

1 *Chattonella*  
 , 0 ( ), 1 ( ), 3 , 2017 6 26 29 7 24 28  
 Stn. A, Stn. B ( 3 5 m), , 6 26 7 24  
 , 6 27 7 25 2  
 m) , 2 m, 4 m 3 , 4 m , bottom ( 3 5  
 4 ) , Stn. A ( )  
 ) MPN

2 *Chattonella*  
 2017 6 26 7 3 , 7 24 8 1 , 2 m 1  
 , 1), 2) , 3  
 25°C, 200  $\mu\text{mol m}^{-2} \text{s}^{-1}$ , 14 h L:10 h D ,  
 3 ,  
 3 , 2017 7 24 31 7 24 , 0 ( 2.5 m,  
 1 m ) , 1, 4, 7 ( 4 m) , 2.5 kg  
 , stn. X, 0.1  $\text{g L}^{-1}$  Stn. Y  
 , 1 m ,

1 *Chattonella*  
 6 St. A 0 m 2 m 20.6 24.6°C, 30.3 33.2 3  
 3 Si:N , 2 m 4 m SiO<sub>2</sub>-Si 0 0  
 Stn. A 1.68 x 10<sup>5</sup> 3.00 x 10<sup>5</sup> MPN g<sup>-1</sup> 1590 2160 cells mL<sup>-1</sup> , 3  
 2 3620 3980 cells mL<sup>-1</sup>  
*Chaetoceros* *Skeletonema* *Chattonella* 0  
 91 cells mL<sup>-1</sup> (2 m) , 3 0 2 cells mL<sup>-1</sup>  
 7 , 25.4 27.6°C, 30.8 32.4 Stn. A 6.15 x  
 10<sup>4</sup> 1.19 x 10<sup>5</sup> MPN g<sup>-1</sup> 4

0 (25 cells mL<sup>-1</sup>) 70 (1680 cells mL<sup>-1</sup>) 0 m  
*Chaetoceros*, *Skeletonema*  
*Chattonella* 0 5 12 cells mL<sup>-1</sup>, 4  
0 2 cells mL<sup>-1</sup>

2 *Chattonella*  
6 , 1) 2) , DIN, SiO<sub>2</sub>-Si, PO<sub>4</sub>-P 1  
, SiO<sub>2</sub>-Si  
1), 2) , *Chattonella*  
, 2) 1) , *Chattonella*  
6 ,

7 , DIN, PO<sub>4</sub>-P, SiO<sub>2</sub>-Si ,  
1) 5 0 40 (2520 cells mL<sup>-1</sup>), 2) ,  
6 11 (726 cells mL<sup>-1</sup>) *Skeletonema* ,  
*Nitzschia longissima* 2) , 1  
2 *Chattonella*  
, 2)

3 ,  
, Stn. X 25.6 30.4°C, 30.0 32.3 7 0 10  
, 2160 cells mL<sup>-1</sup> , Stn. Y  
*Chattonella* 2 m 833 cells mL<sup>-1</sup> ,

6 , 7 ,  
6 , 3  
, ,  
*Chattonella* , *Chattonella* 10<sup>2</sup> cells mL<sup>-1</sup>  
7 , 6 ,  
*Skeletonema* , *Chaetoceros*  
, *Chattonella*  
6 , 7  
, 7 *Chattonella* , 6  
, , DIN ,  
, Stn. X Stn. Y *Chattonella*  
, ,