

Monitorización a largo plazo del fitoplancton de la bahía de Mahón, incluyendo mareas rojas.

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	ANUAL		VERANO		OTOÑO		INVIERNO		PRIMAVERA	
	Nº	%	Nº	%	Nº	%	Nº	%	Nº	%
DINOPHYCEAE										
<i>Akashiwo sanguinea</i> *	57	33.1%	38	55%	1	3.8%			18	31%
<i>Alexandrium minutum</i> *	29	16.9%	6	9%	4	15.4%	4	21%	15	26%
<i>Alexandrium</i> sp.*	57	33.1%	28	41%	6	23.1%	2	11%	21	36%
<i>Ceratium furca</i>	140	81.4%	55	80%	21	81%	13	68%	51	88%
<i>Ceratium fusus</i>	28	16%	9	12.9%	9	35%	5	26%	5	9%
<i>Dinophysis caudata</i> *	17	10%	12	17%	4	15%	1	5%		
<i>Dinophysis sacculus</i> *	81	47%	26	38%	9	35%	9	47%	37	64%
<i>Diplopsalis</i> sp.	19	11.0%	10	14%	4	15%	2	11%	3	5%
<i>Gonyaulax spinifera</i>	21	12.2%	7	10.0%	3	12%	3	16%	8	14%
<i>Gonyaulax</i> sp.	30	17%	4	10.0%	7	27%	4	21%	5	9%
<i>Gymnodinium</i> sp.	86	50.0%	40	58%	10	38%	9	47%	26	46%
<i>Gymnodinium</i> spp. (petites)	84	48.8%	36	52%	8	31%	3	16%	15	27%
<i>Gyrodinium fusiforme</i>	60	34.9%	23	33%	4	15%	4	21%	29	52%
<i>Gyrodinium</i> sp	28	16.3%	16	23%	3	12%	4	21%	10	18%
<i>Heterocapsa pygmaea</i>	45	26.2%	23	33%	2	8%			20	36%
<i>Heterocapsa</i> sp.	42	24.4%	14	20%	11	42%	4	21%	11	20%
<i>Karenia brevis</i> *	10	5.8%	3	4%	1	4%			6	11%
<i>Karenia mikimotoi</i> *	30	17.4%	15	22%	2	8%			13	23%
<i>Karlodinium group</i> *	44	25.6%	21	30%	4	15%			19	34%
<i>Oxytoxum</i> sp.	17	9.9%	8	12%	4	15%			4	7%
<i>Polykrikos</i> sp.	9	5.2%	3	4%					6	11%
<i>Prorocentrum arcuatum</i>	32	19%	17	25%	7	27%			8	14%
<i>Prorocentrum cordatum</i> *	82	48%	35	50%	17	65%	11	58%	19	33%
<i>Prorocentrum gibbosum</i>	36	20.9%	16	23%	1	4%	3	16%	16	28%
<i>Prorocentrum gracile</i>	42	24.4%	16	23%	5	19%	6	32%	15	27%
<i>Prorocentrum mexicanum</i>	14	8.1%	9	13%	1	4%	1	5%	3	5%
<i>Prorocentrum micans</i>	43	25.0%	10	14.3%	6	23%	12	63%	15	27%
<i>Prorocentrum triestinum</i>	54	31.4%	14	20%	10	38%	13	68%	17	30%
<i>Prorocentrum</i> sp.	26	15%	9	13%	4	15%	4	21%	6	10%
<i>Protoperdinium conicum</i>	8	5%	2	3%	2	8%	2	11%	2	4%
<i>Protoperdinium diabolium</i>	9	5.2%			2	8%	3	16%	4	7.1%
<i>Protoperdinium divergens</i>	38	22%	12	17%	5	19%	5	26%	16	29%
<i>Protoperdinium oceanicum</i>	13	8%	3	4%	4	15%	1	5%	5	9%
<i>Protoperdinium</i> sp.	121	70.3%	50	72%	17	65%	12	63%	42	75%
<i>Psellodinium</i> sp.	15	8.7%	7	10%	2	8%	2	11%	4	7%
<i>Scrippsiella trochoidea</i>	36	20.9%	14	20%	4	15%	1	5%	17	30%
<i>Scrippsiella</i> sp.	55	32.0%	22	32%	3	12%	2	11%	28	50%
<i>Torodinium</i> sp.	19	11.0%	9	13%	2	8%	1	5%	7	13%
<i>Tryblionella compressa</i>	22	12.8%	11	16%	1	4%	1	5%	9	16%
<i>Warnovia</i> sp.	23	13.4%	10	14%	1	4%			12	21%
Dinoflagelats tecats	8	4.7%	3	4%			3	16%	2	4%
Dino. Nues (Nano)	38	22.1%	11	16%	11	42%	9	47%	7	13%
No identificats	36	20.9%	8	12%	11	42%	9	47%	8	14%
BACILLARIOPHYCEAE										
CENTRALS										
<i>Bacteriastrium</i> sp.	16	9.3%	5	7%	4	15%	3	16%	4	7%
<i>Cerataulina dentata</i>	29	10%	16	23%	2	8%			11	20%
<i>Cerataulina pelagica</i>	47	27.3%	33	48%	4	15%	2	11%	8	14%
<i>Cerataulina</i> sp.	23	13%	6	9%	6	23%	2	11%	5	9%
<i>Chaetoceros mitra</i>	20	11.6%	9	13%	3	12%	1	5%	7	13%
<i>Chaetoceros tenuissimus</i>	42	24.4%	24	35%	1	4%			17	30%
<i>Chaetoceros</i> sp.	145	84.3%	61	88%	25	96%	14	74%	44	79%
<i>Dactyliosolen</i> sp.	37	21.5%	17	25%	7	27%	3	16%	10	18%
<i>Guinardia striata</i>	50	29.1%	22	32%	8	31%	8	42%	12	21%
<i>Guinardia</i> sp.	15	8.7%	4	6%	2	8%	6	32%	3	5%
<i>Leptocylindrus danicus</i>	73	42.4%	34	49%	12	46%	5	26%	22	39%
<i>Leptocylindrus minimus</i>	41	23.8%	15	22%	12	46%	7	37%	7	13%
<i>Minidiscus</i> sp.	18	10.5%	12	17%	1	4%			5	9%
<i>Proboscia alata</i>	45	26.2%	15	22%	8	31%	3	16%	19	34%
<i>Rhizosolenia</i> sp.	43	25.0%	3	4%	4	15%	9	47%	19	34%
<i>Thalassiosira</i> sp.	9	5.2%	2	3%	1	4%	4	21%	2	4%
<i>Triceratium</i> sp.	10	5.8%	6	9%					4	7%
Sense identificar	10	5.8%	1	1%	4	15%	3	16%	2	4%
PENNALS										
<i>Amphora</i> sp.	19	11.0%	11	16%	1	4%	1	5%	6	11%
<i>Asterionella</i> sp.	12	7%			8	31%	4	21%		
<i>Asterionellopsis glacialis</i>	15	9%	6	9%	7	27%	2	11%		
<i>Cylindrotheca closterium</i> (gran)	129	75.0%	56	81%	17	65%	11	58%	45	80%
<i>Cylindrotheca closterium</i> (petita)	33	19.2%	11	16%	3	12%			19	34%
<i>Licmophora</i> sp.	51	29.7%	15	22%	7	27%	8	42%	21	38%
<i>Lioloma</i> sp.	9	5.2%	3	4%	4	15%	1	5%	1	2%
<i>Navicula</i> sp.	30	17.4%	9	13%	4	15%	8	42%	9	16%
<i>Nitzschia longissima</i>	35	20.3%	11	16%	7	27%	8	42%	9	16%
<i>Nitzschia</i> sp.	55	32.0%	21	30%	10	38%	10	53%	14	25%
<i>Phaeodactylum tricornutum</i>	15	8.7%	5	7%	2	8%			8	14%
<i>Pleurosigma</i> sp.	47	27.3%	19	28%	13	50%	6	32%	10	18%
<i>Pseudo-nitzschia delicatissima</i> *	74	43.0%	31	45%	6	23%	5	26%	32	57%
<i>Pseudo-nitzschia fraudulenta</i> *	10	5.8%	3	4%	4	15%	2	11%	1	2%
<i>Pseudo-nitzschia pseudodelicatissima</i> *	27	15.7%	15	22%	4	15%	3	16%	5	9%
<i>Pseudo-nitzschia seriata</i> *	21	12.2%	6	9%	6	23%	2	11%	7	13%
<i>Pseudo-nitzschia</i> sp*	21	12.2%	7	10%	7	27%	3	16%	4	7%
<i>Tabellaria fenestrata</i>	9	5.2%	4	6%	3	12%	2	11%		
<i>Thalassionema frauenfeldii</i>	26	15.1%	6	9%	4	15%	1	5%	15	26.8%
<i>Thalassionema nitzschioides</i>	98	57.0%	45	65%	11	42%	10	53%	32	57.1%
Pennades >20 mm	31	18.0%	7	10%	4	15%	9	47%	11	19.6%
Pennades <20 mm	31	18.0%	9	13%	7	27%	6	32%	9	16.1%
No identificades	27	15.7%	8	12%	7	27%	6	32%	6	10.7%
ALTRES										
Chlorodendrophyceae										
<i>Tetraselmis</i> sp.	45	26.2%	15	22%	4	15%	2	11%	24	43%
Cryptophyceae										
No identificats	104	60.5%	38	55%	11	42%	16	84%	39	70%
<i>Leucocryptos marina</i>	34	19.8%	13	19%	4	15%	5	26%	12	21%
Cyanophyceae										
<i>Plagioselmis prolonga</i>	74	43.0%	38	55%	6	23%			30	54%
<i>Rhodomonas</i> sp.	35	20%	10	14%	5	19%	6	32%	14	24%
Dyctiochophyceae										
<i>Octatis</i> sp.	11	6%	4	6%	5	19%	2	11%		
Eubriophyceae										
<i>Ebria</i> sp.	10	5.8%	2	3%	6	23%	2	11%		
<i>Hermeslinum adriaticum</i>	25	15%	19	28%	5	19%	1	5%		
Phaeophyceae										
<i>Dictyocha fibula</i>	36	20.9%	5	7%	15	58%	12	63%	4	7%
Prymnesiophyceae										
<i>Acanthoica</i> sp.	44	25.6%	11	16%	8	31%	9	47%	16	29%
<i>Anoplosolenia brassiliensis</i>	49	28.5%	20	29%	10	38%	5	26%	14	25%
<i>Calciopappus caudatus</i>	27	15.7%	20	29%	6	23%			1	2%
<i>Calcosolenia</i> sp.	16	9.3%	7	10%	8	31%			1	2%
<i>Chrysochromulina</i> sp.	87	50.6%	41	59%	9	35%	3	16%	34	61%
<i>Coccosphaerales</i>	48	27.9%	17	25%	9	35%	10	53%	12	21%
<i>Ophiaster</i> sp.	23	13.4%	7	10%	12	46%	2	11%	2	4%
<i>Phaeocystis</i> sp.	66	38.4%	32	46%	4	15%	1	5%	29	52%
<i>Rhabdolithes</i> sp.	28	16.3%	11	16%	9	35%			8	14%
<i>Syracosphaera pulchra</i>	28	16%	17	25%	4	15%	3	16%	4	7%
<i>Syracosphaera</i> sp	10	6%	3	4%	4	15%	1	5%	2	4%
Pyramimonadophyceae										
<i>Pyramimonas</i> sp.	78	45.3%	41	59%	4	15%	5	26%	28	50%
Raphidophyceae										
<i>Heterosigma akashiwo</i>	9	5.2%	5	7%			2	11%	2	4%
Nanoflagel.lats >5mm	149	86.6%	62	90%	20	77%	17	89%	50	89%
Ultraflagel.lats <5mm	121	70.3%	53	77%	17	65%	7	37%	44	79%
No identificats	46	26.7%	15	22%	11	42%	8	42%	12	21%

Tabla: Lista de las especies de fitoplancton más frecuentes. Nº se refiere al nº de veces que aparece en los muestreos, mientras que % se refiere al porcentaje respecto del número de muestreos. Se presentan los taxones que han aparecido como mínimo un 5% de las veces. Las especies marcadas con asterisco son especies potencialmente tóxicas o formadoras de proliferaciones según la IOC.



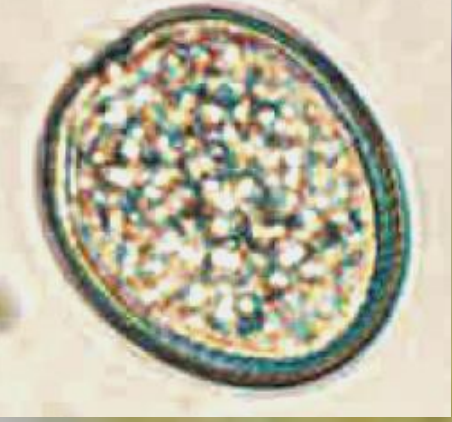
Akashiwo sanguinea



Ceratium furca



Protoperdinium elegans



Prorocentrum lima



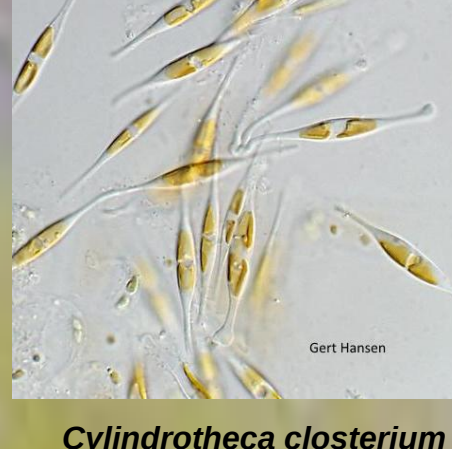
Dinophysis sp.



Prorocentrum sp.



Chaetoceros sp.



Cylindrotheca closterium