



# 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: 28 de diciembre de 2014 al 03 de enero 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										
<i>Grupo Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Grupo 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 sp.</i>	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 sp.</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Karlodinium cf. 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
FITOFAGELADOS										
<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



# 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

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

2da Semana



Semana: 04 al 10 de enero de 2015

Fechas: 05 y 06 de enero 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)	0-7	....	....	....	....	....	....	0-15	....	....
TEMPERATURA (°C)	20.3	....	....	....	....	....	....	16.3	....	....
DIATOMEAS										
<i>Grup Pseudo-nitzschia delicatissima</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Grup Pseudo-nitzschia seriata</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
DINOFLAGELADOS										
<i>Alexandrium minutum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium monilatum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium ostenfeldii</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium peruvianum</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium sp.</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Azadinium spinosum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Cochlodinium polykrikoides</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Dinophysis acuminata</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	1	S/M	S/M
<i>Dinophysis caudata</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Dinophysis rotundata</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Dinophysis tripos</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Gonyaulax spinifera</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Karenia sp.</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Karlodinium cf. veneficum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Lingulodinium polyedrum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Prorocentrum lima</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Prorocentrum minimum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Protoceratium reticulatum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Proterodinium crassipes</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
FITOFLAGELADOS										
<i>Heterosigma akashiwo</i>	0	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.



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## 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)

3ra Semana



Semana: 11 al 17 de enero de 2015

Fechas: 14 y 15 de enero 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)	0-7	....	....	....	....	....	....	0-15	....	....
TEMPERATURA (°C)	18.1	....	....	....	....	....	....	16.9	....	....
DIATOMEAS										
<i>Grupo Pseudo-nitzschia delicatissima</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Grupo Pseudo-nitzschia seriata</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
DINOFLAGELADOS										
<i>Alexandrium minutum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium monilatum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium ostenfeldii</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium peruvianum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium</i> sp.	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Azadinium spinosum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Cochlodinium polykrikoides</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Dinophysis acuminata</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	1	S/M	S/M
<i>Dinophysis caudata</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Dinophysis rotundata</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Dinophysis tripos</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Gonyaulax spinifera</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Karenia</i> sp.	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Karlodinium cf. veneficum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Lingulodinium polyedrum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Prorocentrum lima</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Prorocentrum minimum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Protoceratium reticulatum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Protoperdinium crassipes</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
FITOFAGELADOS										
<i>Heterosigma akashiwo</i>	0	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: 18 al 24 de enero 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)	....	....	....	....	....	....	....	....	....	....
<b>DIATOMEAS</b>										
<i>Grupu Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Grupu Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<b>DINOFLAGELADOS</b>										
<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 sp.</i>	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 sp.</i>	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M	S/M
<i>Karlodinium cf. 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
<b>FITOFLAGELADOS</b>										
<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



# 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)

5ta Semana



Semana: 25 al 31 de enero de 2015

Fechas: 29 y 30 de enero 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)	0-7	....	....	....	....	....	....	0-15	....	....
TEMPERATURA (°C)	18.9	....	....	....	....	....	....	16.8	....	....
DIATOMEAS										
<i>Grupu Pseudo-nitzschia delicatissima</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Grupu Pseudo-nitzschia seriata</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	1	S/M	S/M
DINOFLAGELADOS										
<i>Alexandrium minutum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium monilatum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium ostenfeldii</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium peruvianum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Alexandrium sp.</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Azadinium spinosum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Cochlodinium polykrikoides</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Dinophysis acuminata</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	1	S/M	S/M
<i>Dinophysis caudata</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	1	S/M	S/M
<i>Dinophysis rotundata</i>	1	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Dinophysis tripos</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Gonyaulax spinifera</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Karenia sp.</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Karlodinium cf. veneficum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Lingulodinium polyedrum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Prorocentrum lima</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Prorocentrum minimum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Protoceratium reticulatum</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
<i>Protoperdinium crassipes</i>	0	S/M	S/M	S/M	S/M	S/M	S/M	0	S/M	S/M
FITOFAGELADOS										
<i>Heterosigma akashiwo</i>	0	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 CERPES S.A.