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# Ecological Functions of Aquatic Vegetation in East Taihu Lake and Its Reasonable Regulation

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In shallow lakes, aquatic plants play very improtant roles in primary production and environmental protection. On the other h and, it can also cause silting-up by adding large amount of plant material to the lake bottom and release pollutant to the lake water when it dies and decnys. The functions of aquatic plants can be regulated reasonably by manipulating the structure and species co mposition of aquatic vegetation of the lake. In East Taihu Lake, more than 97% of the lake surface was covered by aquatic plants, which absorbed 3916t nitrogen and 496t phophorous from the lake in a year to produce 1120325t plant biomass (fresh weight). Ab out 599295t plant bioamss was harvested from the lake to remove 1981t nitrogen and 296t phosphorous, equal to 28% of the exter nal nitrogen load to remove 57% of the external Phophorous load of the lake. There was still 521030t plant biomass remained and decayed in the lake which caused serious water pollution and silting-up of the lake basin. Elndea Nuttallii was introduced to the lake in 1986 and transplanted on a large scale in the past ten years. About 50000ot of Elodea Nuttallii were harvested as fish fodder in 1993. An experiment was carried out successfully to replace Zizania latifolia in the lake with submerged plants. There are still a lot to do to complete the task of reasonable regulation.

【Key Words】 : **East Taihu Lake aquatic plant ecological function regulation**

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