



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

1ra Semana



Semana: 07 al 13 de junio de 2015

Fechas: 09, 12 y 13 de junio de 2015

ZONAS	002 GUAYNUNA															004 ISLA TORTUGAS			009 SALINAS			010 NONURA								
ESTACION	01-A-GUA**			01-B-GUA**			01-C-GUA**			02-D-GUA**			02-E-GUA**			01-A-TOR			01-A-SAL**			01-A-NON*			01-B-NON*			01-C-NON*		
PROFUNDIDAD (m)	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15
TEMPERATURA (°C)	23.2	22.9	21.8	23.0	22.7	22.1	22.9	22.8	22.2	21.4	21.3	20.9	21.4	21.3	20.8	....	....	....	23.5	23.1	23.0	21.6	21.4	21.3	21.8	21.2	21.2	21.7	20.9	21.4
DIATOMEAS																														
Grupo <i>Pseudo-nitzschia delicatissima</i>	9680	6000	2080	3680	3360	1600	480	4640	3920	17200	8960	4160	9040	5680	4560	S/M	S/M	S/M	360	1200	1320	13920	10840	6920	13160	10480	5000	10320	12040	5400
Grupo <i>Pseudo-nitzschia seriata</i>	200	240	0	160	400	280	0	80	80	1160	640	400	400	160	200	S/M	S/M	S/M	160	120	120	8480	8160	4760	6040	4200	4280	7520	6880	4640
DINOFLAGELADOS																														
<i>Alexandrium minutum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium monilatum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium ostenfeldii</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium peruvianum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Azadinium spinosum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cochlodinium polykrikoides</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis acuminata</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	40	0	0	0	0	0	0
<i>Dinophysis caudata</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis rotundata</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis tripos</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Gonyaulax spinifera</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karenia sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karlodinium cf. veneficum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Lingulodinium polyedrum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum lima</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum minimum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	200	80	80	40	40	0	0	0	0	0	0	0
<i>Protoceratium reticulatum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Protoperidinium crassipes</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
FITOFLAGELADOS																														
<i>Heterosigma akashiwo</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

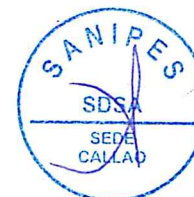
Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

1ra Semana



Semana: 07 al 13 de junio de 2015

Fechas: 11, 12 y 13 de junio de 2015

ZONAS	017 CULEBRAS															012 BAHIA DE SECHURA			
ESTACION	01-A-CUL			01-B-SAM**			01-C-SAM*			02-A-SAM**			02-B-SAM**			12-B-SECH**			13-A-SECH
PROFUNDIDAD (m)	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....
TEMPERATURA (°C)	....	....	....	22.3	22.2	22.0	22.8	20.2	18.4	23.7	23.5	23.1	23.9	23.3	23.2	22.5	22.0	21.5	....
DIATOMEAS																			
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	280	1040	840	400	1720	480	4480	2320	1720	1280	1120	1760	120	160	960	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	2160	2640	2520	800	2800	400	1840	2120	2800	2160	2720	3800	1240	1680	1880	S/M
DINOFLAGELADOS																			
<i>Alexandrium minutum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium</i> sp.	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	0	0	0	0	40	0	160	0	0	80	0	0	0	0	0	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	360	200	40	0	40	0	640	280	120	120	80	80	0	0	0	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Karenia</i> sp.	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Karlodinium</i> cf. <i>veneficum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	3080	1960	840	68613	25360	1680	29840	16240	4480	27840	12960	800	40	0	0	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Protoperdinium crassipes</i>	S/M	S/M	S/M	80	0	0	0	0	0	40	0	0	0	80	0	0	0	0	S/M
FITOFAGELADOS																			
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

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Análisis Cuantitativo de Fitoplancton (N° cel/L)

2da Semana



Semana: 14 al 20 de junio de 2015

Fechas: 16 y 19 de junio de 2015

ZONAS	002 GUAYNUNA															004 ISLA TORTUGAS			009 SALINAS			010 NONURA								
ESTACION	01-A-GUA**			01-B-GUA**			01-C-GUA**			02-D-GUA**			02-E-GUA**			01-A-TOR			01-A-SAL**			01-A-NON*			01-B-NON*			01-C-NON*		
PROFUNDIDAD (m)	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15
TEMPERATURA (°C)	21.7	19.4	19.2	21.3	20.1	19.2	21.3	19.6	19.1	21.9	20.0	19.7	21.9	20.0	19.3	....	....	....	22.5	21.0	20.0	20.9	20.5	20.9	21.4	21.3	21.0	21.3	20.6	20.4
DIATOMEAS																														
Grupo <i>Pseudo-nitzschia delicatissima</i>	543999	225441	25680	367567	147027	46559	174799	111087	48192	1022654	125790	5280	437813	111087	14400	S/M	S/M	S/M	105360	47680	20240	560	240	160	1200	320	680	600	1200	640
Grupo <i>Pseudo-nitzschia seriata</i>	1800	320	240	800	840	80	320	240	600	2120	1000	200	1000	160	0	S/M	S/M	S/M	4640	1800	1680	640	2920	320	560	960	1560	1320	1400	640
DINOFLAGELADOS																														
<i>Alexandrium minutum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium monilatum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium ostenfeldii</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium peruvianum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Azadinium spinosum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cochlodinium polykrikoides</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis acuminata</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	40	0	40	40	0	0	0	0
<i>Dinophysis caudata</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	40	0	0
<i>Dinophysis rotundata</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis tripos</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	40	0	0	0	40
<i>Gonyaulax spinifera</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karenia</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karlodinium</i> cf. <i>veneficum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Lingulodinium polyedrum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum lima</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum minimum</i>	0	0	0	40	0	0	0	0	40	0	0	0	0	0	0	S/M	S/M	S/M	160	120	0	40	0	0	80	0	40	0	0	0
<i>Protoceratium reticulatum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Protoperidinium crassipes</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
FITOFLAGELADOS																														
<i>Heterosigma akashiwo</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

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Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

2da Semana



Semana: 14 al 20 de junio de 2015

Fechas: 18 y 20 de junio de 2015

ZONAS	017 CULEBRAS			011 BAHIA SAMANCO												012 BAHIA DE SECHURA			
ESTACION	01-A-CUL			01-B-SAM**			01-C-SAM*			02-A-SAM**			02-B-SAM**			12-B-SECH**			13-A-SECH
PROFUNDIDAD (m)	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....
TEMPERATURA (°C)	....	....	....	24.9	22.6	21.6	23.8	21.9	20.7	21.8	21.5	20.9	23.9	22.9	21.8	21.1	19.6	19.2	....
DIATOMEAS																			
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	920	2200	4960	11040	19760	19920	17600	26480	10400	8240	39360	25040	360	80	0	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	14320	18320	640	19440	17120	18800	5440	25040	1640	2600	17360	1200	1680	0	120	S/M
DINOFLAGELADOS																			
<i>Alexandrium minutum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium sp.</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	80	40	0	160	80	80	0	80	0	0	480	40	0	0	0	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	240	40	0	480	280	280	0	120	0	0	200	40	0	0	0	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Karenia sp.</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Karlodinium cf. veneticum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	11360	5520	40	72697	9200	32560	80	9120	40	1520	19680	3080	0	0	0	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	120	40	0	400	200	280	0	40	0	0	160	0	0	0	0	S/M
<i>Protoperdinium crassipes</i>	S/M	S/M	S/M	0	40	0	0	40	0	0	40	0	0	80	40	0	0	0	S/M
FITOFLAGELADOS																			
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

3ra Semana



Semana: 21 al 27 de junio de 2015

Fechas: 23 y 26 de junio de 2015

ZONAS	002 GUAYNUNA															004 I. TORTUGAS	009 SALINAS			010 NONURA								
ESTACION	01-A-GUA**			01-B-GUA**			01-C-GUA**			02-D-GUA**			02-E-GUA**			01-A-TOR	01-A-SAL**			01-A-NON*			01-B-NON*			01-C-NON*		
PROFUNDIDAD (m)	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15
TEMPERATURA (°C)	20.6	19.5	19.1	20.2	19.1	19.0	20.2	19.5	19.1	18.9	18.6	18.6	18.8	18.6	18.6	....	21.5	20.5	20.0	21.7	20.7	20.5	21.8	20.4	20.1	21.8	19.8	19.8
DIATOMEAS																												
Grupo <i>Pseudo-nitzschia delicatissima</i>	991615	243411	54727	534198	66162	114354	323459	184600	93177	231976	280985	72697	122522	205838	231976	S/M	764540	1133741	967110	2120	2400	5800	2280	4280	7920	1800	1800	4080
Grupo <i>Pseudo-nitzschia seriata</i>	44880	11120	1760	161730	1040	1800	70246	16320	3080	127423	36560	4880	29840	2200	24080	S/M	20720	32640	18000	4240	4560	5080	4160	5040	9160	5480	4200	4880
DINOFLAGELADOS																												
<i>Alexandrium minutum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium monilatum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium ostenfeldii</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium peruvianum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium sp.</i>	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	40	0	0	0	0	0	0	0	0	0	0	0
<i>Azadinium spinosum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cochlodinium polykrikoides</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis acuminata</i>	400	0	0	160	0	0	120	0	0	80	0	0	360	0	80	S/M	80	40	40	0	0	0	0	40	0	0	0	0
<i>Dinophysis caudata</i>	0	0	0	0	0	0	80	0	0	0	0	0	0	0	0	S/M	0	0	0	80	80	0	40	40	40	0	80	0
<i>Dinophysis rotundata</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis tripos</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Gonyaulax spinifera</i>	240	0	0	80	40	0	0	0	0	0	40	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karenia sp.</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karlodinium cf. veneficum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Lingulodinium polyedrum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum lima</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum minimum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	320	280	0	200	120	40	0	80	0
<i>Protoceratium reticulatum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Protoperdinium crassipes</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	40	0	0	0	0
FITOFAGELADOS																												
<i>Heïerosigma akashiwo</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	0	0	0	0	0	0	0	0	0	0	0	0

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (N° cel/L)

3ra Semana



Semana: 21 al 27 de junio de 2015

Fechas: 25 y 27 de junio de 2015

ZONAS	017 CULEBRAS			011 BAHIA SAMANCO												012 BAHIA DE SECHURA			
ESTACION	01-A-CUL			01-B-SAM**			01-C-SAM*			02-A-SAM**			02-B-SAM**			12-B-SECH**			13-A-SECH
PROFUNDIDAD (m)	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....
TEMPERATURA (°C)	....	....	....	21.4	20.6	19.2	22.8	21.4	20.6	22.8	21.5	20.9	22.4	21.4	20.8	22.6	22.8	20.7	....
DIATOMEAS																			
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	1680	25920	23680	1400	28800	20000	7360	23040	164997	45360	473753	321826	7520	400	80	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	13440	18960	15600	7440	28480	22240	33840	29920	23280	36960	22880	64528	1200	230	0	S/M
DINOFLAGELADOS																			
<i>Alexandrium minutum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium</i> sp.	S/M	S/M	S/M	40	0	0	0	0	0	40	0	0	0	0	0	0	0	0	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	0	80	0	0	40	0	40	40	40	120	80	40	0	0	0	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	280	0	0	80	160	0	240	40	0	80	0	0	0	0	0	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	0	0	0	0	80	0	0	0	40	40	80	40	0	0	0	S/M
<i>Karenia</i> sp.	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Karlodinium</i> cf. <i>veneficum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	520	40	0	200	40	0	2800	0	200	1400	120	0	40	0	40	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	2040	0	0	400	40	40	240	40	240	280	80	120	0	0	0	S/M
<i>Protoperdinium crassipes</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
FITOFLAGELADOS																			
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

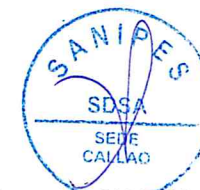
Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Secura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

4ta Semana



Semana: 28 de junio al 04 de julio de 2015

Fechas: 30 de junio y 02, 03 y 04 de julio de 2015

ZONAS	002 GUAYNUNA															004 ISLA TORTUGAS			009 SALINAS			010 NONURA								
ESTACION	01-A-GUA**			01-B-GUA**			01-C-GUA**			02-D-GUA**			02-E-GUA**			01-A-TOR			01-A-SAL **			01-A-NON*			01-B-NON*			01-C-NON*		
PROFUNDIDAD (m)	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15
TEMPERATURA (°C)	20.0	19.1	18.4	19.5	18.9	18.6	19.8	19.1	18.8	19.1	18.4	17.8	18.8	18.5	18.3	....	....	....	20.9	19.4	18.8	20.6	20.2	19.9	20.7	20.4	19.8	20.6	20.3	20.0
DIATOMEAS																														
Grupo <i>Pseudo-nitzschia delicatissima</i>	2400	2240	2040	6000	6560	4160	13200	1360	2160	0	1720	1680	1760	8160	6800	S/M	S/M	S/M	10240	21440	9840	1520	3120	640	3280	1280	1040	1840	2200	760
Grupo <i>Pseudo-nitzschia seriata</i>	102919	22240	10800	28880	6960	7840	57280	9600	3120	169898	215639	71880	187868	128240	45600	S/M	S/M	S/M	278534	86640	19280	3400	6200	2960	4960	2160	3440	4680	3920	2760
DINOFITAGELADOS																														
<i>Alexandrium minutum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium monilatum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium ostenfeldii</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium peruvianum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Alexandrium</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Azadinium spinosum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Cochlodinium polykrikoides</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis acuminata</i>	0	40	0	0	0	0	0	0	0	160	40	40	240	0	0	S/M	S/M	S/M	0	0	0	0	40	0	120	80	40	80	0	40
<i>Dinophysis caudata</i>	0	0	0	0	0	0	80	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	120	0	40	120	0	0
<i>Dinophysis rotundata</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Dinophysis tripos</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	40	0	0
<i>Gonyaulax spinifera</i>	0	0	0	0	0	0	40	0	0	40	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	120	0	0	0	0	0
<i>Karenia</i> sp.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Karlodinium</i> cf. <i>veneficum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Lingulodinium polyedrum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum lima</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Prorocentrum minimum</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	40	80	40	0	40	40
<i>Protoceratium reticulatum</i>	0	0	0	0	0	0	0	0	0	80	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0
<i>Protoperdinium crassipes</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	40
FITOFITAGELADOS																														
<i>Heterosigma akashiwo</i>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.



ORGANISMO NACIONAL DE SANIDAD PESQUERA

SUB DIRECCIÓN DE SUPERVISIÓN ACUÍCOLA

Concesiones de Cultivo de *Argopecten purpuratus* "concha de abanico"

Monitoreo de Fitoplancton Potencialmente Tóxico

Departamentos de Piura, La Libertad y Ancash / Zonas: 002 Guaynuma, 004 Isla Tortugas, 009 Salinas, 010 Nonura, 017 Culebras, 011 Bahía Samanco, 012 Bahía Sechura

Análisis Cuantitativo de Fitoplancton (Nº cel/L)

4ta Semana



Semana: 28 de junio al 04 de julio de 2015

Fechas: 03 y 04 de julio de 2015

ZONAS	017 CULEBRAS			011 BAHIA SAMANCO												012 BAHIA DE SECHURA			
ESTACION	01-A-CUL			01-B-SAM**			01-C-SAM*			02-A-SAM**			02-B-SAM**			12-B-SECH**			13-A-SECH
PROFUNDIDAD (m)	....	....	....	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	0-5	5-10	10-15	....
TEMPERATURA (°C)	....	....	....	20.2	20.1	18.3	22.3	20.6	19.7	21.2	20.2	20.0	20.3	20.0	19.4	19.7	19.5	20.2	....
DIATOMEAS																			
Grupo <i>Pseudo-nitzschia delicatissima</i>	S/M	S/M	S/M	2480	4800	10000	40	1480	9920	6640	10640	28240	1400	8240	7920	160	160	240	S/M
Grupo <i>Pseudo-nitzschia seriata</i>	S/M	S/M	S/M	80	640	2560	40	880	5920	240	2280	6160	2360	6160	6880	3120	1360	480	S/M
DINOFLAGELADOS																			
<i>Alexandrium minutum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium monilatum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium ostenfeldii</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium peruvianum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Alexandrium</i> sp.	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Azadinium spinosum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Cochlodinium polykrikoides</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis acuminata</i>	S/M	S/M	S/M	40	40	0	0	40	0	80	0	0	0	40	0	0	0	0	S/M
<i>Dinophysis caudata</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis rotundata</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Dinophysis tripos</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Gonyaulax spinifera</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	80	0	0	0	0	0	S/M
<i>Karenia</i> sp.	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Karlodinium</i> cf. <i>veneficum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Lingulodinium polyedrum</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum lima</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Prorocentrum minimum</i>	S/M	S/M	S/M	0	0	0	80	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Protoceratium reticulatum</i>	S/M	S/M	S/M	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	S/M
<i>Protopeperidium crassipes</i>	S/M	S/M	S/M	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0	S/M
FITOFLAGELADOS																			
<i>Heterosigma akashiwo</i>	S/M	S/M	S/M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	S/M

S/M: Sin Monitoreo

Fuente: * Entidad de Apoyo CERPER S.A.

** Entidad de Apoyo ACUILAB S.A.