



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Monitoreo de Fitoplancton Potencialmente Tóxico
Departamento de Ica: 006 Bahía Paracas, 003 Bahía Lagunillas, 005 Bahía Independencia
Análisis Semicuantitativo de Fitoplancton / Abundancia Relativa (células/campo)
1ra Semana



Semana: 01 al 07 de noviembre de 2015

Fecha: 06 de noviembre de 2015

ZONAS	006 BAHIA PARACAS	003 BAHIA LAGUNILLAS			005 BAHIA INDEPENDENCIA					
AREAS	ATENAS	ARQUILLO	ZÁRATE	LA MINA LAGUNILLAS	LAGUNA GRANDE	CANASTONES	STA. ROSA	TUNGA - EL QUESO	LA PAMPA	EL ANCLA-CHUCCIO
ESTACION	01-A-PAR	01-B-LAG	04-B-LAG	02-B-LAG	01-A-IND	04-A-IND	07-A-IND	05-A-IND	08-A-IND	03-A-IND
PROFUNDIDAD (m)	....	....	....	....	....	....	....	0-22	....	....
TEMPERATURA (°C)	....	....	....	....	....	....	....	16.6	....	....
DIATOMEAS										
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	1	S/M	S/M
DINOFLAGELADOS										
<i>Alexandrium minutum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium</i> sp.	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	1	S/M	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	1	S/M	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Karenia</i> sp.	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Karlodinium</i> cf. <i>veneficum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Protoperdinium crassipes</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
FITOFLAGELADOS										
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M

Escala relativa de abundancia: Ausente:0, Presente:1, Escaso:2, Abundante:3, Muy Abundante:4

S/M: Sin Monitoreo

Fuente: Entidad de Apoyo CERPER S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamento de Ica: 006 Bahía Paracas, 003 Bahía Lagunillas, 005 Bahía Independencia

Análisis Semicuantitativo de Fitoplancton / Abundancia Relativa (células/campo)

2da Semana



Semana: 08 al 14 de noviembre de 2015

ZONAS	006 BAHIA PARACAS	003 BAHIA LAGUNILLAS			005 BAHIA INDEPENDENCIA					
AREAS	ATENAS	ARQUILLO	ZÁRATE	LA MINA LAGUNILLAS	LAGUNA GRANDE	CANASTONES	STA. ROSA	TUNGA - EL QUESO	LA PAMPA	EL ANCLA-CHUCCIO
ESTACION	01-A-PAR	01-B-LAG	04-B-LAG	02-B-LAG	01-A-IND	04-A-IND	07-A-IND	05-A-IND	08-A-IND	03-A-IND
PROFUNDIDAD (m)	....	....	....	....	....	....	....	....	....	....
TEMPERATURA (°C)	....	....	....	....	....	....	....	....	....	....
DIATOMEAS										
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
DINOFLAGELADOS										
<i>Alexandrium minutum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Alexandrium</i> sp.	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Karenia</i> sp.	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Karlodinium</i> cf. <i>veneficum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Protoperidinium crassipes</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
FITOFLAGELADOS										
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M

Escala relativa de abundancia: Ausente:0, Presente:1, Escaso:2, Abundante:3, Muy Abundante:4

S/M: Sin Monitoreo



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Monitoreo de Fitoplancton Potencialmente Tóxico

Departamento de Ica: 006 Bahía Paracas, 003 Bahía Lagunillas, 005 Bahía Independencia

Análisis Semicuantitativo de Fitoplancton / Abundancia Relativa (células/campo)

3ra Semana



Semana: 15 al 21 de noviembre de 2015

Fecha: 19 de noviembre de 2015

ZONAS	006 BAHIA PARACAS	003 BAHIA LAGUNILLAS			005 BAHIA INDEPENDENCIA					
AREAS	ATENAS	ARQUILLO	ZÁRATE	LA MINA LAGUNILLAS	LAGUNA GRANDE	CANASTONES	STA. ROSA	TUNGA - EL QUESO	LA PAMPA	EL ANCLA-CHUCCO
ESTACION	01-A-PAR	01-B-LAG	04-B-LAG	02-B-LAG	01-A-IND	04-A-IND	07-A-IND	05-A-IND	08-A-IND	03-A-IND
PROFUNDIDAD (m)	....	....	....	....	....	....	....	0-22	....	....
TEMPERATURA (°C)	....	....	....	....	....	....	....	16.9	....	....
DIATOMEAS										
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	1	S/M	S/M
DINOFLAGELADOS										
<i>Alexandrium minutum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium</i> sp.	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	1	S/M	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Karenia</i> sp.	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Karlodinium</i> cf. <i>veneficum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Protoperdinium crassipes</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
FITOFLAGELADOS										
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M

Escala relativa de abundancia: Ausente:0, Presente:1, Escaso:2, Abundante:3, Muy Abundante:4

S/M: Sin Monitoreo

Fuente: Entidad de Apoyo CERPER S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamento de Ica: 006 Bahía Paracas, 003 Bahía Lagunillas, 005 Bahía Independencia

Análisis Semicuantitativo de Fitoplancton / Abundancia Relativa (células/campo)

4ta Semana



Semana: 22 al 28 de noviembre de 2015

ZONAS	006 BAHIA PARACAS	003 BAHIA LAGUNILLAS			005 BAHIA INDEPENDENCIA					
AREAS	ATENAS	ARQUILLO	ZÁRATE	LA MINA LAGUNILLAS	LAGUNA GRANDE	CANASTONES	STA. ROSA	TUNGA - EL QUESO	LA PAMPA	EL ANCLA-CHUCCIO
ESTACION	01-A-PAR	01-B-LAG	04-B-LAG	02-B-LAG	01-A-IND	04-A-IND	07-A-IND	05-A-IND	08-A-IND	03-A-IND
PROFUNDIDAD (m)	....	....	....	....	....	....	....	....	....	....
TEMPERATURA (°C)	....	....	....	....	....	....	....	....	....	....
DIATOMEAS										
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
DINOFLAGELADOS										
<i>Alexandrium minutum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Alexandrium</i> sp.	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Karenia</i> sp.	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Karlodinium</i> cf. <i>veneficum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Protoperdinium crassipes</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
FITOFLAGELADOS										
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M

Escala relativa de abundancia: Ausente:0, Presente:1, Escaso:2, Abundante:3, Muy Abundante:4

S/M: Sin Monitoreo



Monitoreo de Fitoplancton Potencialmente Tóxico

Análisis Semicuantitativo de Fitoplancton / Abundancia Relativa (células/campo)

5ta Semana



Fecha: 03 de diciembre de 2015

ZONAS	006 BAHIA PARACAS	003 BAHIA LAGUNILLAS			005 BAHIA INDEPENDENCIA					
AREAS	ATENAS	ARQUILLO	ZÁRATE	LA MINA LAGUNILLAS	LAGUNA GRANDE	CANASTONES	STA. ROSA	TUNGA - EL QUESO	LA PAMPA	EL ANCLA-CHUCCIO
ESTACION	01-A-PAR	01-B-LAG	04-B-LAG	02-B-LAG	01-A-IND	04-A-IND	07-A-IND	05-A-IND	08-A-IND	03-A-IND
PROFUNDIDAD (m)	....	....	....	0-5	....	....	....	....	....	....
TEMPERATURA (°C)	....	....	....	20.6	....	....	....	....	....	....
DIATOMEAS										
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	1	S/M	S/M	S/M	S/M	S/M	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
DINOFLAGELADOS										
<i>Alexandrium minutum</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Alexandrium</i> sp.	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	1	S/M	S/M	S/M	S/M	S/M	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	1	S/M	S/M	S/M	S/M	S/M	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	1	S/M	S/M	S/M	S/M	S/M	S/M
<i>Karenia</i> sp.	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Karlodinium</i> cf. <i>veneficum</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M
<i>Protoperidinium crassipes</i>	S/M	S/M	S/M	1	S/M	S/M	S/M	S/M	S/M	S/M
FITOFLAGELADOS										
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	0	S/M	S/M	S/M	S/M	S/M	S/M

Escala relativa de abundancia: Ausente:0, Presente:1, Escaso:2, Abundante:3, Muy Abundante:4

S/M: Sin Monitoreo

Fuente: Entidad de Apoyo CERPER S.A.