9. Textularia bocki Höglund. External view, x 60, Dikili Bay, S. 7.
  - 10. Textularia bocki Höglund. External view, x 70, Dikili Bay, S. 8.
- 11-12. Textulaia conica d'Orbigny. External views, x 70, Gulf of Datça, S. 3.
  - 13. Textularia pseudorugosa Lacroix. External view, x 55, Gulf of İzmir, S. 2.
- 14-15. Textularia pseudorugosa Lacroix. External views, x 50, Marmaris Bay, S. 4.

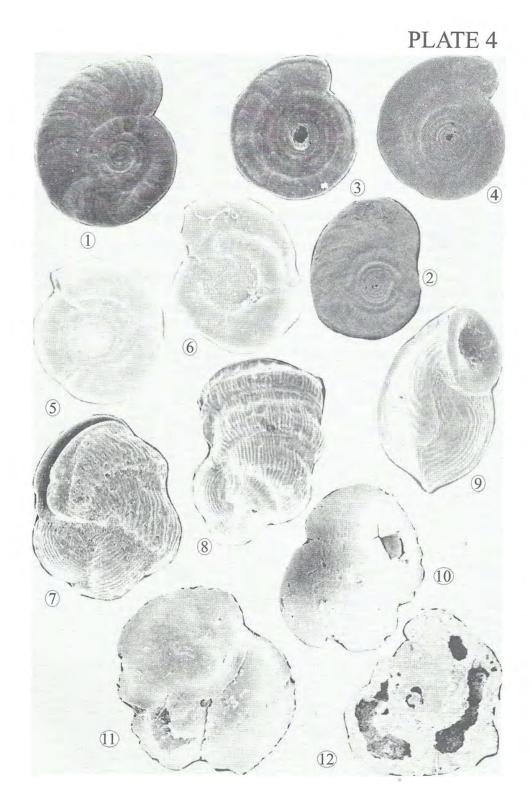


- 1. Textularia truncata Höglund. External view, x 100, Dikili Bay, S. 8.
- 2. Textularia truncata Höglund. External view, x 145, Gökçeada, S. 32.
- 3. Siphotextularia concava (Karrer). External view, x 95, Gökçeada, S. 25.
- 4. Siphotextularia concava (Karrer). External view, x 100, Gulf of İzmir, S. 1.
- 5. Connemarella rudis (Wright). External view, x 55, Çandarli Bay, S. 9.
- 6. Connemarella rudis (Wright). External view, x 65, Gulf of İzmir, S. 2.
- 7. Connemarella rudis (Wright). External view, x 55, Güllük Bay, S. 12.
- Pseudoclavulina crustata Cushman. External view, x 70, Gulf of Saros, S. 13.
- Pseudoclavulina crustata Cushman. Abnormal individual, external view, x 24, Gulf of Gökova, S. 6.
- 10. Spirillina limbata Brady. External view, x 120, Marmaris Bay, S. 1.
- 11-12. *Spirillina vivipara* Ehrenberg. External views, x 70, Gulf of Kuşadası, S. 3.

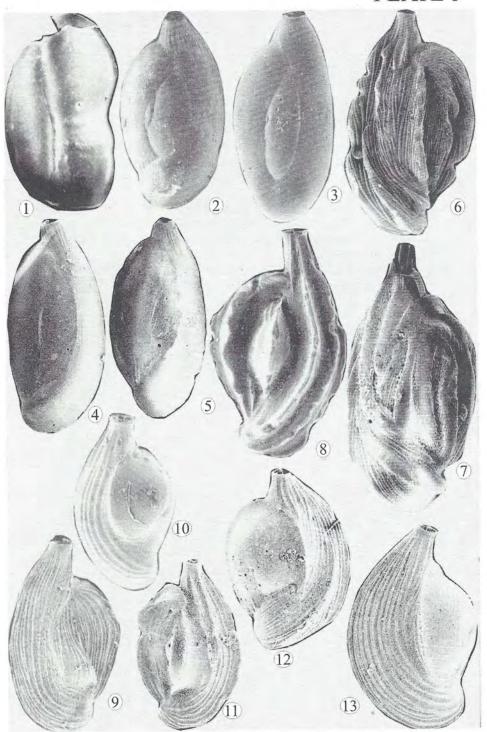




- 1. Cornuspira foliacea Philippi. External view, x 35, Gulf of Saros, S. 21.
- 2. Cornuspira foliacea Philippi. External view, x 40, Güllük Bay, S. 15.
- 3. Cornuspira involvens (Reuss). External view, x 75, Gulf of Saros, S. 12.
- 4. Cornuspira involvens (Reuss). External view, x 45, Güllük Bay, S. 9.
- 5-6. Trisegmentina compressa Wiesner. External views, x 140, Gökçeada, S. 29.
  - 7. Vertebralina striata d'Orbigny. External view, x 75, Bozcaada, S. 2.
  - 8. Vertebralina striata d'Orbigny, External view, x 75, Çandarlı Bay, S. 12.
  - 9. Wiesnerella auriculata (Egger). External view, x 150, Gökçeada, S. 25.
  - Nubecularia lucifuga Defrance. External view, dorsal side, x 90, Dikili Bay, S. 1.
- 11. Nubecularia lucifuga Defrance. External view dorsal side, x 85, Dikili Bay, S. 1.
- Nubecularia lucifuga Defrance. External view, x 70, attached side, Çandarlı Bay, S. 14.



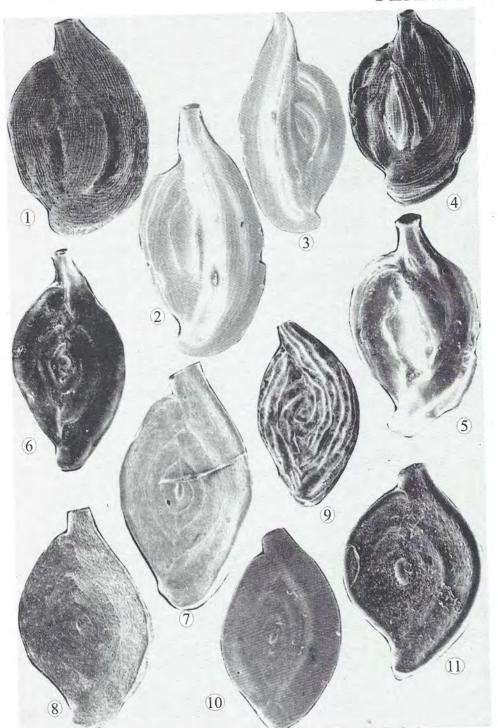
- Edenstostomina cultrata (Brady). External view, x 100, Marmaris Bay, S.
   7.
- 2-3. Adelosina cliarensis (Heron-Allen and Earland). External views, x 85, Gökçeada, S. 16.
- 4-5. Adelosina cliarensis (Heron-Allen and Earland). External views, x 80, Dikili Bay, S. 8.
- 6. Adelosina duthiersi Schlumberger. External view, x 40, Gulf of Saros, S. 3.
- 7. Adelosina duthiersi Schlumberger. External view, x 50, Bozcaada, S. 11.
- 8. Adelosina italica (Terquem). External view, x 75, Gulf of Saros, S. 3
- 9-10. Adelosina mediterranensis (Le Calvez, J. and Y.). External views; 9, x 75; 10, x 95, Gulf of Saros, S. 25.
- 11-13. Adelosina mediterranenesis (Le Calvez, J. and Y.). External views; 11, x40, Dikili Bay, S. 5; 12, x 40, Dikili Bay, S. 7; 13, x 70, Dikili Bay, S. 8.



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- 1. Adelosina partschi (d'Orbigny). External view, x 40, Bozcaada, S. 11.
- 2-3. Adelosina pulchella d'Orbigny. External views, x 50, Gulf of Saros, S. 18.
  - 4. Adelosina pulchella d'Orbigny. External view, x 60, Bozcaada, S. 10.
  - 5. Adelosina pulchella d'Orbigny. External view, x 65, Gulf of İzmir, S. 1.
  - Spiroloculina angulosa Terquem. External view, x 100, Gökçeada-Bozcaada-Çanakkale triangle, S. 2.
  - 7. Spiroloculina angulosa Terquem. External view, x 65, Gulf of İzmir, S. 2.
  - 8. Spiroloculina angulosa Terquem. External view, x 75, Gulf of Datça, S. 1.
- Spiroloculina corrugata Cushman and Todd. External view, x 75, vicinity of Karaburun Peninsula, S. 3.
- 10. Spiroloculina depressa d'Orbigny. External view, x 65, Gulf of Saros, S. 18.
- 11. Spiroloculina dilatata d'Orbigny. External view, x 80, Çandarlı Bay, S. 14.

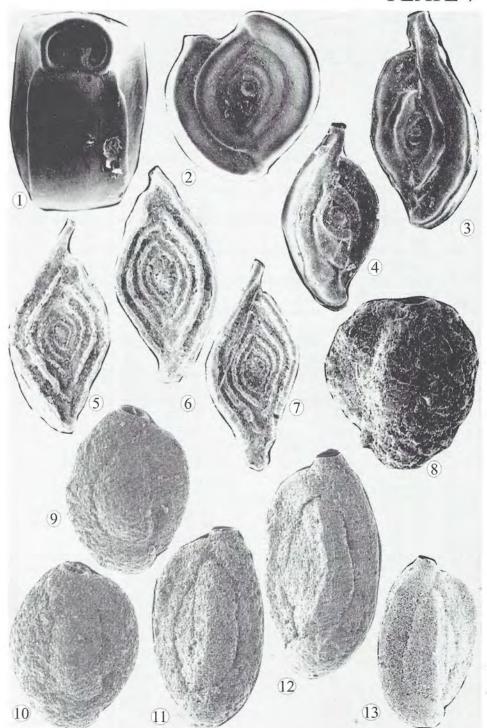
PLATE 6



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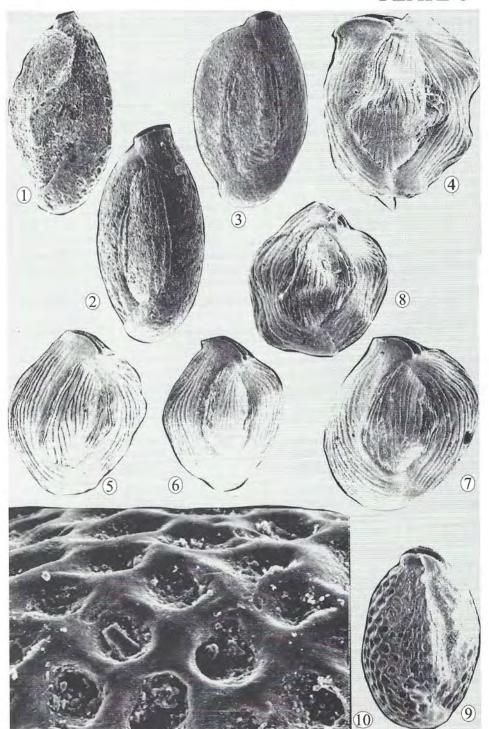
- 1. Spiroloculina excavata d'Orbigny. Edge view, x 150, Dikili Bay, S. 8.
- Spiroloculina excavata d'Orbigny. External view, x 75, Çandarlı Bay, S.
- 3-4. Spiroloculina ornata d'Orbigny. External views, x 100, Dikili Bay, S. 8.
- 5-6. Spiroloculina tenuiseptata Brady. External views, x 100, Çandarlı Bay, S. 13.
- 7. Spiroloculina tenuiseptata Brady. External view, x 90, Gulf of İzmir, S. 2.
- 8. Siphonaperta agglutinans (d'Orbigny). External view, x 75, Bozcaada, S. 10.
- 9-10. Siphonaperta aspera (d'Orbigny). External views, x 95, Gökçeada, S. 32.
- 11-12. Cycloforina contorta (d'Orbigny). External views, x 105, Gökçeada, S. 32.
  - 13. Cycloforina contorta (d'Orbigny). External view, x 70, Dikili Bay, S. 5.





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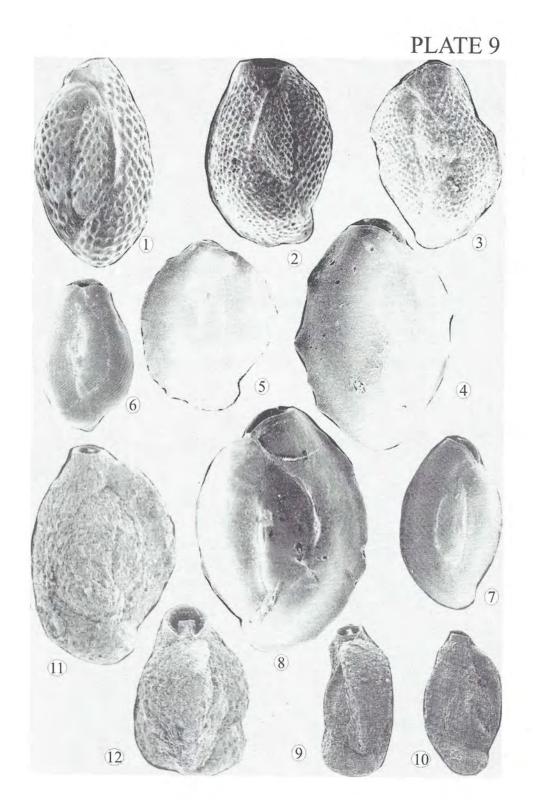
- Cycloforina rugosa (d'Orbigny). External view, x 120, Gökçeada-Bozcaada-Çanakkale triangle, S. 1.
- Cycloforina villafranca (Le Calvez, J. and Y.). External view, x 80, Çandarlı Bay, S. 13.
- 3. Cycloforina villafranca (Le Calvez, J. and Y.). External view, x 60, Gulf of Saros, S. 3.
- 4. Lachlanella bicornis (Walker and Jacob). External view, x 80, Dikili Bay, S. 5.
- 5-6. *Lachlanella bicornis* (Walker and Jacob). External views, x 60, Gulf of Edremit, S. 2.
  - Lachlanella bicornis (Walker and Jacob). External view, x 65, Gulf of İzmir, S. 2.
  - Lachlanella bicornis (Walker and Jacob). External view, x 120, Dikili Bay, S. 8.
  - Lachlanella bicornis (Walker and Jacob). External view, x 100, Dikili Bay, S. 8.
- Lachlanella variolata (d'Orbigny). Enlargement of external view, x 700, Dikili Bay, S. 8.



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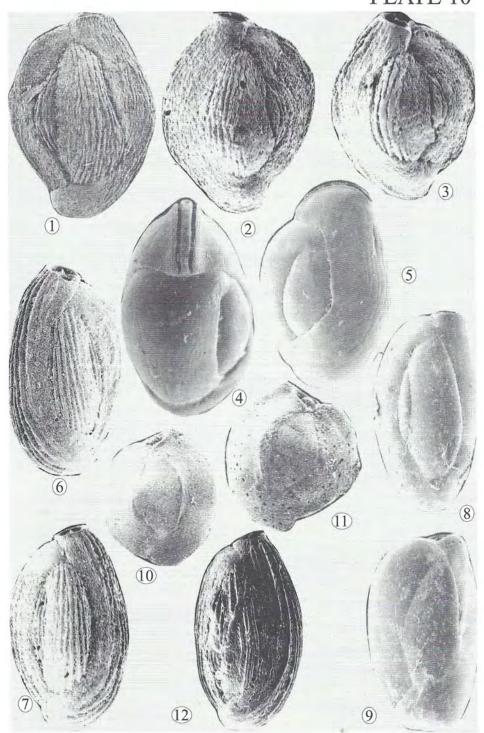
- 1. Lachlanella variolata (d'Orbigny). External view, x 100, Dikili Bay, S. 8.
- 2. Lachlanella variolata (d'Orbigny). External view, x 55, vicinity of Karaburun Peninsula, S. 3.
- Lachlanella variolata (d'Orbigny). External view, x 50, Gulf of Datça, S.
- 4. Massilina gualtieriana (d'Orbigny). External view, x 80, Dikili Bay, S. 1.
- 5. Massilina gualtieriana (d'Orbigny). External view, x 40, Dikili Bay, S. 1.
- 6. Massilina gualtieriana (d'Orbigny). External view, x 40, Bozcaada, S. 4.
- 7. Massilina secans (d'Orbigny). External view, x 30, Gökçeada, S. 25.
- 8. Massilina secans (d'Orbigny). External view, x 50, vicinity of Karaburun Peninsula, S. 5.
- 9-10. Quinqueloculina berthelotiana d'Orbigny. External views, x 75, Gökçeada, S. 32.
- 11-12. Quinqueloculina bidentata d'Orbigny. External views, x 110, Gökçeada, S. 29.



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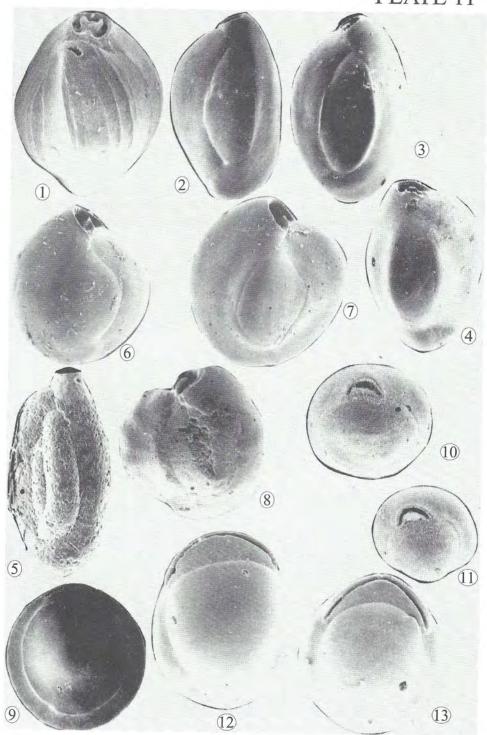
- Quinqueloculina disparilis d'Orbigny. External view, x 60, Gökçeada, S. 25.
- 2-3. Quinqueloculina disparilis d'Orbigny. External views, x 70, Çandarlı Bay, S. 14.
- 4-5. Quinqueloculina eburnea (d'Orbigny). External views; 4, x 100; 5, x 160; Gökçeada, S. 13.
- 6-7. *Quinqueloculina jugosa* Cushman. External views; 6, x 70, Dikili Bay, S. 5; 7, x 75, Çandarlı Bay, S. 14.
- 8-9. Quinqueloculina laevigata d'Orbigny. External views, x 100, Gökçeada, S. 26.
- 10-11. Quinqueloculina lamarckiana d'Orbigny. External views, x 80, Gökçeada, S. 32.
  - Quinqueloculina limbata d'Orbigny. External view, x 100, Bozcaada, S. 10.



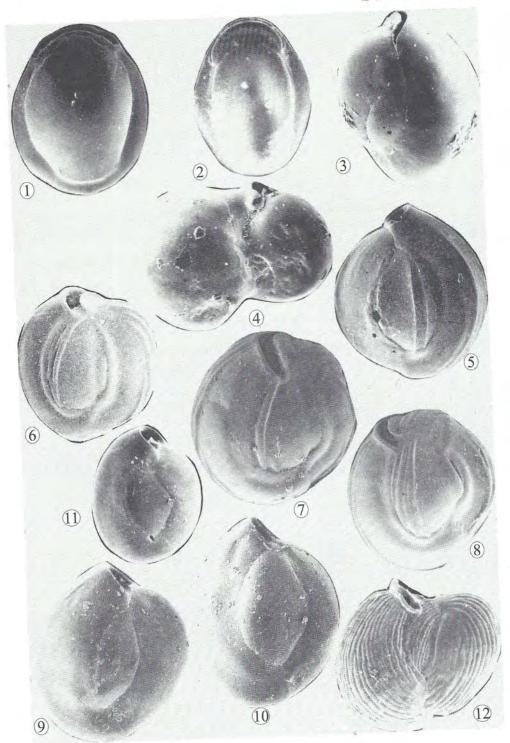


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- 1. Quinqueloculina neapolitana Sgarella and Moncharmont-Zei. External view, x 90, Gulf of Saros, S. 25.
- Quinqueloculina seminula (Linné). External view, x 60, Gulf of Saros, S. 12.
- 3-4. Quinqueloculina seminula (Linné). External views; 3, x 80; 4, x 75, Dikili Bay, S. 8.
  - 5. Quinqueloculina stalkeri Loeblich and Tappan. External view, x 95, vicinity of Karaburun Peninsula, S. 4.
- 6-7. Quinqueloculina viennensis Le Calvez J. and Y. External views, x 110, Gökçeada, S. 29.
  - 8. Quinqueloculina vulgaris d'Orbigny. External view, x 60, Gulf of Saros, S. 3.
  - 9. Biloculinella depressa (Wiesner). External view, x 85, Gulf of Saros, S. 13.
- 10-11. Biloculinella globula (Bornemann). External views, x 100, Gulf of Edremit, S. 3.
- 12-13. *Biloculinella inflata* (Wright). External views, x 150, Gulf of Saros, 12, S. 30 and 13, S 34.

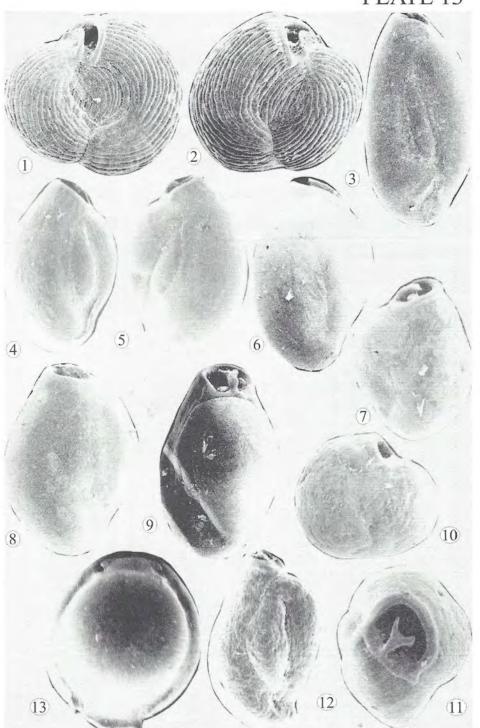


- Biloculinella labiata (Schlumberger). External view, x 80, Gulf of Saros, S. 12.
- Biloculinella labiata (Schlumberger). External view, x 120, Gulf of Edremit, S. 3.
- 3. Miliolinella elongata Kruit. External view, x 150, Dikili Bay, S. 8.
- 4. Miliolinella labiosa (d'Orbigny). External view, x 150, Marmaris Bay, S. 2.
- Miliolinella semicostata (Wiesner). External view, x 110, Gulf of Saros, S. 12.
- 6. Miliolinella semicostata (Wiesner). External view, x 140, Dikili Bay, S. 5.
- 7-8. Miliolinella semicostata (Wiesner). External views, x 140, Gökçeada, S. 29.
- 9-10. Miliolinella subrotunda (Montagu). External views, x 120, Gökçeada, S. 32.
  - 11. Miliolinella subrotunda (Montagu). External view, x 90, Dikili Bay, S. 8.
  - 12. Miliolinella webbiana (d'Orbigny). External view, x 85, Gulf of Saros, S. 39.

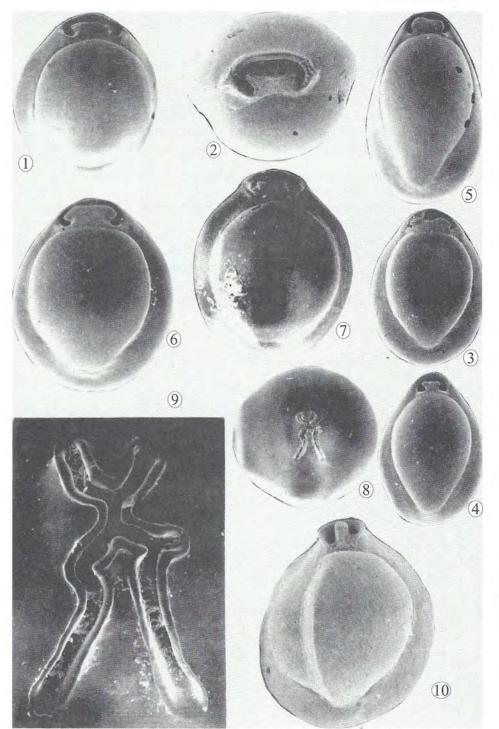


- 1-2. Miliolinella webbiana (d'Orbigny). External views, x 90, Dikili Bay, S. 5.
  - Pseudotriloculina laevigata (d'Orbigny). External view, x 50, Dikili Bay, S.
     5.
- 4-5. Pseudotriloculina oblonga (Montagu). External views, x 95, Gökçeada, S. 28.
  - 6. Pseudotriloculina oblonga (Montagu). External view, x 70, Dikili Bay, S. 5.
  - Pseudotriloculina rotunda (d'Orbigny). External view, x 75, Gökçeada, S. 26.
- 8-9. *Pseudotriloculina rotunda* (d'Orbigny). External views; 8, x 80; 9, x 70, Dikili Bay, S. 5.
- 10-11. Pseudotriloculina sidebottomi (Martinotti). External views, 10, x 95; 11, apertural view, x 130, Gökçeada, S. 29.
  - 12. Pseudotriloculina subgranulata (Cushman). External view, x 120, vicinity of Karaburun Peninsula, S. 3.
  - 13. Pyrgo anomala (Schlumberger). External view, x 55, Çandarlı Bay, S. 13.

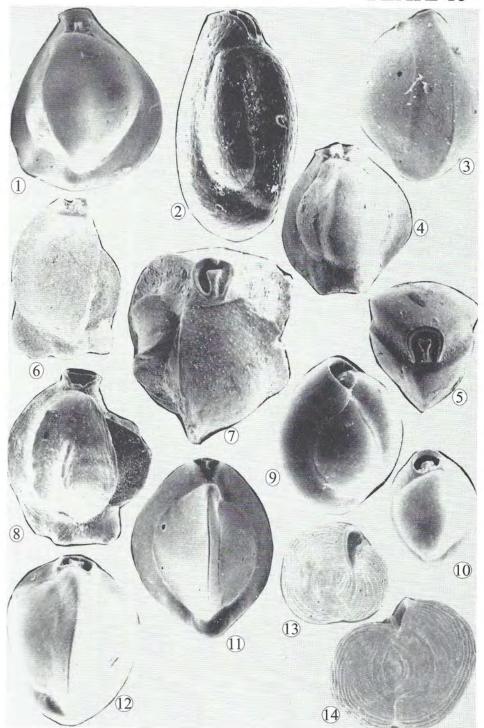




- 1-2. Pyrgo anomala (Schlumberger). External views; 1, x 85; 2, x 120, Gulf of Saros, S. 14.
- 3-5. *Pyrgo elongata* (d'Orbigny). External views; 3, x 80; 4 and 5, x 75, Gulf of Saros, S. 12.
- 6-7. *Pyrgo inornata* (d'Orbigny). External views; 6, x 65, S. 14 and 7, x 150, S. 13, Gulf of Saros.
- 8-9. Pyrgoella sphaera (d'Orbigny). External views: 8, x 80 and 9, apertural view, x 430, Gulf of Saros, S. 25.
- 10. Triloculina adriatica Le Calvez. External view, x 100, Gulf of Saros, S. 4.

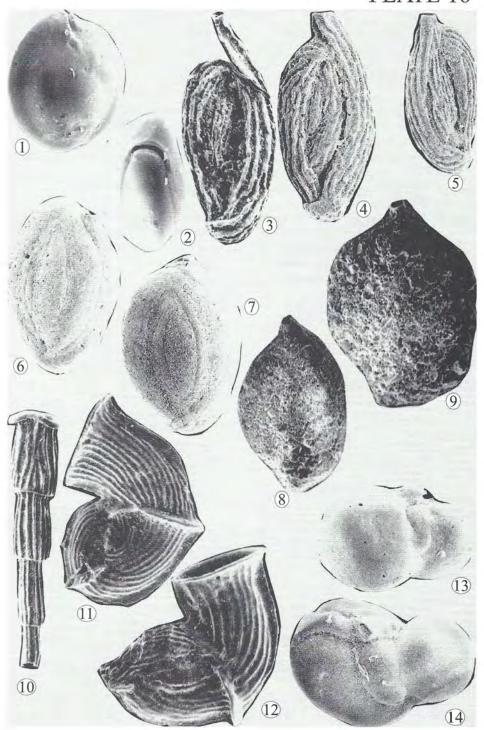


- 1. Triloculina adriatica Le Calvez. External view, x 140, Gulf of Saros, S. 13.
- 2. Triloculina bermudezi Acosta. External view, x 140, Dikili Bay, S. 5.
- Triloculina marioni Schlumberger, External view, x 120, Gulf of Saros, S. 4.
- 4-5. Triloculina marioni Schlumberger. External views; 5, apertural view, x 85, Dikili Bay, S. 8.
- 6-7. *Triloculina plicata* Terquem. External views; 6, x 75; 7, apertural view, x 100, Dikili Bay, S. 8.
  - 8. *Triloculina plicata* Terquem. External view, x 90, vicinity of Karaburun Peninsula, S. 3.
- 9-10. Triloculina schreiberiana d'Orbigny. External views, x 80, Dikili Bay, S. 8.
  - Triloculina tricarinata d'Orbigny. External view, x 140, Gulf of Saros, S. 13.
  - 12. *Triloculina tricarinata* d'Orbigny, External view, x 150, Gulf of Edremit, S. 3.
- 13-14. Wellmanellinella striata (Sidebottom). External views, x 80, Gökçeada, S. 29.



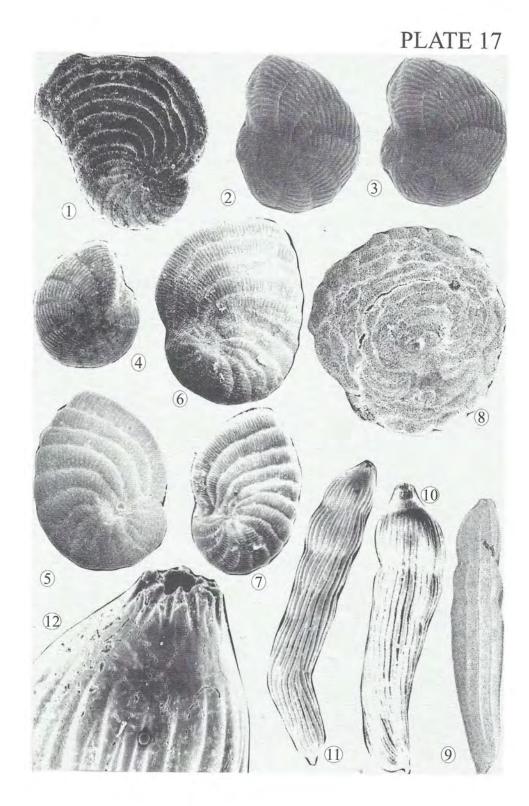
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- 1-2. Sigmoilina sigmoidea (Brady). External views, x 100, Gulf of Saros, S. 20.
- Sigmoilinita costata (Schlumberger). External view, x 120, Gökçeada-Bozcaada-Canakkale triangle, S. 2.
- 4. Sigmoilinita costata (Schlumberger). External view, x 100, Dikili Bay, S. 6.
- 5. Sigmoilinita costata (Schlumberger). External view, x 75, Dikili Bay, S. 7.
- 6-7. Sigmoilinita edwardsi (Schlumberger). External views; 6, x 80, Dikili Bay, S. 5; 7, x 100, Dikili Bay, S. 8.
- 8-9. Sigmoilopsis schlumbergeri (Silvestri). External views, x 100, Gulf of Saros, S. 7.
- 10. Articulina alticostata d'Orbigny. External view, x 75, Gulf of Datça, S, 4.
- 11-12. Articulina carinata Wiesner. External views; 11, x 130; 12, x 150; Dikili Bay, S. 8.
  - 13. Parrina bradyi (Millet). External view, x 100, Dikili Bay, S. 2.
- 14-15. Parrina bradyi (Millet). External views; 14, x 80; 15, x 120, Dikili Bay, S. 5.



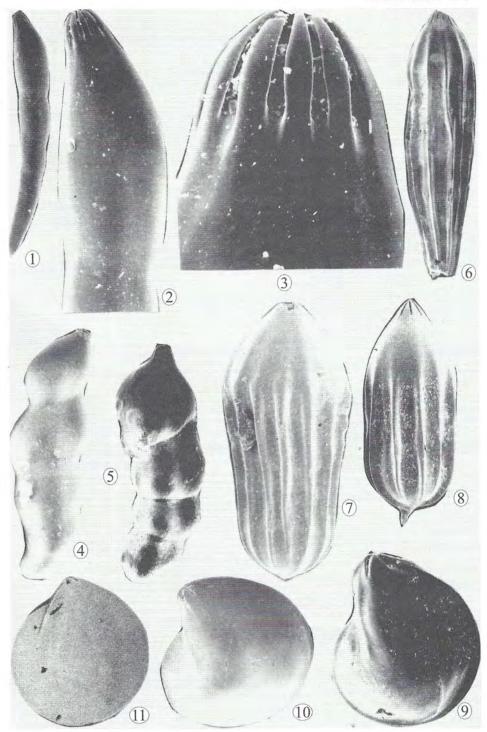
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- 1. Laevipeneroplis karreri (Wiesner). External view, x 75, Gökçeada, S. 10.
- 2-3. Peneroplis pertusus (Forskal). External views, x 120, Gökçeada, S. 3.
- 4. Peneroplis pertusus (Forskal). External view, x 75, Bozcaada, S. 2.
- 5-6. *Peneroplis planatus* (Fichtel and Moll). External views; 5, x 70; 6, x 50, Dikili Bay, S. 5.
  - 7. Peneroplis planatus (Fichtel and Moll). External view, x 50, Gulf of Gökova, S. 6.
  - 8. Sorites orbiculus Ehrenberg. External view, x 115, Gulf of Gökova, S. 2.
  - 9. Dentalina albatrossi (Cushman). External view, x 165, Güllük Bay, S. 9.
- 10. Dentalina flintii (Cushman). External view, x 43, Gulf of Gökova, S. 2.
- 11-12. Denealina flintii (Cushman). External views; 11, x 37; 12, detail view of the aperture, x 200, Marmaris Bay. S. 2.

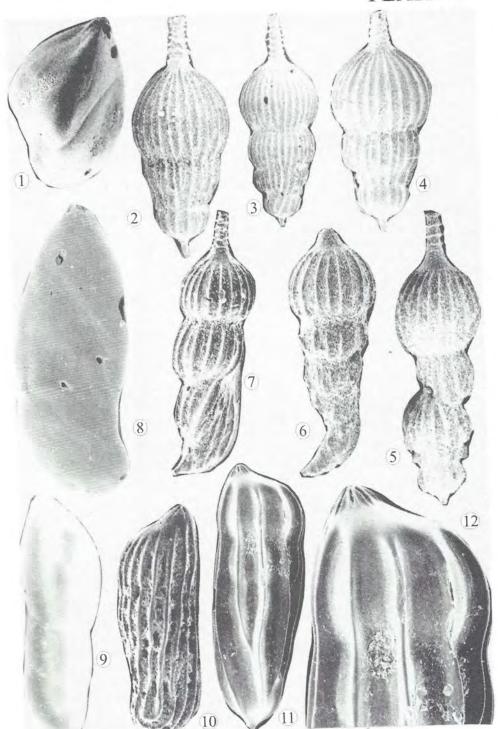


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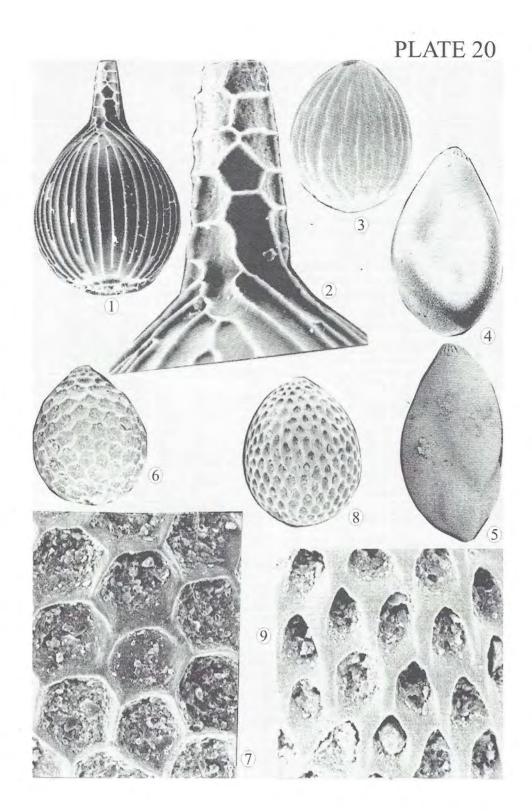
- 1-3. *Dentalina inornata* d'Orbigny. External views: 1, x 55; 2, x 70 and 3, detail view of the aperture, x 700, Gulf of Saros, S. 13.
- 4. Dentalina mucronata Neugeboren. External view, x 65, Gulf of Edremit, S. 2.
- 5. Dentalina mucronata Neugeboren. External view, x 85, Marmaris Bay, S. 1.
- 6. Nodosaria raphanus (Linné). External view, x 50, Gulf of Saros, S. 4.
- Pseudonodosaria vomatula (Cushman). External view, x 95, Gulf of Saros, S. 4.
- Pseudonodosaria comatula (Cushman). External view, x 75, Gökçeada-Bozcaada-Çanakkale triangle, S. 6.
- 9. Lenticulina cultrata (Montfort). External view, x 120, Marmaris Bay, S. 1.
- 10. Lenticulina cultrata (Montfort). External view, x 65, Marmaris Bay, S. 5.
- Lenticulina orbicularis (d'Orbigny). External view, x 50, Gulf of Gökova, S. 6.



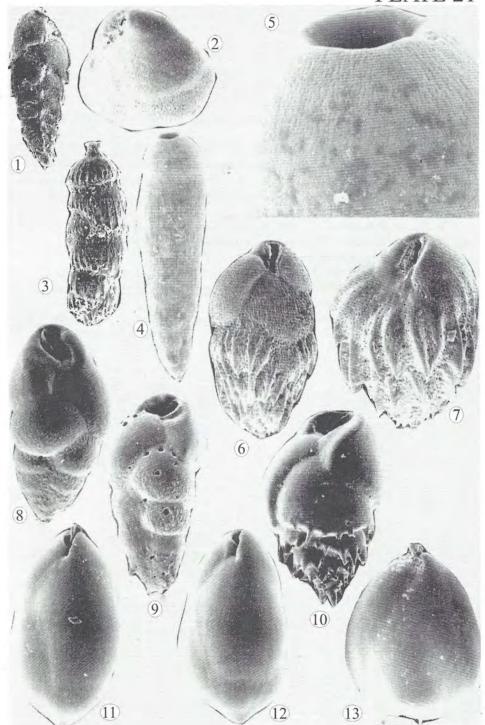
- 1. Saracenaria italica Defrance. External view, x 80, Gulf of Datça, S. 1.
- 2-4. Amphicoryna scalaris (Batsch). External views; 2, x 100; 3, x 75; 4, x 120, Gökçeada-Bozcaada-Çanakkale triangle, S. 5.
  - Amphicoryna scalaris (Batsch). External view, x 100, Gulf of Gökova, S. 7.
  - 6. Amphicoryna scalaris (Batsch). External view, x 120, Gulf of Datça, S. 1.
  - 7. Amphicoryna scalaris (Batsch). External view, x 140, Gulf of Datça, S. 9.
  - 8. Astacolus crepidulus (Fichtel and Moll). External view, x 80, Gulf of Saros, S. 54.
- 9. Astacolus sublegumen (Parr). External view, x 90, Gulf of Edremit, S. 18.
- Marginulina costata (Batsch). External view, x 85, Gökçeada-Bozcaada-Çanakkale triangle, S. 13.
- 11-12. Marginulina costata (Batsch). External views; 11, x 70; 12, detail view of the aperture, x 150, Gulf of Datça, S. 7.



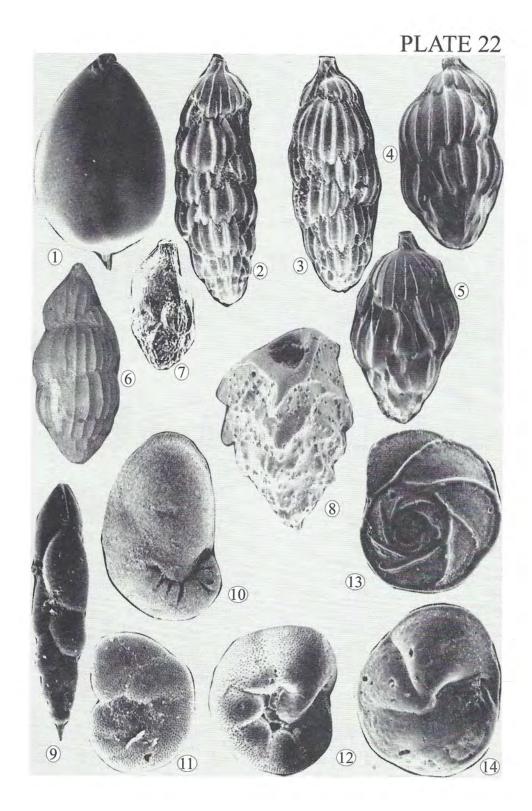
- 1-2. Lagena striata d'Orbigny. External views; 1, x 200; 2, detail view of neck, x 700, Gulf of Saros, S. 13.
  - 3. Globulina myristiformis (Williamson). External view, x 100, Gulf of Saros, S. 14.
  - 4. Polymorphina sp. 1. External view, x 100, Dikili Bay, S. 2.
- 5. Polymorphina sp. 2. External view, x 40, Gulf of Gökova, S. 4.
- 6-7. Favulina hexagona (Montagu). External views; 6, x 150; 7, enlargement of external view, x 700, Gulf of Edremit, S. 3.
- 8-9. Favulina squamosa (Montagu). External views; 8, x 150; 9, enlargement of external view, x 700, Gulf of Edremit, S. 3.



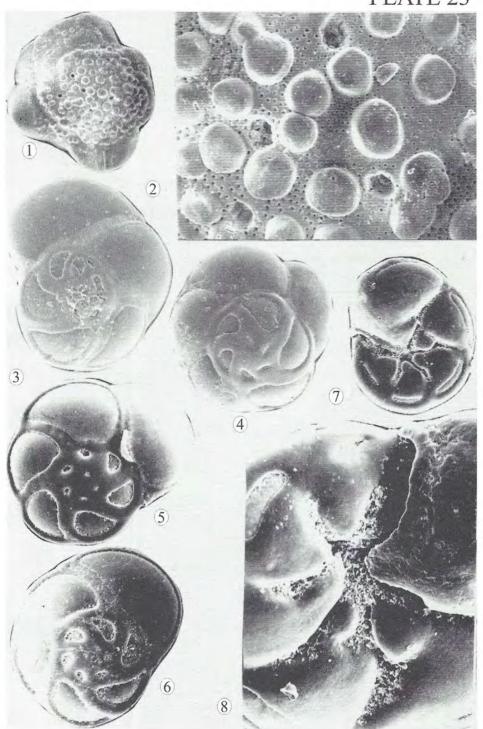
- Brizalina alata (Seguenza), External view, x 60, Gökçeada-Bozcaada-Çanakkale triangle, S. 10.
- Globocassidulina subglobosa (Brady). External view, x 150, Gökçeada-Bozeaada-Çanakkale triangle, S. 5.
- Rectuvigerina phlegeri Le Calvez, External view, x 130. Gökçeada-Bozcaada-Çanakkale triangle, S. 10.
- 4-5. Rectobolivina columellaris (Brady). External views; 4, x 130; 5, detail view of the aperture, x 700, Gulf of Saros, S. 74.
- 6-7. Bulimina costata d'Orbigny. External views; 6, x 140; 7, x 70. Gulf of Saros, S. 23.
- 8-9. Bulimina elongata d'Orbigny. External view, x 110, Gulf of Saros, S. 13.
  - 10. Bulimina marginata d'Orbigny. External view, x 160, Gulf of Saros, S. 13.
- 11-12. Globobulimina affinis (d'Orbigny). External views, x 120, Gulf of Saros,
  - Globobulimina pseudospinescens (Emiliani). External view, x 100, Gulf of Saros, S. 23.



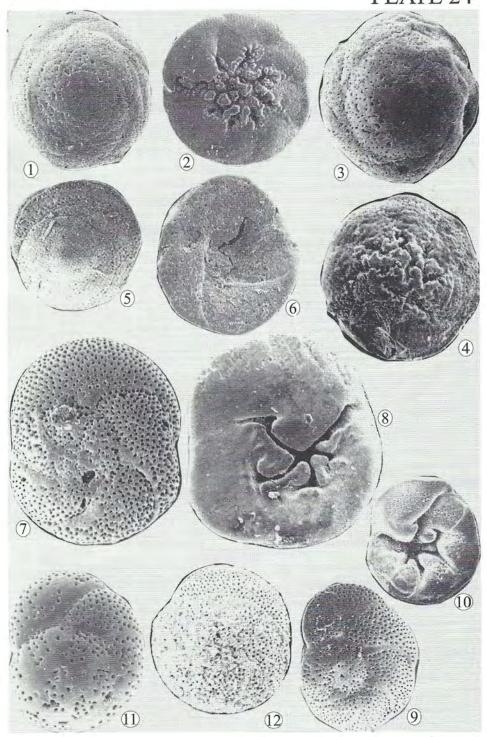
- Globobulimina pseudospinescens (Emiliani). External view, x 100, Gulf of Saros, S. 23.
- 2-3. Euwigerina sp. External views, x 95, Gulf of Saros, S. 12.
- 4-5. Uvigerina medaterranea Hofker. External views, x 85, Gulf of Saros, S. 7.
  - 6. Uvigerina peregrina Cushman. External view, x 80, Gulf of Kuşadası, S. 4.
  - 7. Angulogerina angulosa (Williamson). External view, x140, Gökçeada-Bozcaada-Çanakkale triangle, S. 9.
  - 8. Reussella spinulosa (Reuss). External view, x 200, Gökçeada, S. 29.
  - Fursenkoina acuta (d'Orbigny). External view, x 150, Gökçeada-Bozcaada-Çanakkale triangle, S. 10.
- 10. Cancris sagra (d'Orbigny). External view, x 100, Gulf of Edremit, S. 1.
- 11-12. Valvulineria bradyana (Fornasini). External views; 11, spiral side and 12, umblical side, x 120, Çandarlı Bay, S. 10.
- 13-14. Eponides concameratus (Williamson). External views; 13, spiral side, x 50, Gökçeada-Bozcaada-Çanakkale triangle, S. 3; 14, umblical side, x 70, Dikili Bay, S. 8.



- 1-2. *Planopulvinulina dispansa* (Brady). External views; 1, spiral side, x 55; 2, Enlargement of external view, x 300, Gulf of Saros, S. 61.
  - 3. Stomatorbina concentrica (Parker and Jones). External view, spiral side, x 100, Gulf of Saros, S. 79.
  - 4. *Stomatorbina concentrica* (Parker and Jones). External view, spiral side, x 85, Gökçeada, S. 17.
- 5-8. *Stomatorbina* sp. External views; 5-6, spiral sides; 7, umblical side, x 100; 8, detail view of the umblical side, x 300, Marmaris Bay, S. 1.

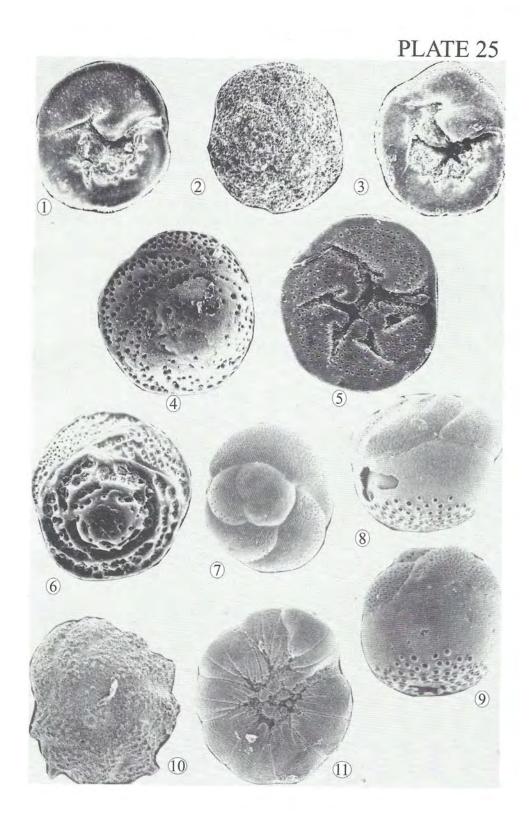


- 1-2. Neoeponides bradyi (Le Calvez). External views; 1, spiral side; 2, umblical side, x 120, Gökçeada, S. 32.
- 3-4. Neoeponides bradyi (Le Calvez). External views; 3, spiral side; 4, umblical side, x 120, Dikili Bay, S. 8.
- 5-6. *Neoconorbina terquemi* (Rzehak). External views; 5, spiral side; 6, umblical side, x 120, Gökçeada, S. 32.
- 7-8. *Rosalina bradyi* Cushman. External views; 7, spiral side; 8, umblical side, x 140, Gulf of Saros, S. 17.
- 9-10. Rosalina floridensis Cushman. External views; 9, spiral side; 10, umblical side, x 80, Gökçeada, S. 32.
- Rosalina globularis d'Orbigny. External view, spiral side, x 190, Gökçeada, S. 30.
  - 12. Rosalina obtusa d'Orbigny. External view, spiral side, x 100, Dikili Bay, S. 8,



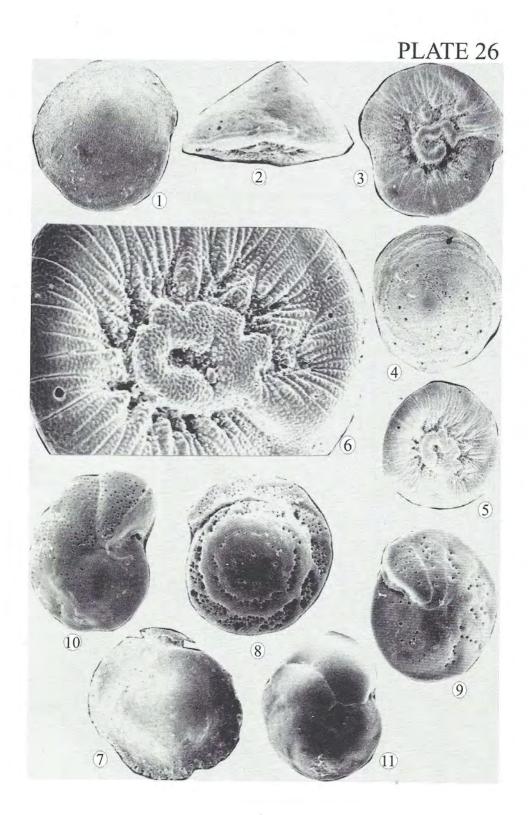
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- Rosalina obtusa d'Orbigny. External view, umblical side, x 100, Dikili Bay, S. 8.
- 2-3. Rosalina obtusa d'Orbigny. External views; 2. spiral side, x 80, Gulf of Datça, S. 4; 3, umblical side, x 75, Gulf of Datça, S. 5.
- 4-5. Pararosalina dimorphiformis McCulloch. External views; 4, spiral side, x 150; 5, umblical side, x 120, Bozcaada, S. 2.
  - 6. Pararosalina dimorqpiformis McCulloch. External view, spiral side, x 100, Gulf of Datça, S. 2.
- 7-9. *Tretomphalus bulloides* (d'Orbigny). External views; 7, spiral side, 8 and 9, edge views, x 200, Gökçeada, S. 21.
- 10-11. *Conorbella imperatoria* (d'Orbigny). External views; 10, spiral side; 11, umblical side, x 160, Gökçeada, S. 29.

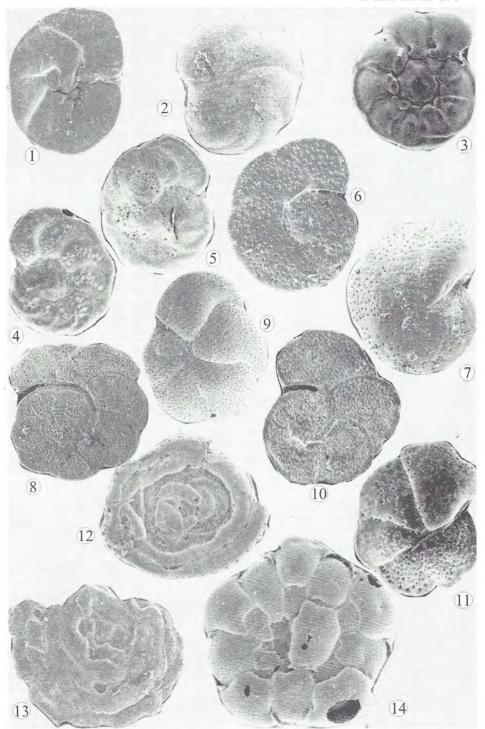


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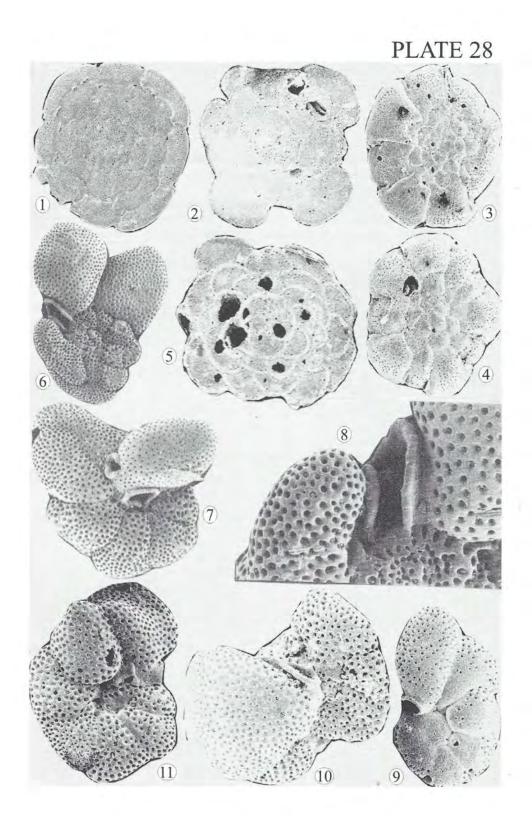
- 1-3. Planoglabratella opercularis (d'Orbigny). External views; 1, spiral side; 2, edge view; 3, umblical side, x 120, Gökçeada-Bozcaada-Çanakkale triangle, S. 5.
- 4-6. Planoglabratella opercularis (d'Orbigny). External views; 4, spiral side and 5, umblical side, x 120; 6, detail view of the umblical side, x 350, Dikili Bay, S. 8.
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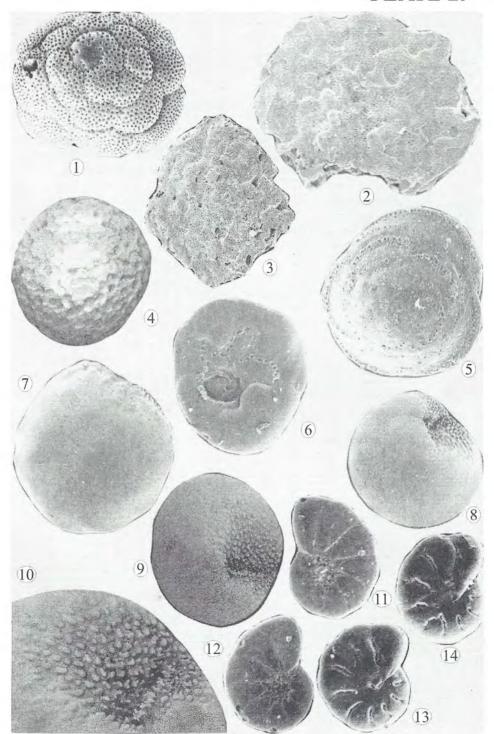


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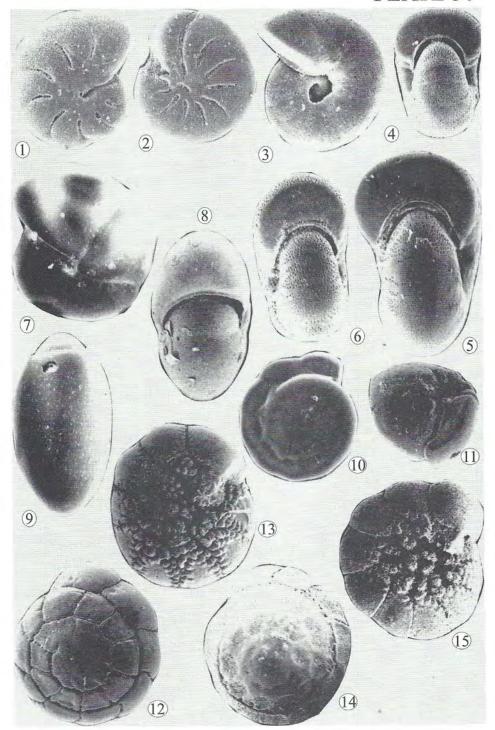


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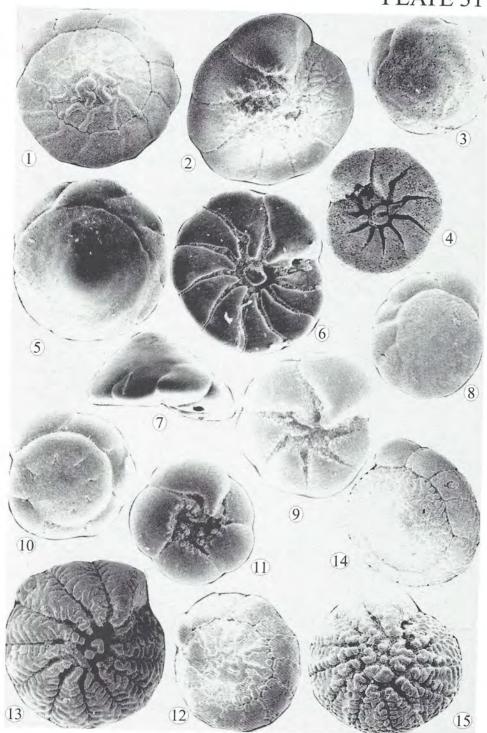
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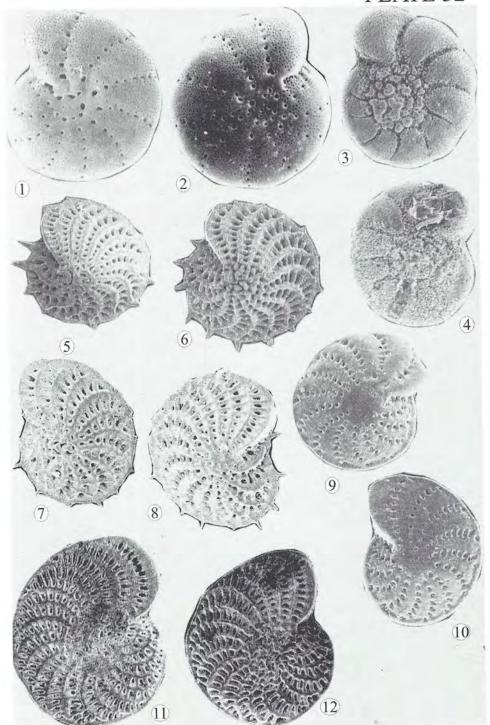
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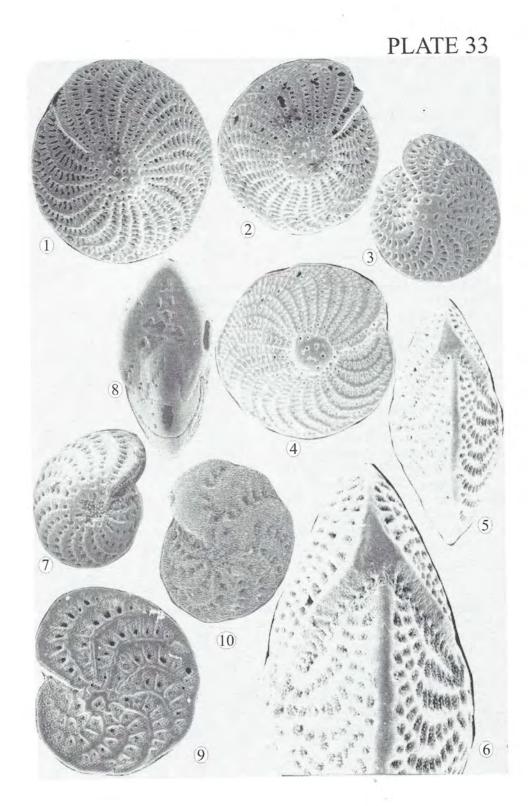
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