

Checklist of Mediterranean Free-living Dinoflagellates

F. Gómez

Department of Aquatic Biosciences, The University of Tokyo, 1-1-1 Yayoi, Bunkyo, Tokyo 113-8657, Japan, fernando.gomez@fitoplancton.com

An annotated checklist of the free-living dinoflagellates (Dinophyceae) of the Mediterranean Sea, based on literature records, is given. The distribution of 673 species in 9 Mediterranean sub-basins is reported. The number of taxa among the sub-basins was as follows: Ligurian (496 species), Balear-Provençal (360), Adriatic (322), Tyrrhenian (284), Ionian (283), Levantine (268), Aegean (182), Alborán (179) and Algerian Seas (151).

Introduction

The oligotrophic conditions in the Mediterranean Sea could favour the richness of dinoflagellates, typical organisms of oligotrophic waters. Intensive studies have been made by Jörgensen (1920, 1923), Schiller (1931–37) (Adriatic Sea), Pavillard (1905–1937) (Gulf of Lions and Monaco), Halim (1960) (Villefranche and Alexandria), Rampi (1939–1969) (Ligurian Sea) and Margalef (1945–1995) (Spanish coasts). However a catalogue of the dinoflagellate species recorded is not available. The aims of this study are to provide a checklist of the species from each sub-basin and to evaluate the species richness of dinoflagellates in the Mediterranean Sea based on a compilation of published data.

Material and Methods

This study is based on literature records of free-living dinoflagellates (Table I), grouped in the main sub-basins of the Mediterranean Sea (Fig. 1). References used for the elaboration of this checklist, but not cited in the text, checklist or notes are listed in the Appendix. Species with their nomenclatural authorities are arranged alphabetically in each order according to the classification proposed by Chrétiennot-Dinet *et al.* (1993) with the following modifications: the genera *Parahistioneis* and *Phalacroma* have been added to the Dinophysaceae; *Balechina* Loeblich *et* Loeblich III, *Plectodinium* Biecheler and the recently erected genera *Akashiwo* G. Hansen *et* Moestrup, *Karenia* G. Hansen *et* Moestrup and *Karlodinium* J. Larsen have been added to the Gymnodiniaceae; *Proterothropsis* Kofoid *et* Swezy *in* Kofoid has been added to the Warnowiaceae; *Pavillardinium* De-Toni has been added to the Oxytoxaceae; *Exuviella* Cienkowski has been added to the Prorocentraceae; *Mysticella* Carbonell-Moore has been added to the Podolampadaceae; *Calcigonellum* Deflandre, *Cal-*

cionellum Deflandre, *Pentapharsodinium* Indelicato *et* Loeblich III and *Preperidinium* Mangin have been added to the Peridiniaceae.

Synonyms have been tracked down and relocated in order to avoid duplicate entries. Synonyms, which have not been quoted in the world literature during the last decades, are not reported. Because of space limitation, not all the references reporting each species for each area have been included. Only when a taxon is reported in less than 3 of the 9 Mediterranean sub-basins considered, is the source of the record reported. Exceptionally, also in 3 of the Mediterranean sub-basins when the number of citations was low (< 5). In some cases, these scarcely reported taxa can be considered as misidentifications or unreliable records, recently described species or rare species. The results of this study depend on the valid identification by the authors of each reference. In most of the cases, there are not photographs or figures of the taxa and the verification of the records is difficult. Records of unarmoured cells should be considered cautiously due to the difficulties of their identification. Most of these doubtful records are in the studies by Skolka *et al.* (1986) for the Libyan waters and/or Innamorati *et al.* (1986, 1989 a,b) for the Ligurian Sea. Many species of the rare genera *Histioneis* and *Heterodinium*, mainly reported by Rampi (1939–1969) and Halim (1960), were not further recorded after their first description. For recently described taxa, the geographical distribution is still unknown beyond the type locality (e.g., some calcareous dinoflagellates). Parasitic (except *Dissodinium pseudolunula* Swift *ex* Elbrächter *et* Drebes) and symbiotic species (i.e., *Symbiodinium* Freudenthal) have been excluded. Freshwater species have been excluded [e.g., *Peridiniella catenata* (Levander) Balech, *P. danica* (Paulsen) Okolodkov *et* Dodge, etc]. Sometimes these species are reported from offshore waters especially in sub-basins such as the Adriatic or Aegean Seas. Taxa only reported from the identification of cysts have been excluded except

Table I. References considered for each Mediterranean sub-basin (references from the Appendix are excluded).

Alb	Arg	Bal	Tyr	Lig	Ion	Adr	Aeg	Lev
13	52	4	3	12	21	3	59	1–2
33	56	8–9	6	14–18	149	10	73–74	40
56	87–88	24	19	49	151	20	82–83	46
100	127	34	23	51		22	126	65–66
119		47	27–30	57–58		50		81
		60	32	61–64		71–72		83
		68–69	38–39	75–77		141		85–86
		96–99	54–55	84		150		106–107
		101–105	58	89–93		163–167		126
		115–116	70	116		173–176		
		118	95	125				
		120–122	108–113	129–140				
		168–169	117	160–161				
		171–172	128					
			143–144					
			146–148					
			151					
			162					
			177–178					

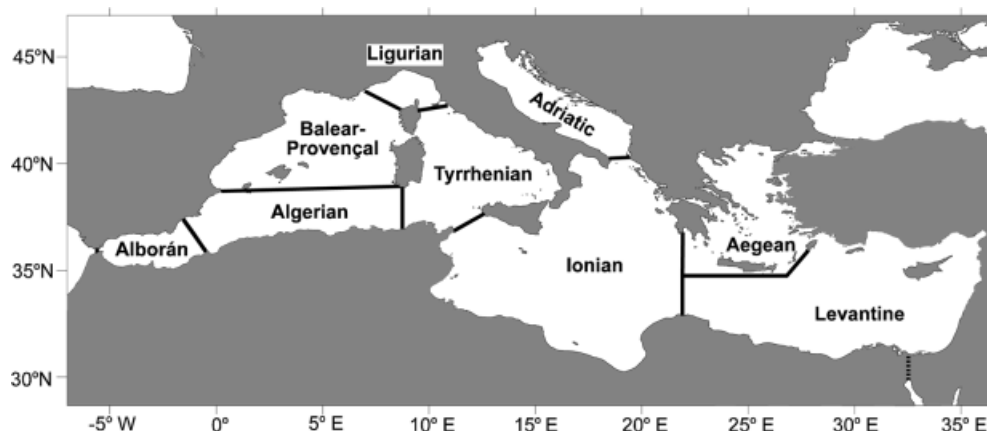


Fig. 1. Map of the Mediterranean sub-basins.

when live cells have germinated from cysts (Ciminiello *et al.* 2000, D'Onofrio *et al.* 1999, Meier *et al.* 2002).

Results

Mediterranean free-living planktonic dinoflagellates were represented by 673 species with 604 and 480 species reported in the western and eastern basins respectively (Table II). The Ligurian (74%), Balear-Provençal (53%), Adriatic (48%), Tyrrhenian = Ionian (42%) and Levantine (40%) Seas showed the highest number of species whereas the Aegean (27%), Alborán (26%) and Algerian (22%) Seas showed the lowest number of species.

Acknowledgements

I acknowledge the financial support by the Spanish Ministry of Science and Technology and by the European Commission (ICB2-CT-2001-80002). I thank for the helpful comments and suggestions by four reviewers and the Editor. This checklist has been made possible with the collaboration of many colleagues supplying less accessible literature.

Accepted 22 December 2002.

Table II. List of taxa and their distribution.

Dinophyceae West <i>et</i> Fritsch 1927	Alb	Alg	Bal	Tyr	Lig	Ion	Adr	Aeg	Lev	Reference no.
Actiniscales Sournia 1984										
Actiniscaceae Kützing 1844										
Achradina Lohmann 1903										
<i>Achradina pulchra</i> Lohmann			+		+					76, 116
Actiniscus Ehrenberg 1843										
<i>Actiniscus pentasterias</i> (Ehrenberg) Ehrenberg	+		+	+	+					
Brachydiniales Loeblich III <i>ex</i> Sournia 1984										
Brachydiniaceae Sournia 1972										
Asterodinium Sournia 1972										
<i>Asterodinium gracile</i> Sournia ¹				+	+				+	1, 57
<i>Asterodinium libanum</i> Abboud-Abi Saab ¹					+				+	2, 57, 58
Brachydinium F.J.R. Taylor ²										
<i>Brachydinium capitatum</i> F.J.R. Taylor			+		+		+		+	
<i>Brachydinium taylorii</i> Sournia			+							102
Desmomonadales Pascher 1914										
Desmocapsaceae Pascher 1914										
Desmocapsa Pascher 1914										
<i>Desmocapsa gelatinosa</i> Pascher ³					+		+			75, 76, 77, 145
Haplodiniaceae Lindemann 1928										
Haplodinium Klebs 1912										
<i>Haplodinium antjoliense</i> Klebs ⁴					+					75
Dinococcales Pascher 1914										
Gloeodiniaceae Pascher <i>ex</i> Schiller 1937										
Gloeodinium Klebs 1912										
<i>Gloeodinium marinum</i> Bouquaheux ⁵			+		+					12, 103, 160
Thoracosphaeraceae Schiller 1930										
Thoracosphaera Kamptner 1927										
<i>Thoracosphaera heimii</i> (Lohmann) Kamptner ⁶		+	+	+		+		+	+	
Dinophysales Lindemann 1928										
Citharistaceae Kofoid <i>et</i> Skogsberg 1928										
Citharistes Stein 1883										
<i>Citharistes apsteini</i> Schütt									+	81
<i>Citharistes regius</i> Stein				+	+	+				
Dinophysaceae Stein 1883										
Amphisolenia Stein 1883										
<i>Amphisolenia bidentata</i> Schröder	+	+	+	+	+	+	+	+	+	
<i>Amphisolenia bispinosa</i> Kofoid				+						29
<i>Amphisolenia brevicauda</i> Kofoid					+					91, 139
<i>Amphisolenia clavipes</i> Kofoid									+	1, 86
<i>Amphisolenia complanata</i> Kofoid <i>et</i> Skogsberg					+					91
<i>Amphisolenia extensa</i> Kofoid	+			+	+					33, 80, 90
<i>Amphisolenia globifera</i> Stein	+	+	+	+	+	+	+	+	+	
<i>Amphisolenia inflata</i> Murray <i>et</i> Whitting			+		+					91, 105
<i>Amphisolenia lemmermanni</i> Kofoid									+	40, 46
<i>Amphisolenia palaeotheroides</i> Kofoid					+					91
<i>Amphisolenia palmata</i> Stein			+	+	+		+		+	
<i>Amphisolenia quadrispina</i> Kofoid									+	1, 86
<i>Amphisolenia rectangulata</i> Kofoid			+	+						148, 168
<i>Amphisolenia sigma</i> Halim ⁷									+	66
<i>Amphisolenia spinulosa</i> Kofoid		+	+	+	+	+	+		+	
<i>Amphisolenia truncata</i> Kofoid <i>et</i> Michener		+	+		+			+	+	
Dinophysis Ehrenberg 1839 (= <i>Phalacroma</i> Stein 1883 <i>partim</i> .)										
<i>Dinophysis acuminata</i> Claparède <i>et</i> Lachmann ⁸	+	+	+	+	+	+	+	+	+	
<i>Dinophysis acuta</i> Ehrenberg ⁹	+	+	+	+	+	+	+	+		
<i>Dinophysis alata</i> Jörgensen ¹⁰			+	+	+	+	+			
<i>Dinophysis amandula</i> (Balech) Sournia ¹¹		+	+	+	+	+			+	
<i>Dinophysis apicata</i> (Kofoid <i>et</i> Skogsberg) Abé <i>vel</i> Balech					+					125
<i>Dinophysis apiculata</i> Meunier ¹²					+					91
<i>Dinophysis biceps</i> Schiller					+		+			138, 145

Table II. (continued)

Dinophyceae West et Fritsch 1927	Alb	Alg	Bal	Tyr	Lig	Ion	Adr	Aeg	Lev	Reference no.
<i>Ornithocercus francescae</i> (Murray et Whitting) Balech ²⁶					+		+		+	
<i>Ornithocercus geniculatus</i> Dangeard			+		+				+	
<i>Ornithocercus heteroporus</i> Kofoid	+		+	+	+	+	+		+	
<i>Ornithocercus magnificus</i> Stein	+	+	+	+	+	+	+	+	+	
<i>Ornithocercus quadratus</i> Schütt ²⁷			+	+	+	+	+	+	+	
<i>Ornithocercus splendidus</i> Schütt ²⁸			+		+	+			+	
<i>Ornithocercus steinii</i> Schütt <i>emend.</i> Kofoid et Skogsberg ²⁹					+		+		+	
<i>Ornithocercus thumii</i> (Schmidt) Kofoid et Skogsberg	+		+							33, 115
Parahistioneis Kofoid et Skogsberg 1928 (= <i>Histioneis</i> Stein 1883 <i>partim.</i>)										
<i>Parahistioneis acutiformis</i> Rampi					+					136
<i>Parahistioneis karstenii</i> (Kofoid et Michener) Kofoid et Skogsberg ³⁰					+					129
<i>Parahistioneis mediterranea</i> Schiller					+	+	+			
<i>Parahistioneis paraformis</i> Kofoid et Skogsberg					+				+	81, 136
<i>Parahistioneis sphaeroidea</i> Rampi					+			+		73, 136
<i>Parahistioneis varians</i> Böhm in Schiller							+			10
Phalacroma Stein 1883 (= <i>Dinophysis</i> Ehrenberg 1839 <i>partim.</i>)										
<i>Phalacroma acutum</i> (Schütt) Pavillard ³¹	+		+		+	+	+			
<i>Phalacroma argus</i> Stein	+	+	+	+	+	+	+		+	
<i>Phalacroma bipartitum</i> Kofoid et Skogsberg			+							99
<i>Phalacroma cuneus</i> Schütt		+	+	+	+	+	+		+	
<i>Phalacroma doryphorum</i> Stein	+	+	+	+	+	+	+		+	
<i>Phalacroma expulsum</i> (Kofoid et Michener) Kofoid et Skogsberg ³²			+		+					64, 69, 99
<i>Phalacroma favus</i> Kofoid et Michener			+	+	+	+	+		+	
<i>Phalacroma nasutum</i> Stein ³³	+	+	+	+	+	+	+			
<i>Phalacroma operculatum</i> Stein	+		+		+		+			
<i>Phalacroma ovatum</i> (Claparède et Lachmann) Jörgensen	+	+	+	+	+	+	+		+	
<i>Phalacroma parvulum</i> (Schütt) Jörgensen	+	+	+	+	+	+	+	+	+	
<i>Phalacroma porodictyum</i> Stein			+	+	+		+		+	
<i>Phalacroma praetextum</i> Kofoid et Michener				+						95
<i>Phalacroma pulchellum</i> Lebour	+	+	+	+	+	+		+	+	
<i>Phalacroma striatum</i> Kofoid					+	+	+			80, 125, 173, 175
Triposolenia Kofoid 1906										
<i>Triposolenia bicornis</i> Kofoid			+	+	+	+	+	+		
<i>Triposolenia longicornis</i> Kofoid					+					76
<i>Triposolenia truncata</i> Kofoid	+		+		+		+	+	+	
Oxyphysaceae Sournia 1984										
Oxyphysis Kofoid 1926										
<i>Oxyphysis oxytoxoides</i> Kofoid			+	+			+		+	
Gymnodiniales Lemmermann 1910										
Gymnodiniaceae Lankester 1885										
Akashiwo G. Hansen et Moestrup 2000										
<i>Akashiwo sanguinea</i> (Hirasaka) G. Hansen et Moestrup ³⁴		+	+	+	+	+	+	+	+	
Amphidinium Claparède et Lachmann 1885										
<i>Amphidinium acutissimum</i> Schiller	+		+		+	+	+			
<i>Amphidinium acutum</i> Lohmann					+	+			+	
<i>Amphidinium carterae</i> Hulburt			+						+	1, 168
<i>Amphidinium conus</i> Schiller					+		+			77, 145
<i>Amphidinium crassum</i> Lohmann ³⁵		+	+		+	+	+	+		
<i>Amphidinium cucurbitella</i> Kofoid et Swezy						+				149
<i>Amphidinium curvatum</i> Schiller					+	+	+			
<i>Amphidinium extensum</i> Wulff					+	+				75, 76, 149
<i>Amphidinium flagellans</i> Schiller					+	+	+			

Table II. (continued)

Dinophyceae West et Fritsch 1927	Alb	Alg	Bal	Tyr	Lig	Ion	Adr	Aeg	Lev	Reference no.
<i>Amphidinium glaucum</i> Conrad					+					76
<i>Amphidinium globosum</i> Schröder			+		+	+	+		+	
<i>Amphidinium hyalinum</i> Entz					+	+				77, 149
<i>Amphidinium inflatum</i> Kofoid		+								127
<i>Amphidinium kesslitzii</i> Schiller					+		+		+	
<i>Amphidinium lacustriforme</i> Schiller ³⁶			+			+	+			
<i>Amphidinium lanceolatum</i> Schröder					+	+	+			
<i>Amphidinium latum</i> Lebour			+			+	+			
<i>Amphidinium lissae</i> Schiller					+		+			76, 77, 175
<i>Amphidinium oceanicum</i> Lohmann					+	+				75, 149
<i>Amphidinium operculatum</i> Claparède et Lachmann ³⁷			+	+			+			145, 177
<i>Amphidinium ovoideum</i> (Lemmermann) Lemmermann					+					76
<i>Amphidinium pellucidum</i> Herdman					+					76
<i>Amphidinium roseolum</i> (Schmarda) Schiller						+				149
<i>Amphidinium schroederii</i> Schiller ³⁸		+			+	+	+			
<i>Amphidinium sphenoides</i> Wulff ³⁹					+	+				76, 149
<i>Amphidinium stigmatum</i> Schiller					+	+	+			
<i>Amphidinium turbo</i> Kofoid et Swezy					+				+	77, 81
<i>Amphidinium vasculum</i> Kofoid et Swezy						+				149
<i>Amphidinium vigrense</i> Woloszynska					+					76
Balechina Loeblich et Loeblich III 1966										
<i>Balechina coerulea</i> (Dogiel) F.J.R. Taylor					+	+				76, 149
<i>Balechina marianae</i> F.J.R. Taylor ⁴⁰					+					160
Cochlodinium Schütt 1896										
<i>Cochlodinium achromaticum</i> Lebour			+		+					76, 102
<i>Cochlodinium adriaticum</i> Schiller					+		+			77, 145
<i>Cochlodinium brandtii</i> Wulff	+		+		+	+	+			
<i>Cochlodinium citron</i> Kofoid et Swezy						+				149
<i>Cochlodinium constrictum</i> (Schütt) Lemmermann				+					+	81, 147
<i>Cochlodinium faurei</i> Kofoid et Swezy									+	81
<i>Cochlodinium geminatum</i> (Schütt) Schütt				+						147
<i>Cochlodinium helix</i> (Pouchet) Lemmermann ⁴¹			+			+	+			
<i>Cochlodinium polykrikoides</i> Margalef ⁴²				+						143
<i>Cochlodinium pulchellum</i> Lebour			+		+		+			
<i>Cochlodinium pupa</i> Lebour			+							101, 102
<i>Cochlodinium strangulatum</i> (Schütt) Schütt				+	+	+				
<i>Cochlodinium turbineum</i> Kofoid et Swezy						+				149
<i>Cochlodinium schuettii</i> Kofoid et Swezy							+			141, 145
Gymnodinium Stein 1878 emend. G. Hansen et Moestrup										
<i>Gymnodinium achromaticum</i> Lebour			+							34, 99
<i>Gymnodinium agile</i> Kofoid et Swezy					+	+				76, 149
<i>Gymnodinium agiliforme</i> Schiller			+		+	+	+			
<i>Gymnodinium albulum</i> Lindemann ⁴³					+					76
<i>Gymnodinium amphora</i> Kofoid et Swezy					+					76
<i>Gymnodinium arcticum</i> Wulff		+			+	+		+		
<i>Gymnodinium attenuatum</i> Kofoid et Swezy					+	+				76, 149
<i>Gymnodinium auratum</i> Kofoid et Swezy					+	+				76, 149
<i>Gymnodinium aureolum</i> (Hulburt) G. Hansen ⁴⁴			+	+		+		+	+	
<i>Gymnodinium aureum</i> Kofoid et Swezy			+			+				101, 149
<i>Gymnodinium baccatum</i> Balech			+							34
<i>Gymnodinium biconicum</i> Schiller			+		+	+	+			
<i>Gymnodinium canus</i> Kofoid et Swezy						+			+	86, 149
<i>Gymnodinium caput</i> Schiller				+	+	+	+			76, 145, 149
<i>Gymnodinium carinatum</i> Schilling		+								127
<i>Gymnodinium catenatum</i> Graham ^{45,46}	+	+								13, 56
<i>Gymnodinium cinctum</i> Kofoid et Swezy					+					76
<i>Gymnodinium conicum</i> Kofoid et Swezy ⁴⁷						+	+			22, 149
<i>Gymnodinium corii</i> Schiller				+	+	+	+			
<i>Gymnodinium costatum</i> Kofoid et Swezy			+							99

Table II. (continued)

Dinophyceae West et Fritsch 1927	Alb	Alg	Bal	Tyr	Lig	Ion	Adr	Aeg	Lev	Reference no.
<i>Gymnodinium cucumis</i> Schütt			+	+	+		+			
<i>Gymnodinium diploconus</i> Schütt				+	+	+				
<i>Gymnodinium dissimile</i> Kofoid et Swezy					+	+				76, 149
<i>Gymnodinium elongatum</i> Hope				+		+				144, 149
<i>Gymnodinium flavum</i> Kofoid et Swezy					+				+	76, 81
<i>Gymnodinium fulvum</i> Kofoid et Swezy						+				149
<i>Gymnodinium fuscum</i> (Ehrenberg) Stein		+			+	+				
<i>Gymnodinium galeaeforme</i> Matzenauer									+	81
<i>Gymnodinium gelbum</i> Kofoid									+	81
<i>Gymnodinium gibberum</i> Schiller				+	+	+	+			
<i>Gymnodinium gleba</i> Schütt				+	+					76, 147
<i>Gymnodinium gracile</i> Bergh						+				149
<i>Gymnodinium grammaticum</i> (Pouchet) Kofoid et Swezy ⁴⁸				+	+		+		+	
<i>Gymnodinium heterostriatum</i> Kofoid et Swezy ⁴⁹				+	+	+	+			
<i>Gymnodinium impudicum</i> (Fraga et Bravo) G. Hansen et Moestrup ⁴⁶	+		+	+		+	+		+	
<i>Gymnodinium incertum</i> Herdman					+					76
<i>Gymnodinium incisum</i> Kofoid et Swezy					+					76
<i>Gymnodinium lachmannii</i> Saville-Kent					+					75
<i>Gymnodinium lineatum</i> Kofoid et Swezy						+				149
<i>Gymnodinium lira</i> Kofoid et Swezy					+					76
<i>Gymnodinium lohmannii</i> Paulsen						+			+	40, 149
<i>Gymnodinium maguelonnense</i> Biecheler ⁵⁰			+			+				9, 149
<i>Gymnodinium marinum</i> Saville-Kent					+	+			+	
<i>Gymnodinium minor</i> Lebour					+	+	+			21, 22, 76
<i>Gymnodinium mitratum</i> Schiller					+					76
<i>Gymnodinium multilineatum</i> Kofoid et Swezy					+					76
<i>Gymnodinium multistriatum</i> Kofoid et Swezy			+						+	81, 168
<i>Gymnodinium najadeum</i> Schiller				+	+	+	+			
<i>Gymnodinium nanum</i> Schiller			+		+					75, 76, 77, 102
<i>Gymnodinium neapolitanum</i> Schiller			+	+	+	+	+			
<i>Gymnodinium opressum</i> Conrad			+		+					75, 76, 102
<i>Gymnodinium ostefeldii</i> Schiller					+		+			75, 76, 145
<i>Gymnodinium ovulum</i> Kofoid et Swezy					+					75, 76
<i>Gymnodinium paulsenii</i> Schiller					+	+	+			
<i>Gymnodinium pulchellum</i> J. Larsen ⁵¹			+	+						23, 171
<i>Gymnodinium pulchrum</i> Schiller					+		+			
<i>Gymnodinium punctatum</i> Pouchet					+					75, 76
<i>Gymnodinium pygmaeum</i> Lebour					+					76
<i>Gymnodinium ravenescens</i> Kofoid et Swezy					+					76
<i>Gymnodinium rotundatum</i> Klebs		+			+	+	+			
<i>Gymnodinium rubrocinctum</i> Lebour					+					76
<i>Gymnodinium scopulosum</i> Kofoid et Swezy					+					76
<i>Gymnodinium semidivisum</i> Schiller					+		+			75, 76, 77, 145
<i>Gymnodinium simplex</i> (Lohmann) Kofoid et Swezy ⁴³			+		+	+	+	+		
<i>Gymnodinium situla</i> Kofoid et Swezy						+				149
<i>Gymnodinium sphaericum</i> Calkins						+				149
<i>Gymnodinium sphaeroideum</i> Kofoid					+	+				75, 149
<i>Gymnodinium sulcatum</i> Kofoid et Swezy					+					76
<i>Gymnodinium translucens</i> Kofoid et Swezy					+					75
<i>Gymnodinium tridentatum</i> Schiller						+				149
<i>Gymnodinium variabile</i> Herdman			+		+	+				75, 76, 77, 102, 149
<i>Gymnodinium vestificii</i> Schütt ⁵²				+	+					76, 147
<i>Gymnodinium voukii</i> Schiller				+	+	+				
<i>Gymnodinium wulfii</i> Schiller					+	+				77, 149
Gyrodinium Kofoid et Swezy 1921 emend. G. Hansen et Moestrup (= <i>Gymnodinium</i> Stein 1878 partim.)										
<i>Gyrodinium acutum</i> (Schütt) Kofoid et Swezy			+	+		+				

Table II. (continued)

Dinophyceae West <i>et</i> Fritsch 1927	Alb	Alg	Bal	Tyr	Lig	Ion	Adr	Aeg	Lev	Reference no.
<i>Amphidoma</i> Stein 1883 (= <i>Pavillardinium</i> De-Toni 1936 <i>partim.</i>, <i>Murrayella</i> Kofoid 1907)										
<i>Amphidoma caudata</i> Halldal ⁷⁵			+		+		+			
<i>Amphidoma elongata</i> Kofoid <i>et</i> Swezy						+				149
<i>Amphidoma nucula</i> Stein ⁷⁶	+	+								33,88
Ceratiaceae Kofoid 1907										
<i>Ceratium</i> Schrank 1793										
<i>Ceratium arietinum</i> Cleve	+	+	+	+	+	+	+	+	+	
<i>Ceratium azoricum</i> Cleve	+	+	+	+	+		+	+		
<i>Ceratium belone</i> Cleve	+	+	+	+	+	+		+	+	
<i>Ceratium breve</i> (Ostenfeld <i>et</i> Schmidt) Schröder			+			+		+	+	
<i>Ceratium brunellii</i> Rampi ⁷⁷					+					134
<i>Ceratium buceros</i> (Zacharias) Schiller	+	+	+	+	+	+	+	+	+	
<i>Ceratium candelabrum</i> (Ehrenberg) Stein	+	+	+	+	+	+	+	+	+	
<i>Ceratium carriense</i> Gourret	+	+	+	+	+	+	+	+	+	
<i>Ceratium claviger</i> Kofoid ⁷⁸	+		+		+					
<i>Ceratium coarctatum</i> Pavillard	+		+	+	+	+		+	+	
<i>Ceratium concilians</i> Jörgensen	+		+	+	+	+	+	+	+	
<i>Ceratium contortum</i> (Gourret) Cleve	+	+	+	+	+	+	+	+	+	
<i>Ceratium contrarium</i> (Gourret) Pavillard ⁷⁹	+	+	+	+	+	+	+	+	+	
<i>Ceratium declinatum</i> (Karsten) Jörgensen	+	+	+	+	+	+	+	+	+	
<i>Ceratium deflexum</i> (Kofoid) Jörgensen			+		+		+		+	
<i>Ceratium denticulatum</i> (Jörgensen) Paulsen ⁸⁰	+		+					+		82, 119, 168
<i>Ceratium digitatum</i> Schütt			+	+	+	+	+	+	+	
<i>Ceratium egyptiacum</i> Halim ⁸¹									+	1, 65, 86
<i>Ceratium euarctatum</i> Jörgensen ⁸²	+	+	+	+	+	+	+	+	+	
<i>Ceratium extensum</i> (Gourret) Cleve ⁸³	+	+	+	+	+	+	+	+	+	
<i>Ceratium falcatifforme</i> Jörgensen	+		+	+	+				+	
<i>Ceratium falcatum</i> (Kofoid) Jörgensen	+		+	+	+	+	+	+	+	
<i>Ceratium furca</i> (Ehrenberg) Claparède <i>et</i> Lachmann	+	+	+	+	+	+	+	+	+	
<i>Ceratium fusus</i> (Ehrenberg) Dujardin	+	+	+	+	+	+	+	+	+	
<i>Ceratium geniculatum</i> (Lemmermann) Cleve	+	+	+		+					
<i>Ceratium gibberum</i> Gourret	+		+	+	+	+	+	+	+	
<i>Ceratium gravidum</i> Gourret	+		+	+	+	+	+	+	+	
<i>Ceratium hexacanthum</i> Gourret	+		+	+	+	+	+	+	+	
<i>Ceratium horridum</i> (Cleve) Gran ⁸⁴	+		+	+	+	+	+	+	+	
<i>Ceratium incisum</i> (Karsten) Jörgensen		+	+	+		+	+	+	+	
<i>Ceratium inflatum</i> (Kofoid) Jörgensen		+	+	+	+	+	+	+	+	
<i>Ceratium kofoidii</i> Jörgensen	+		+	+	+	+	+	+	+	
<i>Ceratium limulus</i> (Gourret <i>ex</i> Pouchet) Gourret	+	+	+	+	+	+	+	+	+	
<i>Ceratium lineatum</i> (Ehrenberg) Cleve			+	+	+					
<i>Ceratium longirostrum</i> Gourret	+	+	+	+	+	+	+	+	+	
<i>Ceratium longissimum</i> (Schröder) Kofoid			+	+	+	+	+	+	+	
<i>Ceratium lunula</i> (Schimper <i>ex</i> Karsten) Jörgensen	+		+	+	+		+		+	
<i>Ceratium macroceros</i> (Ehrenberg) Cleve	+	+	+	+	+	+	+	+	+	
<i>Ceratium massiliense</i> (Gourret) Karsten	+	+	+	+	+	+	+	+	+	
<i>Ceratium minutum</i> Jörgensen			+	+	+				+	
<i>Ceratium paradoxides</i> Cleve ⁸⁵	+				+			+	+	
<i>Ceratium pavillardii</i> Jörgensen	+	+	+	+	+	+	+	+	+	
<i>Ceratium pentagonum</i> Gourret	+	+	+	+	+	+	+	+	+	
<i>Ceratium platycorne</i> Daday	+	+	+	+	+	+	+	+	+	
<i>Ceratium praeolongum</i> (Lemmermann) Kofoid <i>ex</i> Jörgensen	+		+	+	+					
<i>Ceratium pulchellum</i> Schröder	+	+	+	+	+	+	+	+	+	
<i>Ceratium ranipes</i> Cleve	+		+	+	+	+	+	+	+	
<i>Ceratium reflexum</i> Cleve							+			150
<i>Ceratium schroeteri</i> Schröder					+	+	+	+		
<i>Ceratium setaceum</i> Jörgensen	+	+	+	+	+	+	+		+	
<i>Ceratium strictum</i> (Okamura <i>et</i> Nishikawa) Kofoid	+		+	+	+	+	+	+	+	
<i>Ceratium symmetricum</i> Pavillard	+	+	+	+	+	+	+	+	+	
<i>Ceratium tenue</i> (Ostenfeld <i>et</i> Schmidt) Jörgensen ⁸⁶	+	+	+		+				+	

Table II. (continued)

Dinophyceae West et Fritsch 1927	Alb	Alg	Bal	Tyr	Lig	Ion	Adr	Aeg	Lev	Reference no.
<i>Heterodinium scrippsi</i> Kofoid ¹¹⁴			+		+		+			64, 89, 90, 91, 124, 175
<i>Heterodinium sinistrum</i> Kofoid et Adamson ¹¹⁵									+	1
<i>Heterodinium whittingae</i> Kofoid					+					91, 92, 124, 125, 139
Ostreopsidaceae Lindemann 1928										
Coolia Meunier 1919 (= <i>Ostreopsis</i> J. Schmidt 1901 <i>partim.</i>)										
<i>Coolia monotis</i> Meunier ¹¹⁶			+	+	+		+			
Ostreopsis J. Schmidt 1901										
<i>Ostreopsis ovata</i> Fukuyo				+						162
<i>Ostreopsis siamensis</i> J. Schmidt				+	+					151, 161
Oxytoxaceae Lindemann 1928										
Centrodinium Kofoid 1907 (= <i>Pavillardinium</i> De-Toni 1936 <i>partim.</i> , <i>Murrayella</i> Kofoid 1907 <i>partim.</i>)										
<i>Centrodinium biconicum</i> (Murray et Whitting) F.J.R. Taylor ¹¹⁷					+				+	81, 138
<i>Centrodinium complanatum</i> (Cleve) Kofoid			+		+				+	
<i>Centrodinium elongatum</i> Kofoid	+									33
<i>Centrodinium eminens</i> Böhm					+		+			91, 138, 175
<i>Centrodinium intermedium</i> Pavillard			+		+	+				
<i>Centrodinium maximum</i> Pavillard	+		+		+				+	
<i>Centrodinium pavillardii</i> F.J.R. Taylor ¹¹⁸	+		+	+	+			+	+	
<i>Centrodinium splendidum</i> (Rampi) F.J.R. Taylor ¹¹⁹					+					131, 138
Corythodinium Loeblich et Loeblich III 1966 (= <i>Oxytoxum</i> Stein 1883 <i>partim.</i>)										
<i>Corythodinium belgicae</i> (Meunier) F.J.R. Taylor ¹⁰³					+				+	76, 81, 114
<i>Corythodinium compressum</i> (Kofoid) F.J.R. Taylor	+		+		+					
<i>Corythodinium constrictum</i> (Stein) F.J.R. Taylor	+	+	+	+	+	+	+	+	+	
<i>Corythodinium cristatum</i> (Kofoid) F.J.R. Taylor			+		+	+				
<i>Corythodinium curvicaudatum</i> (Kofoid) F.J.R. Taylor			+							168
<i>Corythodinium diploconus</i> (Stein) F.J.R. Taylor		+			+		+			64, 88, 175
<i>Corythodinium elegans</i> (Pavillard) F.J.R. Taylor			+	+	+	+			+	
<i>Corythodinium frenguelli</i> (Rampi) F.J.R. Taylor			+	+	+		+			138, 168, 175
<i>Corythodinium reticulatum</i> (Stein) Loeblich et Loeblich III		+	+	+	+	+	+	+	+	
<i>Corythodinium tessellatum</i> (Stein) Loeblich et Loeblich III	+	+	+	+	+	+	+	+	+	
Oxytoxum Stein 1883										
<i>Oxytoxum aceratum</i> Rampi					+					138
<i>Oxytoxum adriaticum</i> Schiller				+	+	+	+			
<i>Oxytoxum areolatum</i> Rampi			+		+		+			22, 68, 131
<i>Oxytoxum brunellii</i> Rampi ¹²⁰			+		+			+		64, 74, 118, 138
<i>Oxytoxum caudatum</i> Schiller			+		+	+	+			
<i>Oxytoxum coronatum</i> Schiller					+	+	+			140, 145, 175
<i>Oxytoxum crassum</i> Schiller			+		+		+	+		
<i>Oxytoxum cribosum</i> Stein					+					140
<i>Oxytoxum curvatum</i> (Kofoid) Kofoid ¹²¹			+		+	+			+	
<i>Oxytoxum depressum</i> Schiller			+		+		+	+		
<i>Oxytoxum elongatum</i> Wood									+	81
<i>Oxytoxum gladiolus</i> Stein		+			+	+	+	+		
<i>Oxytoxum globosum</i> Schiller ¹²²				+	+	+	+			
<i>Oxytoxum laticeps</i> Schiller			+		+	+	+		+	
<i>Oxytoxum longiceps</i> Schiller ¹²³	+		+	+	+	+	+	+	+	
<i>Oxytoxum longum</i> Schiller	+		+		+		+			
<i>Oxytoxum milneri</i> Murray et Whitting ¹²⁴	+		+	+	+	+	+		+	
<i>Oxytoxum minutum</i> Rampi			+	+	+	+	+			
<i>Oxytoxum obesum</i> Rampi					+					140
<i>Oxytoxum obliquum</i> Schiller					+	+	+			
<i>Oxytoxum ovale</i> Schiller ¹²⁵	+		+	+	+	+	+	+		
<i>Oxytoxum pachyderme</i> Schiller ex F.J.R. Taylor							+			145

Table II. (continued)

Dinophyceae West <i>et</i> Fritsch 1927	Alb	Alg	Bal	Tyr	Lig	Ion	Adr	Aeg	Lev	Reference no.
<i>Oxytoxum parvum</i> Schiller ¹²⁶			+		+	+	+	+		
<i>Oxytoxum punctulatum</i> Rampi ¹²⁷				+	+					55, 138
<i>Oxytoxum radiosum</i> Rampi					+					131, 138
<i>Oxytoxum rampii</i> Sournia ¹²⁸				+	+					29, 140
<i>Oxytoxum scolopax</i> Stein	+	+	+	+	+	+	+	+	+	
<i>Oxytoxum sphaeroideum</i> Stein		+	+		+	+	+	+	+	
<i>Oxytoxum spinosum</i> Rampi					+					64, 131
<i>Oxytoxum subulatum</i> Kofoid			+	+	+					29, 91, 105
<i>Oxytoxum turbo</i> Kofoid					+	+			+	
<i>Oxytoxum variabile</i> Schiller ¹²⁹	+		+	+	+	+	+		+	
<i>Oxytoxum viride</i> Schiller				+	+	+	+		+	
<i>Pavillardinium</i> De-Toni 1936 (= <i>Amphidoma</i> Stein 1883 <i>partim.</i> , <i>Murrayella</i> Kofoid 1907)										
<i>Pavillardinium ovale</i> (Pavillard) De-Toni ¹³⁰				+						29, 123
<i>Schuetiella</i> Balech 1988 (= <i>Gonyaulax</i> Diesing 1866 <i>partim.</i> , <i>Oxytoxum</i> Stein 1883 <i>partim.</i>)										
<i>Schuetiella mitra</i> (Schütt) Balech ¹³¹	+	+	+	+	+	+	+			
Peridiniaceae Ehrenberg 1828										
<i>Calcigonellum</i> Deflandre 1948										
<i>Calcigonellum infula</i> Deflandre <i>emend.</i> Montresor ¹³²				+						39
<i>Calciodinellum</i> Deflandre 1947										
<i>Calciodinellum levantinum</i> Meier, Janofske <i>et</i> Willems ¹³³									+	106
<i>Calciodinellum operosum</i> Deflandre ¹³²				+						39
<i>Diplopelta</i> Stein <i>ex</i> Jörgensen 1912 (= <i>Dissodium</i> Abé 1941 <i>partim.</i>)										
<i>Diplopelta bomba</i> Stein <i>ex</i> Jörgensen ¹³⁴	+		+	+	+				+	
<i>Diplopelta symmetrica</i> Pavillard ¹³⁵			+	+	+					
<i>Diplopsalis</i> Bergh 1881 (= <i>Dissodium</i> Abé 1941 <i>partim.</i>)										
<i>Diplopsalis lenticula</i> Bergh ¹³⁶	+	+	+	+	+	+	+	+	+	
<i>Diplopsalopsis</i> Meunier <i>emend.</i> Balech 1988										
<i>Diplopsalopsis orbicularis</i> (Paulsen) Meunier ¹³⁷							+			150
<i>Diplopsalopsis latipeltata</i> Balech <i>et</i> Borgese				+						28, 144
<i>Kryptoperidinium</i> Lindemann 1924 (= <i>Glenodinium</i> Ehrenberg 1837 <i>partim.</i>)										
<i>Kryptoperidinium foliaceum</i> (Stein) Lindemann ¹³⁸			+			+		+		
<i>Oblea</i> Balech <i>ex</i> Loeblich <i>et</i> Loeblich III 1966										
<i>Oblea rotunda</i> (Balech) Balech <i>ex</i> Sournia ¹³⁹				+		+				32, 149
<i>Pentapharsodinium</i> Indelicato <i>et</i> Loeblich III 1986 (= <i>Peridinium</i> Ehrenberg 1831 <i>partim.</i>)										
<i>Pentapharsodinium tyrrhenicum</i> (Balech) Montresor, Zingone <i>et</i> Marino ¹⁴⁰				+						6, 111
<i>Peridinium</i> Ehrenberg 1831 ¹⁴¹										
<i>Peridinium quinquecorne</i> Abé ¹⁴²				+			+		+	
<i>Preperidinium</i> Mangin 1913 (= <i>Diplopeltopsis</i> Pavillard 1913, <i>Zygabikodinium</i> Loeblich <i>et</i> Loeblich III 1970)										
<i>Preperidinium meunieri</i> (Pavillard) Elbrächter ¹⁴³			+	+	+				+	
<i>Proto-peridinium</i> Bergh <i>emend.</i> Balech 1974 ¹⁴¹ (= <i>Peridinium</i> Ehrenberg 1831 <i>partim.</i> , <i>Minuscula</i> Lebour 1925)										
<i>Proto-peridinium abei</i> (Paulsen) Balech ¹⁴⁴	+		+	+	+			+	+	
<i>Proto-peridinium anthonyi</i> (Fauré-Fremiet) Balech					+					76
<i>Proto-peridinium bipes</i> (Paulsen) Balech ¹⁴⁵	+	+	+		+	+	+	+		
<i>Proto-peridinium bispinum</i> (Schiller) Balech ¹⁴⁶		+		+	+		+	+		
<i>Proto-peridinium brevipes</i> (Paulsen) Balech							+	+	+	
<i>Proto-peridinium brochii</i> (Kofoid <i>et</i> Swezy) Balech	+	+	+	+	+	+	+	+	+	
<i>Proto-peridinium bulla</i> (Meunier) Balech					+					76
<i>Proto-peridinium cerasus</i> (Paulsen) Balech	+	+	+		+	+	+	+	+	
<i>Proto-peridinium claudicans</i> (Paulsen) Balech	+	+	+	+	+			+	+	

Table II. (continued)

Dinophyceae West et Fritsch 1927	Alb	Alg	Bal	Tyr	Lig	Ion	Adr	Aeg	Lev	Reference no.
<i>Protooperidinium conicoides</i> (Paulsen) Balech									+	40
<i>Protooperidinium conicum</i> (Gran) Balech	+	+	+	+	+	+	+	+	+	
<i>Protooperidinium crassipes</i> (Kofoid) Balech ¹⁴⁷		+	+	+	+	+	+	+	+	
<i>Protooperidinium curvipes</i> (Ostenfeld) Balech ¹⁴⁸	+	+			+		+		+	
<i>Protooperidinium deficiens</i> (Meunier) Balech									+	86
<i>Protooperidinium depressum</i> (Bailey) Balech	+	+	+	+	+	+	+	+	+	
<i>Protooperidinium diabolus</i> (Cleve) Balech ¹⁴⁹	+	+	+	+	+	+	+	+	+	
<i>Protooperidinium divergens</i> (Ehrenberg) Balech	+	+	+	+	+	+	+	+	+	
<i>Protooperidinium elegans</i> (Cleve) Balech			+		+		+			
<i>Protooperidinium excentricum</i> (Paulsen) Balech			+		+			+		
<i>Protooperidinium exiguipes</i> (Mangin ex Halim) Dodge									+	40
<i>Protooperidinium fimbriatum</i> (Meunier) Balech					+					76
<i>Protooperidinium finitimum</i> Balech ¹⁵⁰			+	+	+			+	+	
<i>Protooperidinium globulus</i> (Stein) Balech ¹⁵¹	+	+	+	+	+	+	+	+	+	
<i>Protooperidinium grande</i> (Kofoid) Balech	+	+	+	+	+		+	+	+	
<i>Protooperidinium granii</i> (Ostenfeld) Balech	+	+	+	+	+	+	+	+	+	
<i>Protooperidinium heteracanthum</i> (Dangear) Balech			+		+					77, 99
<i>Protooperidinium hirobis</i> (Abé) Balech				+					+	1, 144
<i>Protooperidinium inclinatum</i> (Balech) Balech			+							99
<i>Protooperidinium inflatum</i> (Okamura) Balech	+		+	+	+	+			+	
<i>Protooperidinium latispinum</i> (Mangin) Balech	+		+		+				+	
<i>Protooperidinium leonis</i> (Pavillard) Balech	+	+	+	+	+		+	+	+	
<i>Protooperidinium ligusticum</i> (Rampi) Balech					+					138
<i>Protooperidinium maranense</i> Tolomio							+			163, 165
<i>Protooperidinium mariebourae</i> (Paulsen) Balech	+		+	+	+		+			
<i>Protooperidinium mediterraneum</i> (Kofoid) Balech	+	+	+	+	+	+	+	+	+	
<i>Protooperidinium minutum</i> (Kofoid) Loeblich III	+	+			+			+	+	
<i>Protooperidinium mite</i> (Pavillard) Balech	+		+		+		+		+	
<i>Protooperidinium nipponicum</i> (Abé) Balech ¹⁵²							+		+	40, 150
<i>Protooperidinium nudum</i> (Meunier) Balech ¹⁵³			+							98, 99
<i>Protooperidinium oblongum</i> (Aurivillius)	+		+	+	+		+		+	
Parke et Dodge										
<i>Protooperidinium obtusum</i> (Karsten) Parke et Dodge							+			150
<i>Protooperidinium oceanicum</i> (Vanhöffen) Balech	+	+	+	+	+	+	+	+	+	
<i>Protooperidinium oviforme</i> (Dangear) Balech	+	+	+		+					
<i>Protooperidinium ovum</i> (Schiller) Balech		+	+	+	+	+	+		+	
<i>Protooperidinium pallidum</i> (Ostenfeld) Balech	+	+	+	+	+		+	+	+	
<i>Protooperidinium parthenopes</i> Zingone et Montresor				+						178
<i>Protooperidinium pedunculatum</i> (Schütt) Balech		+	+		+		+	+	+	
<i>Protooperidinium pellucidum</i> (Schütt) Balech	+	+	+	+	+		+	+	+	
<i>Protooperidinium pentagonum</i> (Gran) Balech	+	+	+	+		+	+	+	+	
<i>Protooperidinium punctulatum</i> (Paulsen) Balech	+		+	+	+		+	+	+	
<i>Protooperidinium pyriforme</i> (Paulsen) Balech	+	+	+	+	+	+	+	+	+	
<i>Protooperidinium quarnerense</i> (Schröder) Balech	+		+	+	+		+	+	+	
<i>Protooperidinium schilleri</i> (Paulsen) Balech	+		+		+					
<i>Protooperidinium simulum</i> (Paulsen) Balech	+		+		+				+	
<i>Protooperidinium sinaicum</i> (Matzenauer) Balech					+	+				76, 77, 149
<i>Protooperidinium solidicorne</i> (Mangin) Balech ¹⁵⁴			+	+	+		+		+	
<i>Protooperidinium sphaericum</i> (Murray et Whitting)			+	+	+	+	+		+	
Balech										
<i>Protooperidinium sphaeroides</i> (Dangear) Balech ¹⁵⁵	+		+		+					
<i>Protooperidinium sphaeroideum</i> (Mangin) Balech ¹⁵⁵						+				149
<i>Protooperidinium steinii</i> (Jørgensen) Balech	+	+	+	+	+	+	+	+	+	
<i>Protooperidinium subinerme</i> (Paulsen) Loeblich III	+		+	+	+		+	+	+	
<i>Protooperidinium thorianum</i> (Paulsen) Balech	+				+	+			+	
<i>Protooperidinium tregouboffii</i> (Halim) Balech ¹⁵⁶					+					63, 64
<i>Protooperidinium tristylum</i> (Stein) Balech			+		+		+			76, 168, 175
<i>Protooperidinium tubum</i> (Schiller) Balech	+		+		+		+			
<i>Protooperidinium tumidum</i> (Okamura) Balech		+			+		+			
<i>Protooperidinium variegatum</i> (Peters) Balech		+								127
<i>Protooperidinium wiesneri</i> (Schiller) Balech ¹⁵⁷			+		+		+			

Table II. (continued)

Dinophyceae West <i>et</i> Fritsch 1927	Alb	Alg	Bal	Tyr	Lig	Ion	Adr	Aeg	Lev	Reference no.
<i>Scrippsiella</i> Balech <i>ex</i> Loeblich III 1965 ¹⁵⁸										
<i>Scrippsiella lachrymosa</i> Lewis				+						39, 112
<i>Scrippsiella precaria</i> Montresor <i>et</i> Zingone				+						109
<i>Scrippsiella ramonii</i> Montresor				+						39, 108
<i>Scrippsiella rotunda</i> Lewis				+						39, 117
<i>Scrippsiella spinifera</i> Honsell <i>et</i> Cabrini							+			72
<i>Scrippsiella trochoidea</i> (Stein) Balech <i>ex</i> Loeblich III ¹⁵⁹	+	+	+	+	+	+	+	+	+	
Podolampadaceae Lindemann 1928										
<i>Blepharocysta</i> Ehrenberg 1873										
<i>Blepharocysta hermosillai</i> Carbonell-Moore				+						19
<i>Blepharocysta paulsenii</i> Schiller			+		+	+			+	
<i>Blepharocysta splendor-maris</i> (Ehrenberg) Stein	+	+	+		+				+	
<i>Mysticella</i> Carbonell-Moore 1994										
<i>Mysticella striata</i> (Schütt) Carbonell-Moore ¹⁶⁰					+					132
<i>Podolampas</i> Stein 1883										
<i>Podolampas bipes</i> Stein	+	+	+	+	+	+	+	+	+	
<i>Podolampas curvatus</i> Schiller					+		+			76, 145
<i>Podolampas elegans</i> Schütt	+	+	+	+	+	+	+	+	+	
<i>Podolampas palmipes</i> Stein	+	+	+	+	+	+	+	+	+	
<i>Podolampas spinifera</i> Okamura ¹⁶¹	+	+	+	+	+	+	+	+	+	
Pyrophacaceae Lindemann 1928										
<i>Pyrophacus</i> Stein 1883										
<i>Pyrophacus horologium</i> Stein <i>emend.</i> Wall <i>et</i> Dale	+	+	+	+	+	+	+	+	+	
<i>Pyrophacus steinii</i> (Schiller) Wall <i>et</i> Dale			+	+	+		+	+	+	
<i>Pyrophacus vancampoae</i> (Rossignol) Wall <i>et</i> Dale ¹⁶²			+							96, 160
Peridinales incertae sedis										
<i>Ceratoperidinium</i> Margalef <i>ex</i> Loeblich III 1980										
<i>Ceratoperidinium mediterraneum</i> Abboud-Abi Saab ¹⁶³									+	2
<i>Ceratoperidinium yeye</i> Margalef <i>ex</i> Loeblich III ¹⁶³			+						+	1, 99, 169
<i>Fragilidium</i> Balech <i>ex</i> Loeblich III 1965 (= <i>Helgolandicum</i> von Stosch 1869, <i>Goniodoma</i> Stein 1883 <i>partim.</i>)										
<i>Fragilidium fissile</i> Balech				+						6
<i>Heterocapsa</i> Stein 1883 (= <i>Cachonina</i> Loeblich III 1968)										
<i>Heterocapsa lanceolata</i> Iwataki <i>et</i> Fukuyo ¹⁶⁴								+		126
<i>Heterocapsa niei</i> (Loeblich III) Morrill <i>et</i> Loeblich III ¹⁶⁵				+		+	+			
<i>Heterocapsa rotundata</i> (Lohmann) G. Hansen ¹⁶⁶		+			+			+	+	
<i>Heterocapsa triquetra</i> (Ehrenberg) Stein		+	+			+	+	+		
<i>Micracanthodinium</i> Deflandre 1937 (= <i>Cladopyxis</i> Stein 1883 <i>partim.</i>)										
<i>Micracanthodinium bacilliferum</i> (Schiller) Deflandre ¹⁶⁷					+		+			20, 140
<i>Micracanthodinium claytonii</i> (Holmes) Dodge ¹⁶⁸					+		+			22, 140
<i>Micracanthodinium setiferum</i> (Lohmann) Deflandre ¹⁶⁹			+	+	+	+	+			
<i>Spiraulax</i> Kofoid 1911 (= <i>Gonyaulax</i> Diesing 1866 <i>partim.</i>)										
<i>Spiraulax jolliffei</i> (Murray <i>et</i> Whitting) Kofoid	+		+	+	+		+	+	+	
Prorocentrales Lemmermann 1910										
Prorocentraceae Stein 1883										
<i>Exuviella</i> Cienkowski 1881 ¹⁷⁰										
<i>Exuviella aperta</i> Schiller ¹⁷¹			+		+		+			77, 145, 168
<i>Mesoporos</i> Lillick 1937 (= <i>Porella</i> Schiller 1928)										
<i>Mesoporos globulus</i> (Schiller) Lillick		+	+	+	+	+	+			
<i>Mesoporos perforatus</i> (Gran) Lillick	+	+	+	+	+	+	+	+	+	
<i>Prorocentrum</i> Ehrenberg 1834 ¹⁷⁰ (= <i>Exuviella</i> Cienkowski 1881)										
<i>Prorocentrum aporum</i> (Schiller) Dodge	+		+	+	+	+	+	+		
<i>Prorocentrum arcuatum</i> Issel ¹⁷²			+	+	+		+	+		

Table II. (continued)

Dinophyceae West et Fritsch 1927	Alb	Alg	Bal	Tyr	Lig	Ion	Adr	Aeg	Lev	Reference no.
<i>Prorocentrum balticum</i> (Lohmann) Loeblich III	+		+		+	+	+	+	+	
<i>Prorocentrum belizeanum</i> Faust				+		+				151
<i>Prorocentrum cassubicum</i> (Woloszynska) Dodge					+			+		75, 76, 83
<i>Prorocentrum compressum</i> (Bailey) Abé ex Dodge ¹⁷³	+	+	+	+	+	+	+	+	+	
<i>Prorocentrum concavum</i> Fukuyo				+		+				151
<i>Prorocentrum cordatum</i> (Ostenfeld) Dodge ^{174, 175}	+		+		+	+	+	+	+	
<i>Prorocentrum dactylus</i> (Stein) Dodge		+	+		+	+	+			
<i>Prorocentrum dentatum</i> Stein ¹⁷⁶	+		+	+	+	+	+	+	+	
<i>Prorocentrum emarginatum</i> Fukuyo			+							172
<i>Prorocentrum gracile</i> Schütt ¹⁷⁷		+	+	+	+	+	+	+		
<i>Prorocentrum lima</i> (Ehrenberg) Dodge		+	+	+	+	+	+	+		
<i>Prorocentrum maximum</i> (Gourret) Schiller ¹⁷⁸			+	+	+	+	+			
<i>Prorocentrum micans</i> Ehrenberg ¹⁷⁹	+	+	+	+	+	+	+	+	+	
<i>Prorocentrum minimum</i> (Pavillard) Schiller ¹⁷⁵			+	+	+	+	+	+		
<i>Prorocentrum nanum</i> Schiller ¹⁸⁰			+		+		+			
<i>Prorocentrum nux</i> Puigserver et Zingone				+						128
<i>Prorocentrum ovum</i> (Schiller) Dodge			+	+	+		+	+		
<i>Prorocentrum rostratum</i> Stein	+		+		+			+	+	
<i>Prorocentrum rotundatum</i> Schiller ¹⁸¹		+	+	+	+	+	+	+	+	
<i>Prorocentrum scutellum</i> Schröder ¹⁸²	+	+	+	+	+	+	+	+	+	
<i>Prorocentrum triestinum</i> Schiller		+	+	+	+	+	+	+	+	
<i>Prorocentrum vaginulum</i> (Stein) Dodge ¹⁸³		+	+		+	+	+	+	+	
<i>Prorocentrum venetum</i> Tolomio et Cavolo ¹⁸⁴							+			164
Protaspidales Loeblich III 1970										
Entomosigmataceae Chatton 1952										
<i>Entomosigma</i> Schiller 1925										
<i>Entomosigma peridinioides</i> Schiller ¹⁸⁵				+	+		+			75, 76, 145
Pyrocystales Apstein 1909										
Pyrocystaceae (Schütt) Lemmermann 1899										
<i>Dissodinium</i> Klebs in Pascher emend.										
Elbrächter et Drebes 1978 ¹⁸⁶										
<i>Dissodinium pseudolunula</i> Swift ex Elbrächter et Drebes ¹⁸⁷			+	+	+	+	+	+	+	
<i>Pyrocystis</i> Murray ex Haeckel 1890 ¹⁸⁶										
(= <i>Gymnodinium</i> Stein 1883 partim.,										
<i>Dissodinium</i> Klebs in Pascher emend.										
Elbrächter et Drebes 1978 partim.)										
<i>Pyrocystis acuta</i> Kofoid					+					76, 125
<i>Pyrocystis elegans</i> Pavillard	+		+	+	+	+	+	+	+	
<i>Pyrocystis fusiformis</i> (Wyville-Thomson ex Haeckel) Blackman ¹⁸⁸	+		+	+	+	+	+	+	+	
<i>Pyrocystis gerbaultii</i> Pavillard ¹⁸⁹			+	+	+					
<i>Pyrocystis hamulus</i> Cleve			+		+	+	+		+	
<i>Pyrocystis margalefii</i> Léger ¹⁹⁰			+		+					91, 104
<i>Pyrocystis minima</i> (Matzenauer) Schiller ¹⁹¹				+	+	+	+			
<i>Pyrocystis noctiluca</i> Murray ex Schütt ¹⁹²		+	+	+	+		+		+	
<i>Pyrocystis obtusa</i> Pavillard			+	+	+	+	+	+	+	
<i>Pyrocystis robusta</i> Kofoid			+	+	+	+	+		+	
Dinoflagellates of uncertain identification										
<i>Adinimonas</i> Schiller 1928										
<i>Adinimonas oviforme</i> Schiller ¹⁹³		+				+	+		+	
<i>Archaeosphaerodiniopsis</i> Rampi 1943										
<i>Archaeosphaerodiniopsis verrucosa</i> Rampi ¹⁹⁴					+					135
<i>Pachydinium</i> Pavillard 1915										
<i>Pachydinium mediterraneum</i> Pavillard ¹⁹⁵			+		+	+				

Notes

- ¹ Reported in the Western Mediterranean Sea by Gómez and Claustre (2003). These records assigned to *Asterodinium gracile* Sournia presented morphological differences with respect the type species. *Asterodinium libanum* Abboud-Abi Saab requires a more detailed description.
- ² The type species *Brachydinium capitatum* F.J.R. Taylor (Taylor 1963) was replaced by *Brachydinium capitatum* F.J.R. Taylor due to an etymological error (Taylor 1967). Sournia (1973 p.5) reported that the correction is invalid.
- ³ Rare dinoflagellate epiphytic on Rhodophyceae (see Sournia 1986, p. 36).
- ⁴ Rare and insufficiently described taxon (Sournia 1986, p. 36).
- ⁵ According to Taylor (1976 p. 190), the cysts were reported by Margalef *et al.* (1954). *Gloeodinium* Klebs and *Hemidinium* Stein have been considered as the immobile and mobile stage respectively of the life cycle of the same taxa (see Sournia 1986 p. 67). The continental species, *Hemidinium nasutum* Stein and others, are reported in the Mediterranean waters (e.g., Schiller 1935–1937, p. 89–92, Viličić *et al.* 2002).
- ⁶ *Syracosphaera heimii* Lohmann. This taxon was previously considered to be a coccolithophorid and has been scarcely reported in dinoflagellate checklists (see Tangen *et al.* 1982).
- ⁷ This taxon resembles *Amphisolenia spinulosa* Kofoid and *Amphisolenia mozambica* Sournia.
- ⁸ This taxon presents synonyms as *Dinophysis borealis* Paulsen, *D. lachmanni* Paulsen, *D. boehmii* Paulsen or *D. skagii* Paulsen.
- ⁹ *Dinophysis dens* Pavillard.
- ¹⁰ The orthographical similarity of *Dinophysis alata* Jörgensen, *Dinophysis alata* Böhm and *Dinophysis alata* (Wood) Balech is confusing. Viličić *et al.* (2002) reported *Dinophysis alata* (Wood) Balech.
- ¹¹ *Dinophysis amygdala* Balech, *Phalacroma ovum* Schütt, non *Dinophysis ovum* Schütt.
- ¹² This taxon resembles *Phalacroma ovatum* (Claparède et Lachmann) Jörgensen.
- ¹³ *Dinophysis caudata* var. *diegensis* Kofoid.
- ¹⁴ *Dinophysis intermedia* Pavillard, *Dinophysis laevis* Pouchet.
- ¹⁵ *Phalacroma odiosum* Pavillard.
- ¹⁶ *Phalacroma mitra* Schütt, *Phalacroma rapa* Stein, *Phalacroma dolichopterygium* Murray et Whitting.
- ¹⁷ Non *Phalacroma ovum* Schütt.
- ¹⁸ *Dinophysis infundibula* Schiller.
- ¹⁹ *Dinophysis lenticula* Pavillard.
- ²⁰ *Dinophysis reticulata* (Kofoid) Balech.
- ²¹ *Dinophysis acuminata* f. *reniformis* Pavillard, *D. pavillardii* Schröder, *D. reniformis* (Pavillard) Kofoid et Skogsberg, *D. ventrecta* Schiller.
- ²² *Dinophysis sphaeroidea* (Schiller) Balech.
- ²³ *Dinophysis uracantha* Schütt, non *Dinophysis uracantha* Stein.
- ²⁴ *Dinophysis sphaerica* Pavillard
- ²⁵ A possible variety of *Histioneis depressa* Schiller (Taylor 1976, p. 44).
- ²⁶ *Ornithocercus carolinae* Kofoid, *Histiones francescae* Murray et Whitting.
- ²⁷ *Ornithocercus assimilis* Jörgensen, *O. galea* (Pouchet) Abé.
- ²⁸ *Histioneis splendida* Murray et Whitting.
- ²⁹ *Ornithocercus serratus* Kofoid, *O. orbiculatus* Kofoid et Michener.
- ³⁰ *Histioneis karstenii* Kofoid et Michener.
- ³¹ *Dinophysis acutoides* Balech, *Phalacroma acutum* Pavillard.
- ³² *Phalacroma stenopterygium* Jörgensen.
- ³³ *Pseudophalacroma nasutum* (Stein) Jörgensen, *Dinophysis nasuta* (Stein) Parke et Dixon.
- ³⁴ *Gymnodinium sanguineum* Hirasaka, *G. splendens* Lebour.
- ³⁵ *Amphidinium phaeocysticola* Lebour has been considered as a synonym of *A. crassum* Lohmann. However this synonymy is debatable (Elbrächter 1979).
- ³⁶ *Amphidinium lacustre* Stein, *A. schroederi* Schiller and *A. lacustriformis* Schiller are often considered as synonyms. Typically fresh and brackish water species.
- ³⁷ *Amphidinium klebsii* Kofoid et Swezy.
- ³⁸ Considered as a synonym of *Amphidinium lacustriforme* Schiller by Dodge (1982 p. 72).
- ³⁹ *Gymnodinium filum* Lebour.
- ⁴⁰ Taylor (1976 p. 114) reported this taxon from the Ligurian Sea.
- ⁴¹ Non *Cochlodinium helix* Kofoid et Swezy (= *Cochlodinium helicoides* Lebour).
- ⁴² Confusion possible between *Cochlodinium polykrikoides* Margalef (= *C. heterolobatum* Silva) and *Gymnodinium impudicum* (Fraga et Bravo) G. Hansen et Moestrup (see Cho *et al.* 2001).
- ⁴³ *Gymnodinium albulum* Lindemann and *G. simplex* (Lohmann) Kofoid et Swezy may be synonyms.
- ⁴⁴ The North European taxon, *Gyrodinium aureolum* Hulburt *sensu* Braarud et Heimdal, is a synonym of *Karenia mikimotoi* (Miyake et Kominami ex Oda) G. Hansen et Moestrup (= *Gymnodinium nagasakiense* Takayama et Adachi) (Hansen *et al.* 2000). See also Note 51.
- ⁴⁵ According to Bolch and Reynolds (2002) other taxa that also produce microreticulate cysts such as *Gymnodinium nolleri* Ellegaard et Moestrup and *G. microreticulatum* Bolch et Hallegraef are present in the Tyrrhenian and Adriatic Seas based on the cysts reported by Montresor *et al.* (1998) and Rubino *et al.* (2000).
- ⁴⁶ The records of *Gymnodinium catenatum* Graham by Carrada *et al.* (1991), Giacobbe *et al.* (1995) and Labib (1997) are considered as *G. impudicum* (Fraga et Bravo) G. Hansen et Moestrup.
- ⁴⁷ *Gymnodinium conicum* Kofoid et Swezy (= *G. viridis* Lebour) is considered as a synonym of *Gyrodinium viridescens* Kofoid et Swezy. Non *Gyrodinium conicum* Schiller.
- ⁴⁸ *Gymnodinium punctatum* var. *grammaticum* Pouchet.
- ⁴⁹ *Gymnodinium rhomboides* Schütt, *G. hyalinum* Lebour (= *G. lucidum* Ballantine in Parke et Dixon). *Gyrodinium striatissimum* (Hulburt) G. Hansen et Moestrup has been considered as a synonym until the redescription of *G. heterostriatum* Kofoid et Swezy by Elbrächter (1994).
- ⁵⁰ This brackish waters taxon appears associated with *Karenia mikimotoi* (Miyake et Kominami ex Oda) G. Hansen et Moestrup (see also Notes 44 and 51).
- ⁵¹ According to Faust and Gullede (2002) this taxon was recorded in the Tyrrhenian Sea by Carrada *et al.* (1991). Confusion possible with species of the complex *Karenia*

- mikimotoi* (Miyake *et* Kominami *ex* Oda) G. Hansen *et* Moestrup. *Gymnodinium pulchellum* is distinguished from *K. mikimotoi* by the sigmoid apical groove. See also Note 44.
- 52 This taxon resembles *Katodinium glaucum* (Lebour) Loeblich III.
- 53 *Gyrodinium opinum* (Schütt) Lebour.
- 54 *Gyrodinium dominans* Hulburt.
- 55 “*lacryma*” (= tear-drop) should be the correct epithet of this taxon.
- 56 *Gymnodinium spirale* var. *pepo* Schütt.
- 57 *Gymnodinium spirale* var. *pinguis* Schütt.
- 58 *Gymnodinium breve* Davis, *Ptychodiscus brevis* (Davis) Steidinger.
- 59 Reported as *Gymnodinium galatheanum* Braarud (= *Gyrodinium galatheanum* (Braarud) Taylor *sensu* Taylor). More recently this taxon, unless *Gymnodinium galatheanum* Braarud *sensu* Kite *et* Dodge, is considered as a synonym of *Karlodinium micrum* (Leadbeater *et* Dodge) J. Larsen (Daugbjerg *et al.* 2000).
- 60 *Massartia glauca* (Lebour) Schiller, *Gyrodinium glaucum* (Lebour) Kofoid *et* Swezy, *Gymnodinium minutum* Lebour, *Massartia minuta* (Lebour) Conrad *et* Kufferath, *Massartia tubulata* Rampi.
- 61 *Massartia tubulata* Rampi.
- 62 Related to the genus *Gyrodinium* Kofoid *et* Swezy according to Sournia (1986, p. 57).
- 63 *Gymnodinium teredo* Pouchet.
- 64 *Ptychodiscus inflatus* Pavillard, *P. carinatus* Kofoid.
- 65 *Erythropis agilis* Hertwig. Probably several species are reported as *E. agile* (Hertwig) P.C. Silva according to Elbrächter (1979).
- 66 Elbrächter (1979) considered this taxon as a synonym of *E. agile* (Hertwig) P.C. Silva.
- 67 To the best of my knowledge, never reported after the initial description by Greuet (1968b).
- 68 *Pouchetia armata* Dogiel, *Pouchetia maculata* Kofoid *et* Swezy.
- 69 *Kofoidinium lebourae* (Pavillard) Taylor (= *Gymnodinium lebourae* Pavillard).
- 70 Originally described from the Ligurian Sea as *Leptodinium caudatum* Cachon *et* Cachon.
- 71 *Pratjetella medusoides* (Hertwig) Loeblich *et* Loeblich III. Doubtful taxon (Sournia 1986, p. 53).
- 72 *Abedinium dasypus* (Cachon *et* Cachon) Loeblich *et* Loeblich III.
- 73 Reported from the Ligurian Sea as *Leptospathium navicula* Cachon *et* Cachon-Enjumet (1964) after the description by Margalef (1963). Balkis (2000) reported this taxon from the Marmara Sea.
- 74 Resembles *Pronoctiluca acuta* (Lohmann) Schiller.
- 75 *Oxytoxum margalefii* Rampi, *Oxytoxum tonollii* Rampi.
- 76 *Murrayella spinosa* Kofoid, *Pavillardinium spinosum* (Kofoid) Taylor *ex* Sournia, *Amphidoma spinosa* (Kofoid) Kofoid *et* Michener, *Gonyaulax rouchii* Rampi.
- 77 This taxon resembles *Ceratium incisum* (Karsten) Jörgensen.
- 78 *Ceratium buceros* f. *claviger* (Kofoid) Schiller, *Ceratium horridum* f. *claviger* (Kofoid) Sournia.
- 79 Also reported as *Ceratium trichoceros* var. *contrarium* (Gourret) Schiller.
- 80 *Ceratium horridum* var. *lenticulatum* Jörgensen, *C. buceros* f. *denticulatum* (Jörgensen) Schiller.
- 81 Reported as *Ceratium pulchellum* f. *eupulchellum* by Ghazzawi (1939) in the Canal of Suez. This taxon resembles *C. tripos* var. *pulchellum* (Schröder) López, see Sournia (1967).
- 82 *Ceratium arcuatum* (Gourret) Pavillard, *C. tripos* var. *arcuatum* Gourret, non *C. arcuatum* Cleve.
- 83 *Ceratium fusus* var. *extensum* Gourret.
- 84 *C. tripos* var. *horridum* Cleve, but *C. tenue* (Ostenfeld *et* Schmidt) Jörgensen, *C. intermedium* (Jörgensen) Jörgensen and *C. buceros* (Zacharias) Schiller have not been considered as synonyms.
- 85 This taxon resembles *Ceratium limulus* (Gourret *ex* Pouchet) Gourret.
- 86 *C. tenuissimum* Kofoid.
- 87 *Ceratium carriense* var. *volans* (Cleve) Sournia.
- 88 *Acanthodinium caryophyllum* Kofoid.
- 89 *Micracanthodinium quadrispinum* (Pavillard) Margalef.
- 90 Confusion possible with *Cladopyxis brachiolata* Stein.
- 91 *Heterodinium detonii* Rampi.
- 92 *Crypthecodinium setense* Biecheler.
- 93 *Goniodoma polyedricum* (Pouchet) Jörgensen, *Heteraulacus polyedricum* (Pouchet) Drugg *et* Loeblich, *Triadinium polyedricum* (Pouchet) Dodge, *Goniodoma polyedra* Rampi.
- 94 *Heteraulacus sphaericum* (Murray *et* Whitting) Loeblich III, *Triadinium sphaericum* (Murray *et* Whitting) Dodge.
- 95 Reported as *Pyrodinium schilleri* (Matzenauer) Schiller [= *Pyrodinium bahamense* Plate var. *compressum* (Böhm) Steidinger, Tester *et* Taylor].
- 96 *Alexandrium lusitanicum* Balech.
- 97 Reported as *Goniodoma ostenfeldii* Paulsen by Lecal (1954).
- 98 Reported as *Gonyaulax subulata* Kofoid *et* Michener. This taxon resembles *Amylax triacantha* (Jörgensen) Sournia (Dodge 1982, p. 217).
- 99 Reported as *Gonyaulax? triacantha* Jörgensen by Lecal (1954).
- 100 *Gonyaulax spinifera* *sensu* Schütt.
- 101 *Gonyaulax digitale* Kofoid, *Protopteridinium digitale* Pouchet.
- 102 Resembles *Gonyaulax birostris* Stein.
- 103 Reported by Narusevich and Tokarev (1989) in an undetermined location of the Mediterranean Sea.
- 104 The comments by Schiller (1935–1937, p. 290) on the similarity between *Gonyaulax kofoidii* and *G. pacifica* Kofoid could induce confusion between both taxa (Pavillard 1937, p. 16; Taylor 1976, p. 104).
- 105 *Gonyaulax minima* Matzenauer.
- 106 Resembles *Gonyaulax ovata* Matzenauer (Schiller 1935–1937, p. 289; Taylor 1976, p. 105).
- 107 *Pavillardinium brianii* (Ramp) Sournia (= *Murrayella brianii* Ramp).
- 108 *Gonyaulax levanderi* (Lemmermann) Paulsen, *Ceratocorys spinifera* Schröder.
- 109 *Gonyaulax diacantha* (Meunier) Schiller, *Gonyaulax longispina* Lebour, *Amylax diacantha* Meunier.
- 110 *Gonyaulax milneri* (Murray *et* Whitting) Kofoid, *Goniodoma milneri* Murray *et* Whitting.
- 111 *Gonyaulax polyedra* Stein.
- 112 *Gonyaulax grindleyi* Reinecke, non *G. reticulatum* Kofoid *et* Michener.
- 113 *Heterodinium laticinctum* Kofoid.
- 114 *Heterodinium pulchrum* Böhm, *Heterodinium richardii* Pavillard.
- 115 *Heterodinium mediocre* f. *sinistrum* (Kofoid) Kofoid *et* Adamson.

- 116 *Ostreopsis monotis* (Meunier) Lindemann.
- 117 *Ceratium biconicum* Murray et Whitting, *Murrayella biconica* (Murray et Whitting) Pavillard and *Pavillardinium biconicum* Rampi are considered synonyms.
- 118 *Pavillardinium intermedium* (Pavillard) de Toni (= *Murrayella intermedia* Pavillard), non *Centrodinium intermedium* Pavillard.
- 119 *Pavillardinium splendidum* (Rampi) Rampi (= *Murrayella splendida* Rampi).
- 120 Resembles *Corythodinium reticulatum* (Stein) Loeblich et Loeblich III.
- 121 *Prorocentrum curvatum* Kofoid.
- 122 Non *Corythodinium globosum* (Kofoid) Taylor.
- 123 *Oxytoxum sceptrum* (Stein) Schröder.
- 124 *Oxytoxum challengeroides* Kofoid.
- 125 *Oxytoxum mediterraneum* Schiller.
- 126 *Oxytoxum tenuistriatum* Rampi.
- 127 This taxon resembles *Oxytoxum ovale* Schiller
- 128 *Oxytoxum ligusticum* Rampi.
- 129 *Oxytoxum gracile* Schiller.
- 130 *Murrayella ovalis* Pavillard. See also comments on the genus by Sournia (1986, p. 73).
- 131 *Gonyaulax mitra* (Schütt) Kofoid, *Oxytoxum gigas* Kofoid.
- 132 Based on the germination of recent cysts (D'Onofrio et al. 1999).
- 133 Meier et al. (2002) reported 14 species of calcareous dinoflagellates from recent cysts (4 new species), only this taxon that germinated from one cyst from the Levantine Basin is included.
- 134 *Diplopsalis asymmetrica* (Mangin) Lindeman, *Diplopsalis bomba* (Stein) Dodge et Toriumi, *Dissodium asymmetricum* (Mangin) Loeblich III.
- 135 Considered as a synonym of *Diplopelta bomba* Stein ex Jörgensen by Dodge (1982 p. 157).
- 136 *Dissodium lenticulum* (Bergh) Loeblich III, *Glenodinium lenticula* (Bergh) Schiller.
- 137 *Diplopsalis orbicularis* (Paulsen) Steidinger et Williams.
- 138 Usually a brackish water species.
- 139 *Glenodinium rotundum* (Lebour) Schiller.
- 140 Originally described from the Tyrrhenian Sea as *Peridinium tyrrhenicum* Balech (Balech 1990).
- 141 Nearly all of the marine species of *Peridinium* Ehrenberg have been transferred to *Protoberidinium* Bergh.
- 142 *Protoberidinium quinquecorne* (Abé) Balech.
- 143 This taxon presents synonyms such as *Diplopsalis minor* (Paulsen), *Zygabikodinium lenticulatum* (Manguin) Loeblich et Loeblich III, *Diplopeltopsis minor* (Paulsen) Pavillard, *Diplopsalis lenticula* f. *minor* Paulsen (see Dodge and Toriumi 1993, Elbrächter 1993).
- 144 Non *Protoberidinium biconicum* (Dangeard) Balech.
- 145 *Minuscula bipes* (Paulsen) Lebour.
- 146 *Protoberidinium bimucronatum* (Schiller) Balech. The synonymy between *Peridinium sourniai* F.J.R. Taylor and *Protoberidinium bispinum* (Schiller) Balech is debatable.
- 147 According to Schiller (1935, p. 223) *Peridinium curtipes* Jörgensen is a synonym of *Peridinium crassipes* Kofoid, consequently a confusion could be expected. *Protoberidinium crassipes* (Kofoid) Balech and *Protoberidinium curtipes* (Jörgensen) Balech are different species: 1) *Protoberidinium crassipes* (Kofoid) Balech (= *Peridinium crassipes* Kofoid), 2) *Protoberidinium curtipes* (Jörgensen) Balech (= *Peridinium crassipes* Paulsen 1907, non Paulsen 1930). See also Balech (1988, p. 110).
- 148 *Peridinium decipiens* var. *curvipes* Ostenfeld, *Protoberidinium subcurvipes* (Lebour) Balech.
- 149 *Protoberidinium longipes* (Karsten) Balech.
- 150 According to Balech (1976) this taxon is related to the freshwater species *Protoberidinium achromaticum* (Levander) Balech.
- 151 *Protoberidinium ovatum* Pouchet [= *P. globulus* var. *ovatum* (Pouchet) Schiller, *Peridinium ovatum* (Pouchet) Schütt] have been considered as synonyms.
- 152 This taxon can be confused with *Protoberidinium ovum* (Schiller) Balech.
- 153 Also reported from the Tyrrhenian Sea based on cysts by Montresor et al. (1998).
- 154 *Protoberidinium spiniferum* (Schiller) Balech.
- 155 The orthographic similarity between *P. sphaeroides* (Dangeard) Balech and *P. sphaeroideum* (Mangin) Balech is confusing (Sournia 1978, p. 29).
- 156 This taxon resembles *Protoberidinium brachypus* (Schiller) Balech.
- 157 *Protoberidinium angustum* (Dangeard) Balech.
- 158 Most of the recently described species of *Scrippsiella* Balech ex Loeblich are reported from the germination of cysts (Montresor et al. 1994, D'Onofrio et al. 1999).
- 159 *Scrippsiella faeroense* Dickensheets et Cox, non *Scrippsiella faeroense* (Paulsen) Balech et Soares.
- 160 Reported by Rampi (1941) as *Blepharocysta striata* Schütt (see Carbonell-Moore 1994).
- 161 *Podolampas spinifer* Pavillard.
- 162 *Tuberculodinium vancampoae* (Rossignol) Wall (= *Pterospermopsis vancampoae* Rossignol). Taylor (1976 p. 183) reported the presence of this taxon in the Mediterranean Sea based on Margalef (1948).
- 163 One specimen that resembles *C. yeye* Margalef from the Alborán Sea, one specimen of *C. yeye* and other undetermined species of this genus were observed from the Balearic coasts (unpublished obs.). *Ceratoperidinium mediterraneum* Abboud-Abi Saab requires a more detailed description.
- 164 Iwataki et al. (2002) reported this taxon based on the material from the Aegean Sea by Pennik and Clarke (1977).
- 165 *Cachonina niei* Loeblich III.
- 166 *Katodinium rotundatum* (Lohmann) Loeblich III, *Masartia rotundata* (Lohmann) Schiller, *Amphidinium rotundatum* Lohmann, *Katodinium minutum* (Lebour) Sournia.
- 167 *Cladopyxis bacillifera* Schiller.
- 168 *Cladopyxis claytonii* Holmes.
- 169 *Cladopyxis setifera* Lohmann, *Micracanthodinium bacilliferum* (Schiller) Deflandre.
- 170 The genus *Exuviella* was included in *Prorocentrum* by Dodge (1975). McLachlan et al. (1997) proposed the separation of both genera.
- 171 Schiller (1931–1933, p. 26) reported this taxon as *Exuviella* (?) *aperta* Schiller (described from the Adriatic Sea in 1928). Inadequate description according to Dodge (1975).
- 172 *P. micans* var. *gibbosum* Schiller, *P. gibbosum* (Schiller) Schiller, *P. blatta* Athanassopoulos. Resembles *Prorocentrum micans* Ehrenberg.
- 173 According to Dodge (1975): *Prorocentrum bidens* Schiller, *P. lebourae* Schiller, *Exuviella oblonga* Schiller [= *Prorocentrum oblongum* (Schiller) Taylor], *E. lenticulata* Matzenauer, *E. elongata* Rampi.
- 174 *Prorocentrum pyriformis* (Schiller) Hasle.

- 175 *Prorocentrum minimum* (Pavillard) Schiller and *Prorocentrum cordatum* (Ostenfeld) Dodge may be synonyms (Velikova and Larsen 1999).
- 176 *Prorocentrum obtusidens* Schiller, also *P. monacense* Kufferath described in the Ligurian Sea (Kufferath 1957).
- 177 *P. hentscheli* Schiller, *P. sigmoides* Böhm, *P. macrurus* Athanassopoulos. Resembles *P. micans* Ehrenberg.
- 178 According to Dodge (1975): *Prorocentrum mexicanum* Osorio-Tafall, *P. obtusum* Ostenfeld, *P. brochi* Schiller, *P. ovale* Schiller, *P. ovalis* Rampi, *P. rampii* Sournia.
- 179 *Prorocentrum schilleri* Böhm in Schiller.
- 180 *Prorocentrum nanum* Schiller and *P. pusillum* (Schiller) Loeblich were considered as synonyms until Puigserver and Zingone (2002).
- 181 *Prorocentrum cornutum* Schiller.
- 182 *Prorocentrum sphaeroideum* Schiller, *P. robustum* Osorio Tafall.
- 183 *Prorocentrum adriaticum* Schiller.
- 184 This taxon resembles *Prorocentrum mexicanum* Osorio-Tafall that is here considered a synonym of *Prorocentrum maximum* (Gourret) Schiller.
- 185 Regarded as a doubtful dinoflagellate by Sournia (1986, p. 37).
- 186 *Dissodinium* is a genus of parasitic dinoflagellates with a complicate life cycle including planktonic life cycle stages similar to those of the genus *Pyrocystis*. In contrast, *Pyrocystis* is a permanently free-living phototrophic dinoflagellate with a predominant coccoid stage and a flagellated dinospore stage (e.g., Elbrächter *et al.* 1987).
- 187 *Pyrocystis lunula* (Schütt) Schütt, *Dissodinium lunula* (Schütt) Pascher.
- 188 *Dissodinium fusiformis* (Thompson *ex* Murray) Matzenauer.
- 189 *Dissodinium gerbaultii* (Pavillard) F.J.R. Taylor
- 190 Léger (1973) reported the presence of this taxon in the Spanish Mediterranean coast by Margalef *et al.* (1957). Drebes (1981) reported that *Pyrocystis margalefii* Léger is probably identical with the resting stages of *Dissodinium pseudolunula* Swift *ex* Elbrächter *et* Drebes.
- 191 *Dissodinium minimum* Matzenauer.
- 192 *Pyrocystis pseudonociluca* Wyville-Thomson *ex* Murray, *Dissodinium pseudolunula* Swift *ex* Elbrächter *et* Drebes.
- 193 Regarded as a doubtful dinoflagellate by Sournia (1986, p. 97). Commonly reported as *Adinomonas* Schiller.
- 194 Regarded as a doubtful dinoflagellate by Sournia (1986, p. 97).
- 195 Doubtful taxon (Sournia 1986, p. 98). Also reported from the Sicilian coasts or North-Italian lakes by Andreis *et al.* (1982).

References

1. Abboud-Abi Saab, M. 1985. Étude quantitative et qualitative du phytoplancton des eaux côtières libanaises. *Lebanese Sci. Bull.* 1: 197–222.
2. Abboud-Abi Saab, M. 1989. Les dinoflagellés des eaux côtières libanaises- Espèces rares ou nouvelles du phytoplancton marin. *Lebanese Sci. Bull.* 5: 5–16.
3. Andreis, C., M. D. Ciapi and G. Rodondi. 1982. The thecal surface of some Dinophyceae: A comparative SEM approach. *Bot. Mar.* 25: 225–236.
4. Balech, E. 1976. Sur quelques *Protoperidinium* (Dinoflagellata) du Golfe du Lion. *Vie Milieu* 16: 27–46.
5. Balech, E. 1988. Los Dinoflagelados del Atlántico Sudoccidental. *Pub. Esp. Inst. Español Oceanogr. Madrid* 1: 310 pp.
6. Balech, E. 1990. Four new dinoflagellates. *Helgoländer Meeresunters.* 44: 387–396.
7. Balkis, N. 2000. Five dinoflagellate species new to Turkish seas. *Oebalia* 26: 97–108.
8. Biecheler, B. 1938. Sur un péridinien cuirassé incolore nouveau *Crypthecodinium* n. g. *setense* n. sp. et la famille nouvelle des Crypthecodiniacées. *Bull. Soc. zool. Fr.* 63: 9–13.
9. Biecheler, B. 1939. Sur deux péridiniens nouveaux des eaux saumâtres des environs de Sète. *Bull. Soc. zool. Fr.* 64: 12–18.
10. Böhm, A. 1933. Neue Peridineen aus der Adria. *Arch. Protistenk.* 80: 351–354.
11. Bolch, C. J. S. and M. J. Reynolds. 2002. Species resolution and global distribution of microreticulate dinoflagellate cysts. *J. Plankton Res.* 24: 565–578.
12. Bouquaqueux, F. 1971. *Gloeodinium marinum* nov. sp. péridinien dinocapsale. *Arch. Protistenk.* 113: 314–321.
13. Bravo, I., B. Reguera, A. Martínez and S. Fraga. 1990. First report of *Gymnodinium catenatum* Graham on the Spanish Mediterranean coast. In: (E. Granéli, B. Sundström, L. Edler and D. M. Anderson, eds) *Toxic Marine Phytoplankton*. Elsevier. Amsterdam. pp. 26–30.
14. Cachon, J. and M. Cachon-Enjumet. 1964. *Leptospathium navicula* nov. gen. nov. sp. et *Leptophyllus dasypus* nov. gen. sp., péridiniens Noctilucidae (Hertwig) du plancton néritique de Villefranche-sur-Mer. *Bull. Inst. Océanogr. Monaco* 62 (1292): 1–12.
15. Cachon, J. and M. Cachon-Enjumet. 1966. *Pomatodinium impatiens* nov. gen. nov. sp. péridiniens Noctilucidae Kent. *Protistologica* 2: 23–30.
16. Cachon, J. and M. Cachon. 1967. *Cymbodinium elegans* nov. gen. nov. sp. péridinien Noctilucidae Saville-Kent. *Protistologica* 3: 313–318.
17. Cachon, J. and M. Cachon. 1967. Contribution à l'étude des Noctilucidae Saville-Kent, I. Les Kofoidiniinae Cachon J. et M. Évolution, morphologique et systématique. *Protistologica* 3: 427–444.
18. Cachon, J. and M. Cachon. 1969. Contribution à l'étude des Noctilucidae Saville-Kent. Évolution, morphologique, cytologie, systématique. II. Les Leptodiscinae Cachon J. et M. *Protistologica* 5: 11–33.
19. Carbonell-Moore, M. C. 1994. On the biogeography of the family Podolampadaceae Lindemann (Dinophyceae) -vertical and latitudinal distribution. *Rev. Palaeobot. Palynol.* 84: 23–44.
20. Caroppo, C. 2000. The contribution of picophytoplankton to community structure in a Mediterranean brackish environment. *J. Plankton Res.* 22: 381–397.
21. Caroppo, C. and N. Cardellicchio. 1995. Preliminary

- study on phytoplankton communities of Mar Piccolo in Taranto (Ionian Sea). *Oebalia* 21: 61–76.
22. Caroppo, C., A. Fiocca, P. Sammarco and G. Magazzù. 1999. Seasonal variations of nutrients and phytoplankton in the coastal SW Adriatic Sea (1995–1997). *Bot. Mar.* 42: 389–400.
 23. Carrada, G. C., R. Casotti, M. Modigh and V. Saggiomo. 1991. Presence of *Gymnodinium catenatum* (Dinophyceae) in a coastal Mediterranean lagoon. *J. Plankton Res.* 13: 229–238.
 24. Chatton, É. 1933. *Pheopolykrikos beauchampi* nov. gen. nov. sp. Dinoflagellé polydinide autotrophe dans l'étang de Thau. *Bull. Soc. zool. Fr.* 58: 251–254.
 25. Cho, E. S., G. Y. Kim, B. D. Choi, L. L. Rhodes, T. J. Kim, G. H. Kim and J. D. Lee. 2001. A comparative study of the harmful dinoflagellates *Cochlodinium polykrioides* and *Gyrodinium impudicum* using transmission electron microscopy, fatty acid composition, carotenoid content, DNA quantification and gene sequences. *Bot. Mar.* 44: 57–66.
 26. Chrétiennot-Dinet, M. J., A. Sournia, M. Ricard and C. Billard. 1993. A classification of the marine phytoplankton of the world from class to genus. *Phycologia* 32: 159–179.
 27. Ciminiello, P., E. Fattorusso, M. Forino and M. Montresor. 2000. Saxitoxin and neosaxitoxin as toxic principles of *Alexandrium andersoni* (Dinophyceae) from the Gulf of Naples, Italy. *Toxicon* 38: 1871–1877.
 28. Dale, B., M. Montresor, A. Zingone and K. Zonneveld. 1993. The cyst motile stage relationships of the dinoflagellates *Diplopelta symmetrica* and *Diplopsalopsis latipeltata*. *Eur. J. Phycol.* 28: 129–137.
 29. Daly Yahia-Kefi, O. 1998. Le phytoplancton de la Baie de Tunis: analyse systématique, biogéographique, quantitative et synécologique des diatomées et des dinoflagellés. Ph. D. Université de Tunis II, 332 pp.
 30. Daly Yahia-Kefi, O., E. Nézan and M. N. Daly Yahia. 2001. Sur la présence du genre *Alexandrium* Halim (Dinoflagellés) dans la baie de Tunis (Tunisie). *Oceanol. Acta* 24: S17–25.
 31. Daugbjerg, N., G. Hansen, J. Larsen and O. Moestrup. 2000. Phylogeny of some of the major genera of dinoflagellates based on ultrastructure and partial LSU rDNA sequence data, including the erection of three new genera of unarmoured dinoflagellates. *Phycologia* 39: 302–317.
 32. De Angelis, G., M. Ialongo and R. Perdicaro. 1994. Phytoplankton and phytobenthos in the coastal brackish pond of Caprolace (Latium, Italy). *Oebalia* 20: 21–32.
 33. Delgado, M. 1990. Phytoplankton distribution along the Spanish coast of the Alborán Sea. *Sci. Mar.* 54: 169–178.
 34. Delgado, M. and J. N. Fortuño. 1991. Atlas de fitoplancton del mar Mediterráneo. *Sci. Mar.* 55 (suppl. 1): 1–133.
 35. Dodge, J. D. 1975. The Prorocentrales (Dinophyceae). II. Revision of the taxonomy within the genus *Prorocentrum*. *Bot. J. Linnean Soc.* 71: 103–125.
 36. Dodge, J. D. 1982. *Marine Dinoflagellates of the British Isles*. Her Majesty's Stationery Office, London. 303 pp.
 37. Dodge, J. D. and S. Toriumi. 1993. A taxonomic revision of the *Diplopsalis* group (Dinophyceae). *Bot. Mar.* 36: 137–147.
 38. Dogiel, V. 1906. Beitrage zur Kenntnis der Peridineen. *Mitt. Zool. Stn. Neapel* 18: 1–45.
 39. D'Onofrio, G., D. Marino, L. Bianco, E. Busico and M. Montresor. 1999. Towards an assessment on the taxonomy of dinoflagellates that produce calcareous cyst (Calciodinelloideae, Dinophyceae): a morphological and molecular approach. *J. Phycol.* 35: 1063–1078.
 40. Dowidar, N. M. 1974. The phytoplankton of the Mediterranean waters of Egypt. I. A check list of the species recorded. *Bull. Inst. Oceanogr. Fish. Cairo* 4: 319–344.
 41. Drebes, G. 1981. Possible resting spores of *Dissodinium pseudolunula* (Dinophyta) and their relation to other taxa. *Br. Phycol. J.* 16: 207–215.
 42. Elbrächter, M. 1979. On the taxonomy of unarmoured dinoflagellates (Dinophyta) from the northwest African upwelling region. *Meteor. Forsch. Reihe* 30: 1–22.
 43. Elbrächter, M. 1993. *Kolkwitzia* Lindemann 1919 and *Preperidinium* Mangin 1913: Correct genera names in the *Diplopsalis*-group (Dinophyceae). *Nova Hedwigia* 56: 173–178.
 44. Elbrächter, M. 1994. Redescription of *Gymnodinium heterostriatum* Kofoid et Swezy 1921 (Dinophyceae). *Helgoländer Meeresunters.* 48: 359–363.
 45. Elbrächter, M., C. Hemleben and M. Spindler. 1987. On the taxonomy of lunate *Pyrocystis* species (Dinophyta). *Bot. Mar.* 30: 233–241.
 46. El-Maghraby, A. M. and Y. Halim. 1965. A quantitative and qualitative study of plankton of Alexandria waters. *Hydrobiologia* 25: 221–238.
 47. Estrada, M. 1979. Observaciones sobre la heterogeneidad del fitoplancton en una zona costera del mar Catalán. *Inv. Pesq.* 43: 637–666.
 48. Faust, M.A. and R.A. Gullledge. 2002. Identifying harmful marine dinoflagellates. *Contrib. U. S. Nat. Herbarium, Smithsonian Institution* 42: 1–144.
 49. Forti, A. 1922. Ricerche sulla flora pelagica (fitoplancton) di Quarto dei Mille (Mare Ligure). *R. Comit. Thalass. Mem.* 97: 1–248.
 50. Forti, A. and R. Issel. 1925. *Histioneis kofoidi* n. sp. Peridiniacearum. *La Nova Notarisia* 36: 103–104.
 51. Forti, A. 1932. Una rara Dinofisea del Mediterraneo per la prima volta descritta. *Arch. Protistenk.* 77: 538–542.
 52. Furnestin, M. L. 1973. Phytoplankton et production primaire dans le secteur sud-occidental de la Méditerranée. *Rev. Trav. Pêches marit.* 37: 19–68.
 53. Ghazzawi, F. M. 1939. A study of the Suez Canal plankton. The phytoplankton. *Fish. Res. Direct. Egypt., Notes Memoires* 24: 1–83.
 54. Giacobbe, M. G., F. Oliva, R. La-Ferla, A. Puglisi, E. Crisafi and G. Maimone. 1995. Potentially toxic dinoflagellates in Mediterranean water (Sicily) and related hydrobiological conditions. *Aquat. Microb. Ecol.* 9: 63–68.
 55. Giuffrè, G., R. Pezzani and R. Scarfo. 1996. Neritic micro-nanophytoplankton in a mussel culture experimental station in the Gulf of Castellammare (Trapani, Sicily). *Oebalia* 22: 47–56.

56. Gómez, F. and H. Claustre. 2001. Spreading of *Gymnodinium catenatum* Graham in the western Mediterranean Sea. *Harmful Algae News* 22: 1–3.
57. Gómez, F. and H. Claustre. 2003. The genus *Asterodinium* (Dinophyceae) as a possible biological indicator of warming in the Western Mediterranean Sea. *J. Mar. Biol. Ass. U.K.* 83: 173–174.
58. Gómez, F. and G. Gorsky. 2003. Microplankton annual cycles in the Bay of Villefranche, Ligurian Sea, NW Mediterranean Sea. *J. Plankton Res.* 25: 323–339.
59. Gotsis-Skretas, O. and N. Frigilos. 1990. Contribution to eutrophication and phytoplankton ecology in the Thermaikos Gulf. *Thalassographica* 13: 1–12.
60. Gourret, P. 1883. Sur les Péridiniens du golfe de Marseille. *Annls Mus. Hist. Nat. Marseille, Zool.* 1 (8): 1–114.
61. Greuet, C. 1968a. Organisation ultrastructurale de l'ocelle de deux Péridiniens Warnowiidae, *Erythrospira pavillardi* Kofoid et Swezy et *Warnowia pulchra* Schiller. *Protistologica* 4: 209–230.
62. Greuet, C. 1968b. *Leucopsis cylindrica* nov. gen., nov. sp., péridinien Warnowiidae Lindemann. Considérations phylogénétiques sur les Warnowiidae. *Protistologica* 4: 419–422.
63. Halim, Y. 1955. Note sur *Peridinium tregouboffi* n. sp. *Bull. Inst. Océanogr. Monaco* 1056: 1–7.
64. Halim, Y. 1960. Étude quantitative et qualitative du cycle écologique des Dinoflagellés dans les eaux de Villefranche-sur-Mer. *Ann. Inst. Océanogr.* 38: 123–232.
65. Halim, Y. 1963. Microplancton des eaux égyptiennes. Le genre *Ceratium* Schrank (Dinoflagellés). *P.-v. Réunion. Commn int. Explor. Mer Méditerr.* 17: 495–502.
66. Halim, Y. 1965. Microplancton des eaux égyptiennes. II. Chrysomonadines, Ebriediens et dinoflagellés nouveaux ou d'intérêt biogéographique. *Rapp. P.-v. Réunion. Commn int. Explor. Mer Méditerr.* 18: 373–379.
67. Hansen, G., N. Daugbjerg and P. Henriksen. 2000. Comparative study of *Gymnodinium mikimotoi* and *Gymnodinium aureolum*, comb. nov. (= *Gyrodinium aureolum*) based on morphology, pigment composition, and molecular data. *J. Phycol.* 36: 394–410.
68. Herrera, J., F. Muñoz and R. Margalef. 1955. Fitoplancton de las costas de Castellón durante el año 1953. *Inv. Pesq.* 1: 17–29.
69. Herrera, J. and R. Margalef. 1961. Hidrografía y fitoplancton de la costa comprendida desde Castellón a la desembocadura del Ebro de julio 1958 a junio de 1959. *Inv. Pesq.* 20: 17–63.
70. Hertwig, R. 1877. Über *Leptodiscus medusoides*, eine neue den Noctiluciden verwandte Flagellate. *Jenaische Ztschr. Naturwiss. NF* 11: 307–323.
71. Honsell, G. 1993. First report of *Alexandrium minutum* in northern Adriatic waters (Mediterranean Sea). In: (T. J. Smayda and Y. Shimizu, eds) *Toxic Phytoplankton Blooms in the Sea*. Elsevier, Amsterdam. pp. 127–132.
72. Honsell, G. and M. Cabrini. 1991. *Scrippsiella spinifera* sp. nov. (Pyrrhophyta): A new dinoflagellate from the northern Adriatic Sea. *Bot. Mar.* 34: 167–175.
73. Ignatiades, L. 1976. The standing stock of diatoms and dinoflagellates in the oligotrophic waters of Southern Aegean Sea. *Int. revue ges. Hydrobiol.* 61: 193–199.
74. Ignatiades, L., D. Georgopoulos and M. Karydis. 1995. Description of the phytoplanktonic community of the oligotrophic waters of the SE Aegean Sea (Mediterranean). *P.S.Z.N.I. Mar. Ecol.* 16: 13–26.
75. Innamorati, M., L. Albertotanza, M. De Pol, M. Mannucci, C. Nuccio, G. Rargion, G. Innocenti, G. Mori and L. Lazzara. 1986. Popolamenti fitoplanctonici e condizioni idrologiche nel Mar Ligure. *Resoconti dei Rilevamenti in mare, Università di Firenze* 2: 1–56.
76. Innamorati, M., C. Nuccio, C. Lenzi Grillini, M. De Pol and M. Mannucci. 1989. Biomassa, produzione e specie fitoplanctoniche nel mare antistante lo scarico termico della centrale elettrica di Torre del Sale (Golfo di Follonica). *Resoconti dei Rilevamenti in mare, Università di Firenze* 5: 1–43.
77. Innamorati, M., L. Lazzara, C. Nuccio, M. De Pol, M. Mannucci and G. Mori. 1989. Popolamenti fitoplanctonici e condizioni idrologiche nell'arcipelago Toscano. *Resoconti dei Rilevamenti in mare, Università di Firenze* 6: 1–117.
78. Iwataki, M., H. Takayama, K. Matsuoka and Y. Fukuyo. 2002. *Heterocapsa lanceolata* sp. nov. and *Heterocapsa horiguchii* sp. nov. (Peridiniales, Dinophyceae), two new marine dinoflagellates from coastal Japan. *Phycologia* 41: 470–479.
79. Jörgensen, E. 1920. Mediterranean Ceratia. *Rep. Dan. Oceanogr. Exp. Med. 1908–1910* (Vol. II, Biology) J.1: 1–110.
80. Jörgensen, E. 1923. Mediterranean Dinophysiacea. *Rep. Dan. Oceanogr. Exp. Med. 1908–1910*. (Vol. II, Biology) J.2: 1–48.
81. Kimor, B. and E. J. F. Wood. 1975. A plankton study in the eastern Mediterranean Sea. *Mar. Biol.* 29: 321–333.
82. Koray, T. 1995. Phytoplankton species succession, diversity and nutrients in neritic waters of the Aegean Sea (Bay of Izmir). *Turkish J. Bot.* 19: 531–544.
83. Koray, T., Ş. Gökpinar, S. Polat, M. Türkoğlu, L. Yurga, F. Çolak, H. A. Benli and E. Sarihan. 2000. Türkiye Denizlerinin (Karadeniz, Ege Denizi Ve Kuzeydoğu Akdeniz) Mikroplankton (Bir Hücreliler) Topluluklarının Kalitatif Özelliklerinin Karşılaştırılması. *Su ürünleri Dergisi, Sayı: 3–4: 17: 275–291*.
84. Kufferath, H. 1957. Examen microscopique de l'ultraplancton recueilli au large de Monaco. *Bull. Inst. Océanogr. Monaco* 1089: 1–12.
85. Labib, G. W. 1997. Occurrence of the dinoflagellate *Gymnodinium catenatum* (Graham) along the Mediterranean coast of Alexandria (Egypt). *Chem. Ecol.* 14: 133–141.
86. Lakkis, S. and V. Novel-Lakkis. 1981. Composition, annual cycle and species diversity of the phytoplankton in Lebanese coastal water. *J. Plankton Res.* 3: 123–136.
87. Lecal, J. 1954. Richesse en microplancton estival de eaux méditerranéennes de Porto-Vendres à Oran. *Vie Milieu* (suppl. 3): 13–95.
88. Lecal, J. 1957. Microplancton des stations algériennes occidentales de la croisière du "Prof. Lacaze-Duthiers" en 1952. *Vie Milieu* (suppl. 6): 21–100.
89. Léger, G. 1971. Les populations phytoplanktoniques au point 42° 47' N, 7° 29' E Greenwich (Bouée laboratoire du COMEXO/CNEXO). Généralités et premier séjour. *Bull. Inst. Océanogr. Monaco* 69 (1412): 1–42.

90. Léger, G. 1972. Les populations phytoplanctoniques ...[...]. Troisième séjour. *Bull. Inst. Océanogr. Monaco* 70 (1415): 1–42.
91. Léger, G. 1973. Diatomées et dinoflagellés de la mer Ligure. Systématique et distribution en juillet 1963. *Bull. Inst. Océanogr. Monaco* 71 (1425): 1–36.
92. Léger, G. 1973. Diatomées et dinoflagellés de la côte Est de Corse. Systématique et distribution en juillet 1964. *Bull. Inst. Océanogr. Monaco* 71 (1426): 1–31.
93. Lins da Silva, N. M. 1991. Étude de la repartition spatio-temporelle des peuplements microbiens planctoniques en Mer Ligure (Méditerranée Occidentale). Ph. D. thesis, Université de P. et M. Curie, Paris VI. 119 pp.
94. McLachlan, J. L., G. T. Boalch and R. Jahn. 1997. Reinstatement of the genus *Exuviella* (Dinophyceae, Proterocentrophycidae) and an assessment of *Prorocentrum lima*. *Phycologia* 36: 38–46.
95. Magazzù, G. and C. Andreoli. 1971. Trasferimenti fitoplanctonici attraverso lo stretto di Messina in relazione alle condizioni idrologiche. *Boll. Pesca Pisc. Idrobiol.* 26: 125–157.
96. Margalef, R. 1948. Le phytoplancton estival de la "Costa Brava" catalane en 1946. *Hydrobiologia* 1: 15–21.
97. Margalef, R. 1963. *Scaphodinium mirabile* nov. gen. nov. sp., un nuevo dinoflagelado aberrante del plancton marino. *Misc. zool. Barcelona* 1(5): 3–4.
98. Margalef, R. 1965. Distribución ecológica de las especies del fitoplancton marino en un área del Mediterráneo occidental. *Inv. Pesq.* 28: 117–131.
99. Margalef, R. 1969. Composición específica del fitoplancton de la costa catalano-levantina (Mediterráneo occidental) en 1962–1967. *Inv. Pesq.* 33: 345–380.
100. Margalef, R. 1969. Small scale distribution of phytoplankton in the western Mediterranean at the end of July. *Pubbl. Staz. Zool. Napoli* 37: S40–61.
101. Margalef, R. 1994. Through the looking glass: how marine phytoplankton appears through the microscope when graded by size and taxonomically sorted. *Sci. Mar.* 58 (1–2): S87–101.
102. Margalef, R. 1995. Fitoplancton del NW del Mediterráneo (Mar Catalán) en junio de 1993, y factores que condicionan su producción y distribución. *Mem. Real Acad. Ciencias y Artes de Barcelona* 927 (LV1). 56 pp.
103. Margalef, R., F. Saiz, J. Rodríguez-Roda and M. G. Larrañeta. 1954. Plancton recogido por los laboratorios costeros VIII. Fitoplancton de las costas de Castellón durante el año 1952. *Publ. Inst. Biol. Apl., Barcelona* 17: 87–99.
104. Margalef, R., F. Muñoz and J. Herrera. 1957. Fitoplancton de las costas de Castellón de enero de 1955 a junio de 1956. *Inv. Pesq.* 7: 3–31.
105. Margalef, R. and M. Estrada 1987. Summer phytoplankton across a western Mediterranean front. *Inv. Pesq.* 51: 121–140.
106. Meier, K. J. S., D. Janofsk and H. Willems. 2002. New calcareous dinoflagellates (Calciodinelloidae) from the Mediterranean Sea. *J. Phycol.* 38: 602–615.
107. Mikhail, K. 2001. Toxic red tide species are on rise in Alexandria waters (Egypt). *Harmful Algae News* 22: 5.
108. Montresor, M. 1995. *Scrippsiella ramonii* sp. nov. (Peridinales, Dinophyceae), a marine dinoflagellate producing a calcareous resting cyst. *Phycologia* 34: 87–91.
109. Montresor, M. and A. Zingone. 1988. *Scrippsiella precaria* sp. nov. (Dinophyceae), a marine dinoflagellate from the Gulf of Naples. *Phycologia* 27: 387–394.
110. Montresor, M., D. Marino, A. Zingone and G. Dafnis. 1990. Three *Alexandrium* species from coastal Tyrrhenian waters (Mediterranean Sea). In: (E. Granéli, B. Sundström, L. Edler and D. M. Anderson, eds) *Toxic Marine Phytoplankton*. Elsevier. Amsterdam. pp. 82–87.
111. Montresor, M., A. Zingone and D. Marino. 1993. The calcareous resting cyst of *Pentaparsodinium tyrrhenicum* comb. nov. (Dinophyceae). *J. Phycol.* 29: 223–230.
112. Montresor, M., E. Montesarchi, D. Marino and A. Zingone. 1994. Calcareous dinoflagellate cysts in marine sediments of the Gulf of Naples (Mediterranean Sea). *Rev. Palaeobot. Palynol.* 84: 45–56.
113. Montresor, M., A. Zingone and D. Sarno. 1998. Dinoflagellate cyst production at a coastal Mediterranean site. *J. Plankton Res.* 20: 2291–2312.
114. Narusevich, T. F. and Yu N. Tokarev. 1989. Phytoplankton and bioluminescence in the Mediterranean Sea in summer. *Gidrobiol. Zh.* 25 (6): 10–16. In Russian.
115. Navarro, F. P. and F. Bellón Uriarte. 1945. Catálogo de la flora del mar de Baleares (con exclusión de las diatomeas). *Notas y Resúmenes Inst. Esp. Oceanogr.* 124 (II): 161–295.
116. Nival, P. 1969. Nouvelles observations sur *Achradina pulchra* Lohmann, Dinoflagellé, Gymnosclerotidae (= Amphilotales) en Méditerranée. *Protistologica* 5: 125–136.
117. Nuzzo, L. and M. Montresor. 1999. Different excystment patterns in two calcareous cyst-producing species of the dinoflagellate genus *Scrippsiella*. *J. Plankton Res.* 21: 2009–2018.
118. Palau, M., C. Cornet, T. Riera and M. Zabala. 1991. Planktonic gradients along a Mediterranean cave. *Oecol. Aquat.* 10: 299–316.
119. Paulsen, O. 1931. Études du microplancton de la Mer d'Alboran. *Trab. Inst. Esp. Oceanogr. Madrid* 4: 1–108.
120. Pavillard, J. 1905. Recherches sur la flore pélagique (Phytoplankton) de l'Étang de Thau. *Mem. Univ. Montpellier, sér. Mixte* 2: 1–116.
121. Pavillard, J. 1909. Sur les péridiniens du Golfe de Lion. *Bull. Soc. Bot. Fr.* 9: 227–284.
122. Pavillard, J. 1916. Recherches sur le péridiniens du Golfe du Lion. *Trav. Inst. Bot. Univ. Montpellier, sér. mixte* 4: 9–68.
123. Pavillard, J. 1930. Sur quelques formes intéressantes ou nouvelles du phytoplankton (diatomées et péridiniens) des croisères du Prince Albert 1^{er} de Monaco. *Bull. Inst. Océanogr. Monaco* 558: 1–12.
124. Pavillard, J. 1932. Le genre *Heterodinium* Kofoid dans la Méditerranée occidentale. *Bull. Inst. Océanogr. Monaco* 604: 1–4.
125. Pavillard, J. 1937. Les péridiniens et diatomées pélagiques de la mer de Monaco de 1907 à 1914. Observa-

- tions générales et conclusions. *Bull. Inst. Océanogr. Monaco* 738: 1–56.
126. Pennick, N. C. and K. J. Clarke. 1977. The occurrence of scales in the peridinium dinoflagellate *Heterocapsa triquetra* (Ehremb.) Stein. *Br. Phycol. J.* 12: 63–66.
 127. Pincemin, J. M. 1966. Note préliminaire a l'étude écologique des dinoflagellés de la baie d'Alger et comparaison avec les diatomées. *Pelagos* 1 (6): 19–49.
 128. Puigserver, M. and A. Zingone. 2002. *Prorocentrum nux* sp. nov. (Dinophyceae), a small planktonic dinoflagellate from the Mediterranean Sea, and discussion of *P. nanum* and *P. pusillum*. *Phycologia* 41: 29–38.
 129. Rampi, L. 1939. Su qualche Peridinea rara, nuova o curiosa nel fitoplancton del mare Ligure. *Nuovo Giorn. Bot. Ital. N. Ser.* 46: 456–469.
 130. Rampi, L. 1940. Ricerche sul fitoplancton del mare Ligure 2. Le tecalati e le Dinofisiali delle acque di Sanremo. *Boll. Pesca, Pisc. Idrobiol.* 16: 243–274.
 131. Rampi, L. 1941. Ricerche sul fitoplancton del mare Ligure 3. Le Heterodiniacee e le Oxytoxacee delle acque di Sanremo. *Annali Mus. Civ. Stor. Nat. Genova* 61: 50–69.
 132. Rampi, L. 1941. Ricerche sul fitoplancton del mare Ligure 5. Le Podolampacee delle acque di Sanremo. *Annali Mus. Civico Sci. Nat. Genova.* 61: 141–152.
 133. Rampi, L. 1941. Il generi *Histioneis* Stein e *Parahistioneis* Kof. a. Skogsb. nel Bacino Mediterraneo. *Riv. Sci. Nat. "Natura"* 32: 118–122.
 134. Rampi, L. 1942. Ricerche sul fitoplancton del mare Ligure 4. I *Ceratium* delle acque di Sanremo, parte 2. *Nuovo Giorn. Bot. Ital. N. Ser.* 49: 221–236.
 135. Rampi, L. 1943. Su qualche altra Peridinea nuova o rara delle acque di San Remo. *Atti Soc. Ital. Sci. Nat. Milano* 82: 151–157.
 136. Rampi, L. 1947. Osservazioni sulle *Histioneis* (Peridinee) raccolte nel mare Ligure presso Sanremo. *Bull. Inst. Océanogr. Monaco* 920: 9–16.
 137. Rampi, L. 1951. Ricerche sul fitoplancton del mare Ligure 10. Peridinali delle acque de Sanremo. *Atti Acc. Ligure Sc. Lett.* 7: 241–248.
 138. Rampi, L. 1951. Ricerche sul fitoplancton del mare Ligure 11. Il fitoplancton delle acque de Sanremo. *Atti Acc. Ligure Sc. Lett. Genova* 8: 1–50.
 139. Rampi, L. 1969. Su alcuni elementi fitoplanctonici (Peridinee, Silicococcales ed Heterococcales) rari o nuovi raccolti nelle acque del mare Ligure. *Natura, Soc. ital. Sci. nat., Mus. Civ. St. nat. Milano* 60: 49–56.
 140. Rampi, L. 1969. Péridiniens, Hétérococcales et Pterospermales rares, intéressants ou nouveaux, récoltes dans la mer Ligurienne. *Natura, Soc. Ital. Sci. nat., Mus. Civ. St. nat. Milano* 60: 313–333.
 141. Revelante, N. 1985. A catalogue of phytoplankton reported from the Rovinj area of the northern Adriatic. *Thalassia Jugosl.* 21: 139–169.
 142. Rubino, F., G. Belmonte, A. M. Miglietta, S. Geraci and F. Boero. 2000. Resting stages of plankton in recent North Adriatic sediments. *P.S.Z.N.I Mar. Ecol.* 21: 263–284.
 143. Sannio, A., A. Luglie and N. Sechi. 1997. Potentially toxic dinoflagellates in Sardinia. *Plant Biosystems* 131: 73–78.
 144. Sarno, D., A. Zingone, V. Saggiomo and G. C. Carrada. 1993. Phytoplankton biomass and species composition in a Mediterranean coastal lagoon. *Hydrobiologia* 271: 27–40.
 145. Schiller, J. 1931–1937. Dinoflagellatae (Peridininae) in monographischer Behandlung. In: (L. Rabenhorst, ed.) *Kryptogamen-Flora von Deutschland, Österreichs und der Schweiz*. Akad. Verlag., Leipzig. Vol. 10 (3): Teil 1 (1–3) (1931–1933); Teil 2 (1–4) (1935–1937).
 146. Schröder, B. 1900. Das Phytoplankton des Golfes von Neapel. *Mitt. Zool. Stat. Neapel* 14: 1–38.
 147. Schütt, F. 1895. Die Peridinen der Plankton-Expedition. *Ergeb. Plankton-Expedition der Humboldt-Stiftung* 4: 1–170.
 148. Seguin, G. 1968. Le plancton de la côte nord de la Tunisie. *Pelagos* 9: 73–86.
 149. Skolka, V. H., N. Bodeanu and A. Roban. 1986. Contributions to the systematic study of Mediterranean phytoplankton along the Libyan coasts. *Cercetari marine/Rech. Mar. Constanta* 19: 23–54.
 150. Solazzi, A. and C. Andreoli. 1971. Produttività e ciclo annuale del fitoplancton nel medio Adriatico occidentale. *Quaderni Lab. Tecn. della Pesca* 1: S1–90.
 151. Souâd, T. and A. El Abed. 2001. On the presence of potentially toxic algae in the lagoons of Tunisia. *Harmful Algae News* 22: 10.
 152. Sournia, A. 1967. Le genre *Ceratium* (péridinien planctonique) dans le canal de Mozambique. Contribution a une révision mondiale. *Vie Milieu* 18: 375–500.
 153. Sournia, A. 1973. Catalogue des espèces et taxons infraspécifiques de dinoflagellés marins actuels publiés depuis la révision de J. Schiller. I. Dinoflagellés libres. *Beih. Nova Hedwigia* 48: 1–92.
 154. Sournia, A. 1978. Catalogue des espèces et taxons infraspécifiques de dinoflagellés marins actuels publiés depuis la révision de J. Schiller. III (Complément). *Rev. Algol. n.s.* 13: 3–40.
 155. Sournia, A. 1986. *Atlas du Phytoplankton Marin. Vol. I: Introduction, Cyanophycées, Dictyochophycées, Dinophycées et Raphidophycées*. Editions du Centre National de la Recherche Scientifique, Paris. pp. 219.
 156. Steidinger, K. A. and K. Tangen. 1997. Dinoflagellates. In: (C.R. Tomas, ed.) *Identifying Marine Phytoplankton*. Academic Press. San Diego. pp. 387–584.
 157. Tangen, K., L. E. Brand, P. L. Blackwelder and R. R. Guillard. 1982. *Thoracosphaera heimii* (Lohmann) Kamptner is a dinophyte: observations on its morphology and life cycle. *Mar. Micropaleont.* 7: 193–212.
 158. Taylor, F. J. R. 1963. *Brachydinium*, a new genus of the Dinococcales from the Indian Ocean. *J. S. African Bot.* 29: 75–78.
 159. Taylor, F. J. R. 1967. Phytoplankton of the South Western Indian Ocean. *Nova Hedwigia* 12: 433–476.
 160. Taylor, F. J. R. 1976. Dinoflagellates from the International Indian Ocean Expedition. A report on material collected by R/V "Anton Bruun" 1963–1964. *Bibliotheca Botanica* 132: pp. 234.
 161. Taylor, F. J. R. 1979. A description of the benthic dinoflagellate associated with maitotoxin and ciguatoxin, including observations on Hawaiian material. In:

- (D. L. Taylor and H. H. Seliger, eds) *Toxic Phytoplankton Blooms*. Elsevier North Holland. New York. pp. 71–76.
162. Tognetto, S., S. Bellato, I. Moro and C. Andreoli. 1995. Occurrence of *Ostreopsis ovata* (Dinophyceae) in the Tyrrhenian Sea during Summer 1994. *Bot. Mar.* 38: 291–295.
163. Tolomio, C. 1981. *Protoperidinium maranense* sp. nov., une nouvelle dinophyceae de la Mer Adriatique. *Phycologia* 20: 377–384.
164. Tolomio, C. and F. Cavolo. 1985. Description de *Prorocentrum venetum* sp. nov. (Dinophyceae) trouvé dans la Lagune de Venise. *Bot. Mar.* 28: 345–349.
165. Tolomio, C. and E. Moschin. 1995. Y a-t-il des microalgues nuisibles dans la lagune de Venise?. *Mar. Life* 5: 3–9.
166. Tolomio, C., C. Andreoli, I. Moro, E. Moschin, L. Scarabel and L. Masiero. 1996. Communautés phytoplanctoniques dans le bassin meridional de la lagune de Venise (février 1991-janvier 1993). *Mar. Life* 6: 3–14.
167. Tolomio, C., E. Moschin, I. Moro and C. Andreoli. 1999. Phytoplankton de la lagune de Venise I. Bassins nord et sud (avril 1988-mars 1989). *Vie Milieu* 49: 33–44.
168. Travers, M. 1975. Inventaire des protistes du Golfe de Marseille et des ses parages. *Ann. Inst. Océanogr. Paris* 51: 51–75.
169. Velásquez, Z. R. 1997. Fitoplancton en el Mediterraneo Noroccidental. Ph. D. thesis. Universitat Politècnica de Catalunya, Barcelona. 272 pp.
170. Velikova, V. and J. Larsen. 1999. The *Prorocentrum cordatum*/ *Prorocentrum minimum* taxonomic problem. *Grana* 38:108–112.
171. Vila, M., J. Camp, E. Garcés, M. Masó and M. Delgado. 2001. High resolution spatio-temporal detection of potentially harmful dinoflagellates in confined waters of the NW Mediterranean. *J. Plankton Res.* 23: 497–514.
172. Vila, M., E. Garcés and M. Masó. 2001. Potentially toxic epiphytic dinoflagellate assemblages on macroalgae in the NW Mediterranean. *Aquat. Microb. Ecol.* 26: 51–60.
173. Viličić, D. 1998. Phytoplankton taxonomy and distribution in the offshore southern Adriatic. *Nat. Croat.* 7: 127–141.
174. Viličić, D., N. Jasprica, M. Carić and Z. Burić. 1998. Taxonomic composition and seasonal distribution of microphytoplankton in Mali Ston Bay (Eastern Adriatic). *Acta Bot. Croat.* 57: 29–48.
175. Viličić, D., I. Marasović, and D. Mioković. 2002. Checklist of phytoplankton in the eastern Adriatic Sea. *Acta Bot. Croat.* 61: 57–91.
176. Zacharias, O. 1906. Über Periodizität, Variation und Verbreitung verschiedener Planktonwesen in südlichen Meeren. *Arch. Hydrob.* 1: 498–575.
177. Zimmermann, W. 1930. Neue und wenig bekannte Kleinalgen von Neapel, I-V. *Zeitschr. Bot.* 23: 419–442.
178. Zingone, A. and M. Montresor. 1988. *Protoperidinium parthenopes* sp. nov. (Dinophyceae), an intriguing dinoflagellate from the Gulf of Naples. *Cryptog. Algol.* 9: 117–125.

Appendix

- Alfinito, S. and G. Bazzichelli. 1988. Dinoflagellates from the coastal lakes of Latium, Italy. *Nova Hedwigia* 46: 357–368.
- Andreis, C. and C. Andreoli. 1975. SEM survey on Mediterranean species of *Podolampas*. *Giorn. Bot. Ital.* 109: 387–397.
- Athanassopoulos, G. 1930. Quelques observations sur le plancton des eaux grecques (aperçu général). *Bull. Inst. Océanogr. Monaco* 565: 1–8.
- Athanassopoulos, G. 1931. Dinoflagellés du golfe de Salonique. *Bull. Inst. Océanogr. Monaco* 576: 1–4.
- Athanassopoulos, G. 1931. Microfaune du golfe de Salonique, etc. *Bull. Inst. Océanogr. Monaco* 588: 1–25.
- Balle, P. 1961. Phytoplankton d'Ibiza et de la côte est et sud de la péninsule Ibérique. *Rapp. P. -v. Réun. Commn int. Explor. Mer Méditerr.* 16: 231–236.
- Bernhard, M. and L. Rampi. 1967. The annual cycle of the "Utermöhl-phytoplankton" in the Ligurian Sea in 1959 and 1962. *Pubbl. Staz. Zool. Napoli* 35: 137–169.
- Biecheler, B. 1934. Sur un dinoflagellé à capsule périnucléaire, *Plectodinium* n. gen. *nucleovalvatum* n. sp. et sur relations du Péridiniens avec les Radiolaires. *C. r. hebd. Séanc. Acad. Sci. Paris* 198: 404–406.
- Blasco, D. 1974. Étude du phytoplankton du Golfe de Petal-ion (Mer Egée) en Mars 1970. *Rapp. P. -v. Réun. Commn int. Explor. Mer Méditerr.* 22: 65–70.
- Böhm, A. 1931. Die Adriatischen Ceratien. *Bot. Arch.* 31: 349–385.
- Böhm, A. 1933. Beobachtungen an Adriatischen *Peridinium*-Arten. *Arch. Protistenk.* 80: 303–320.
- Bouquaheux, F. 1972. Variations morphologiques de *Pyrocystis fusiformis* Murray 1897 et *Pyrocystis elegans* Pavillard 1931. *Cah. Biol. Mar.* 13: 1–8.
- Cabrini, M., L. Milani, G. Honsell and S. Fonda-Umani. 1988. The phytoplankton in a station in the Gulf of Trieste from March 1986 to September 1988. *Nova Thalassia* 9: 11–51.
- Caroppo, C., R. Congestri and M. Bruno. 2001. Dynamics of *Dinophysis* sensu lato species (Dinophyceae) in a coastal Mediterranean environment (Adriatic Sea). *Cont. Shelf Res.* 21: 1839–1854.
- Delgado, M. 1987. Fitoplancton de las Bahías del Delta del Ebro. *Inv. Pesq.* 51: 517–548.
- Estrada, M. 1980. Composición taxonómica del fitoplancton en una zona próxima a la desembocadura del río Besós (Barcelona), de octubre de 1978 a marzo de 1979. *Inv. Pesq.* 44: 275–289.
- Estrada, M. 1982. Phytoplankton of the western Mediterranean at the beginning of autumn. *Int. revue ges. Hydrobiol.* 67: 517–532.
- Estrada, M. and J. Salat. 1989. Phytoplankton assemblages of the deep and surface waters layers in a Mediterranean frontal zone. *Sci. Mar.* 53: 203–214.

- Evagelopoulos, A. and G. Nikolaidis. 1996. Morphology of *Protoperidinium compressum* (Peridinales, Dinophyceae) in the North Aegean Sea, Greece. *Nova Hedwigia* 63: 301–307.
- Fiala, M., A. Sournia, H. Claustre, J. C. Marty, L. Prieur and G. Vétion. 1994. Gradients of phytoplankton abundance, composition and photosynthetic pigments across the Almeria front (SW Mediterranean Sea). *J. Mar. Syst.* 5: 223–233.
- Fraga, S., I. Bravo, M. Delgado, J. M. Franco and M. Zapata. 1995. *Gyrodinium impudicum* sp. nov. (Dinophyceae), a non toxic, chain-forming, red tide dinoflagellate. *Phycologia* 34: 514–521.
- Frigilos, N. and O. Gotsis-Skretas. 1987. Relationships of phytoplankton with certain environmental factors in the south Euboikos Gulf (Greece). *P.S.Z.N.I Mar. Ecol.* 8: 59–73.
- Fudge, H. 1977. The red tides of Malta. *Mar. Biol.* 39: 381–386.
- Garcés, E., M. Masó and J. Camp. 1999. A recurrent and localized dinoflagellate bloom in a Mediterranean beach. *J. Plankton Res.* 21: 2373–2391.
- Garcés, E., M. Masó, M. Vila and J. Camp. 2000. Harmful algae events in the Mediterranean: are they increasing?. *Harmful Algae News* 20: 10–11.
- Giacobbe, M.G. and X. M. Yang. 1999. The life history of *Alexandrium taylori* (Dinophyceae). *J. Phycol.* 35: 331–338.
- Gotsis-Skretas, O. and J. Satsmadjis. 1989/90. Notes on the environmental response of phytoplankton in Greek lagoons. *Oebalia* 16 (n.s): 99–115.
- Herrera, J. and R. Margalef. 1963. Hidrografía y fitoplancton de la costa comprendida desde Castellón a la desembocadura del Ebro de julio 1960 a junio de 1961. *Inv. Pesq.* 24: 33–112.
- Ignatiades, L. 1969. Annual cycle, species diversity and succession of phytoplankton in lower Saronicos Bay, Aegean Sea. *Mar. Biol.* 3: 196–200.
- Ignatiades, L. 1974. The phytoplankton distribution in a tidal area. *Bot. Mar.* 17: 55–59.
- Ignatiades, L. 1984. Coarse-scale horizontal distribution of phytoplankton in a semi-enclosed coastal area. *P.S.Z.N.I Mar. Ecol.* 5: 217–227.
- Ignatiades, L. 1994. Species dominance and niche breadth in “bloom” and “non bloom” phytoplankton populations. *Oceanol. Acta* 17: 89–96.
- Jaccarini, V., C. Agius and G. Léger. 1978. A preliminary survey of the phytoplankton of inshore marine waters from Malta (Central Mediterranean). *Mem. Biol. Marina Oceanogr.* 8: 1–12.
- Jacques, G. and M. O. Soyer. 1977. Nouvelles observations sur *Pseliodinium vaubanii* (Sournia) dinoflagellé libre planctonique. *Vie Milieu* 17: 83–90.
- Jasprica, N. and M. Carić. 1997. A comparison of phytoplankton biomass estimators and their environmental correlates in the Mali Ston Bay (Southern Adriatic). *P.S.Z.N.I Mar. Ecol.* 18: 35–50.
- Kim, K. T. 1980. Contribution à l'étude de l'écosystème pélagique dans les parages de Carry-le-Rouet (Méditerranée nord-occidentale). 3. Composition spécifique, biomasse et production du microplancton. *Téthys* 9: 317–344.
- Kimor, B. 1983. Distinctive features of the plankton of the eastern Mediterranean. *Ann. Inst. Oceanogr.* 59: 97–106.
- Kimor, B., T. Berman and A. Scheneller. 1987. Phytoplankton assemblages in the deep chlorophyll maximum layers of the Mediterranean coast of Israel. *J. Plankton Res.* 9: 433–443.
- Koray, T. 1987. One-celled microplankton species of Izmir Bay (Aegean Sea): A species list and a comparison with records of adjacent regions. *Doga, Turkish J. Biol.* 11: 130–146.
- Koray, T., B. Büyükişık, H. Parlak and Ş. Gökpınar. 1996. Eutrophication processes and algal blooms (red-tides) in Izmir Bay. *UNEP. MAP Tech. Rep. Ser.* 104: 1–26.
- Lalami-Taleb, R. 1971. Facteurs de repartition verticale du phytoplancton au large d'Alger. *Pelagos* 3 (3): 1–10.
- Léger, G. 1964. Les populations phytoplanctoniques en mer Ligure (radiale Monaco-Calvi) en juin 1963. *Bull. Inst. Océanogr. Monaco* 64: 1326.
- Léger, G. 1971. Les populations phytoplanctoniques ...[...]. Deuxième séjour. *Bull. Inst. Océanogr. Monaco* 70 (1413): 1–22.
- Léger, G. 1972. Les populations phytoplanctoniques...[...]. Quatrième séjour. *Bull. Inst. Océanogr. Monaco* 70 (1417): 1–56.
- López, J. 1966. Variación y regulación de la forma en el género *Ceratium*. *Inv. Pesq.* 30: 325–427.
- Marasović, I. 1983. Records of new phytoplankton species in the Adriatic. *Bilj. Notes Inst. Oceanogr. Ribar, Split* 52: 6 pp.
- Margalef, R. 1945. Fitoplancton nerítico de la costa Brava Catalana. *Inst. Español Est. Medit., Publ. Biol.* 1: 1–48.
- Margalef, R. 1951. Plancton recogido por los laboratorios costeros III. *Publ. Inst. Biol. Apl., Barcelona* 9: 49–62.
- Margalef, R. 1957. Fitoplancton de las costas de Blanes (Gerona) de agosto de 1952 a junio de 1956. *Inv. Pesq.* 8: 89–195.
- Margalef, R. 1961. Distribución ecológica y geográfica de las especies del fitoplancton marino. *Inv. Pesq.* 19: 80–101.
- Margalef, R. 1964. Fitoplancton de las costas de Blanes (provincia de Gerona, Mediterráneo Occidental) de julio de 1955 a junio de 1963. *Inv. Pesq.* 26: 131–164.
- Margalef, R. and J. Herrera. 1964. Hidrografía y fitoplancton de la costa comprendida entre Castellón y la desembocadura del Ebro, de julio 1961 a julio de 1962. *Inv. Pesq.* 26: 49–90.
- Margalef, R. and E. Morales. 1960. Fitoplancton de las costas de Blanes (Gerona) de julio de 1956 a junio 1959. *Inv. Pesq.* 16: 3–31.
- Margalef, R., F. Saiz, J. Rodríguez-Roda, R. Toll and J. Valles. 1952. Plancton recogido por los laboratorios costeros. *Publ. Inst. Biol. Apl., Barcelona* 10: 133–143.
- Margalef, R., J. Herrera and F. Arias. 1959. Hidrografía y fitoplancton de las costas de Castellón, de julio de 1957 a junio de 1958. *Inv. Pesq.* 15: 153–38.
- Micallef, H. and W. H. Bannister. 1969. On a dinoflagellate bloom (*Plectodinium nucleovolvatum* Biech.) causing ‘red water’ in Pieta Creek. *Experientia* 25: 655.
- Moncheva, S., O. Gotsis-Skretas, K. Pagou and A. Krastev. 2001. Phytoplankton blooms in Black Sea and Mediterranean coastal ecosystems subjected to anthropogenic

- eutrophication: similarities and differences. *Estuar. Coast. Shelf Sci.* 53: 281–295.
- Montresor, M. 1995. The life history of *Alexandrium pseudogonyaulax* (Gonyaulacales, Dinophyceae). *Phycologia* 34: 444–448.
- Moro, I., E. Moschin and C. Andreoli. 1994. Further surveys of *Pselodinium vaubanii* Sournia (Pyrrophyta) in the Adriatic Sea. *Giorn. Bot. Ital.* 128: 771–775.
- Muñoz, F., J. Herrera and R. Margalef. 1956. Fitoplancton de las costas de Castellón durante el año 1954. *Inv. Pesq.* 3: 75–90.
- Nikolaides, G. and M. Moustaka-Gouni. 1990. The structure and dynamics of phytoplankton assemblages from the inner part of the Thermaikos Gulf, Greece 1. Phytoplankton composition and biomass from May 1988 to April 1989. *Helgoländer Meeresunters.* 44: 487–501.
- Ounissi, M. and H. Fréhi. 1999. Variabilité du microphytoplancton et des Tintinnida (Protozoaires Ciliés) d'un secteur eutrophe du Golfe d'Annaba (Méditerranée sud-occidentale). *Cah. Biol. Mar.* 40: 141–153.
- Pagou, K. and O. Gotsis-Skretas. 1990. A comparative study of phytoplankton in Aegean, Levantine and Ionian seas during March–April 1986. *Thalassografica* 13: 13–18.
- Paulmier, G., B. Berland, C. Billard and E. Nezan. 1995. *Gyrodinium corsicum* nov. sp. (Gymnodiniales, Dinophycées), organisme responsable d'une "eau verte" dans l'étang marin de Diana (Corse) en Avril 1994. *Cryptogam. Algol.* 16: 77–94.
- Polat, S., E. Sarihan and T. Koray. 2000. Seasonal changes in the phytoplankton of the NE Mediterranean (Bay of Iskenderun). *Turkish J. Bot.* 24: 1–12.
- Rabatti, S., F. Bianchi, A. Boldrin, L. Da Ros, G. Socal and C. Totti. 1994. Particulate matter and phytoplankton in the Ionian Sea. *Oceanol. Acta* 17: 297–307.
- Rampi, L. 1939. Péridiniens rares ou intéressants dans la mer Ligure. *Bull. Soc. fr. Microscopie* 8: 106–112.
- Rampi, L. 1939. Ricerche sul fitoplancton del mare Ligure 1. I *Ceratium* delle acque di Sanremo. *Nuovo Giorn. Bot. Ital. N. Ser.* 46: 299–312.
- Rampi, L. 1943. Ricerche sul fitoplancton del mare Ligure 7. Le Goniaulacee delle acque di Sanremo. *Att. Soc. Ital. Sc. Nat. Milano* 82: 318–327.
- Rampi, L. 1945. Osservazioni sulla distribuzione qualitativa del fitoplancton nel mare Mediterraneo. *Att. Soc. Ital. Sc. Nat. Milano* 84: 105.
- Rampi, L. 1950. Ricerche sul fitoplancton del mare Ligure 9. I. *Peridinium* delle acque di Sanremo. *Atti Acc. Ligure Sc. Lett.* 7: 1–10.
- Rampi, L. 1954. Variazioni stagionali del fitoplancton di superficie raccolto nel golfo di Genova a Punta del Mesco (La Spezia). *Atti Acc. Ligure Sc. Lett. Genova* 10: 1–12.
- Revelante, N. and M. Gilmartin. 1977. The effects of Northern Italian rivers and eastern Mediterranean ingression on the phytoplankton of the Adriatic Sea. *Hydrobiologia* 56: 229–240.
- Revelante, N., T. William and M. Gilmartin. 1984. A numerical assessment of the temporal and spatial distribution of phytoplankton assemblages in the northern Adriatic Sea. *J. Exp. Mar. Biol. Ecol.* 77: 137–150.
- Romdhane, M. S., H. C. Eilersten, O. Daly Yahia-Kéfi and M. N. Daly Yahia. 1998. Toxic dinoflagellate blooms in Tunisian lagoons: causes and consequences for aquaculture. In: (B. Reguera, J. Blanco, M. L. Fernández and T. Wyatt, eds). *Harmful Algae*. Xunta de Galicia and IOC, Unesco. Paris. pp. 80–83.
- Tolomio, C. 1976. Variazioni stagionali e stazionali del fitoplancton nella Laguna di Marano (Udine). *Pubbl. Staz. Zool. Napoli* 40: 133–237.
- Tolomio, C. 1978. Catalogo delle diatomee e delle peridinee più significative segnalate nelle acque salmastre italiane. *Mem. Biol. Mar. Oceanogr.* 8: 129–150.
- Tolomio, C. 1988. Taxonomical and ultrastructural observation on a *Prorocentrum* (Dinophyceae) collected in southern Corsica coastal waters. *Bot. Mar.* 31: 223–229.
- Tolomio, C. and F. Cavolo. 1985. Presenza di *Coolia monotis* Meunier (Dinophyceae, Peridinales) nelle acque della Laguna di Venezia. *Oebalia* 11: 849–852.
- Tolomio, C. and M. Lenzi. 1996. "Colored waters" in the Orbetello and Burano Lagoons (northern Tyrrhenian Sea) from 1986 to 1989. *Vie Milieu* 46: 25–37.
- Totti, C., G. Civitarese, F. Acri, D. Barletta, G. Candelari, E. Paschini and A. Solazzi. 2000. Seasonal variability of phytoplankton populations in the middle Adriatic sub-basin. *J. Plankton Res.* 22: 1735–1756.
- Travers, A. and M. Travers. 1963. Contribution a l'étude du microplancton du canal de Corse. *Rapp. P. -v. Réunion. Comm. int. Explor. Mer Méditer.* 17: 487–493.
- Viličić, D. 1985. An examination of cell volume in dominant phytoplankton species of the Central and Southern Adriatic Sea. *Int. revue ges. Hydrobiol.* 70: 829–843.
- Viličić, D. 1989. Phytoplankton population density and volume as indicator of eutrophication in the eastern part of the Adriatic Sea. *Hydrobiologia* 174: 117–132.
- Viličić, D. 1991. A study of phytoplankton in the Adriatic Sea after the July 1984 bloom. *Int. revue ges. Hydrobiol.* 76: 197–211.
- Viličić, D. and N. Fanuko. 1984. A study of the phytoplankton in offshore waters of southern Adriatic, January 1980. *Nova Thalassia* 6: 67–82.
- Viličić, D., Z. Vučak, A. Skrivanić and Z. Gržetić. 1989. Phytoplankton blooms in the oligotrophic open south Adriatic waters. *Mar. Chem.* 28: 89–107.
- Zingone, A., M. Montresor and D. Marino. 1998. Morphological variability of the potentially toxic dinoflagellate *Dinophysys sacculus* (Dinophyceae) and its taxonomic relationships with *D. pavillardii* and *D. acuminata*. *Eur. J. Phycol.* 33: 259–273.