Instructions for papers or extended abstracts

- 1. Please assure the originality and reliability of the content in your paper.
- 2. Please confirm to write your paper with clear English without obvious grammar errors.
- 3. Your paper must be not longer than 14 pages.
- 4. Please format your paper(s) according to the following requirements:
- (1) Text area, 257mm×170mm, single column, on A4 size paper, centered
- (2) Title, 14pt, Times New Roman, Bold, Center
- (3) Author, 10.5pt, Times New Roman, Capitalize the first letter of Firstname and all the letters of LASTNAME, Centered
- (4) Affiliation(s), 9pt, Times New Roman, Center
- (5) Abstract/Keywords, 8pt, Times New Roman, 3–8 Keywords.
- (6) Text body, 9pt, Times New Roman, single spaced, fully justified
- (7) Heading level 1, 10.5pt, Times New Roman, Bold, Align left, Capitalize all the first letters
- (8) Heading level 2, 9pt, Times New Roman, Bold, Align left, Capitalize all the first letters
- (9) Heading level 3, 9pt, Times New Roman, Align left
- (10)All tables/figures must have a number and title, 9pt, Times New Roman, Bold; Words in Table/Figure, 9pt, Times New Roman
- (11)All equations and expressions in the paper must be numbered consecutively. The equation is centered while the equation number in parentheses is right aligned.
- (12) Graphics (including photographs) should be black and white. Resolution should be at least 600 DPI.
- (13) Cite each reference in text in numerical order and list in the References section. Indicate references *in the text* using superscript numbers in brackets. References section: 8pt, Times New Roman.

An Ecological Study on Phytoplankton in the Sea Areas near the

Liuheng Power Plant of East China Sea*

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Abstract: This paper focused on the phytoplankton in the sea areas near the Liuheng Power Plant ($29^{\circ}65'00''-29^{\circ}90'00''N$, $122^{\circ}05'00''-122^{\circ}30'00''E$). The samples were collected in the autumn of 2010. Totally 57 species in 23 genus of 3 phyla are identified. The values of phytoplankton cell abundance were between $37.1 \times 10^4 - 1951.6 \times 10^4 \text{ cells/m}^3$, and the average abundance was $559.2 \times 10^4 \text{ cells/m}^3$

Keywords: phytoplankton; ecology; Liuheng

1 Introduction

Phytoplankton is the primary generator and the material base of every biological produce in the marine. The purpose of the survey was to check out the basic conditions of the community environment of the marine creatures in the sea areas near the Liuheng Power Plant. Combing with the historic data, the influence of construction of the Liuheng Power Plant and its operation on the marine biological system could be evaluated from the biological view. The phytoplankton in Zhejiang coastal area and Yangtze estuary area had been researched many times ^[1–8].

2 Materials and Methods

The phytoplankton samples were collected from 15 observation stations(Fig.1) in the sea areas near Liuheng Power Plant in the autumn of 2010.

Species diversity index (H') uses Formula Shannon-Wiener:

$$H' = -\sum_{i=1}^{S} (N_i / N) \log_2(N_i / N)$$
(1)

In the formula, S stands for the total species of the samples, N stands for the total units of the samples, N_i stands for the units of specie *i*.

3 Results Discussions

3.1 The Species Composition of Phytoplankton

Fig. 1 shows.....

29.8 29.8 29.8 29.8 29.8 29.8 29.7 20.7

Fig.1 Sampling locations of studied sea areas

^{*} Supported by the Key Project in the National Pillar Program (Grant No. 2007BAD43B01).

Table 1	Table 1 The species of phytoplankton in the sea areas near the Liuheng Power Plant	
	NO.	LIST OF SPECIES
	1	Actinocyclus ehrenbergii Ralfs
	2	Asterionella japonica Cleve*

4 Discussions

(1)Totally 57 species in 23 genus of 3 phyla are identified. bacillariophyta accounted for 77.2%, pyrrophyta made up 21.1%, and cyanophyta occupied1.7%. The results were consistent with the previous survey in the same sea areas (Zhu Gen–hai^[6]).....

5 Conclusions

(1) In autumn, totally 57 species in 23 genus of 3 phyla are identified. The main advantage specie was Skeletonema costatum.

References

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- [3] ZHU Genhai, WANG Xu, WANG Chunsheng, GAO Aigen. Ecological studies on nanoalgae and microalgae in Nanji Island national marine nature conservation area I. Species composition and ecological characteristics[J]. Donghai Marine Science, 1998, 16(2), 1–21(in Chinese).