

Research on Duckweed Treatment, Sewage Purification and Ecological Restoration in Campus

Zhou, Xiangquan (School: YuXian Middle School)

Zhao, Yudi (School: YuXian Middle School)

Purpose: The phenomenon of floating weeds is a reflection of the quality of a body of water, which at the same time can indirectly lead to an ecological imbalance of the waters in which it is located. We found that the ecology of the campus pond was in this crisis, so we designed a process to restore its ecological balance. **Procedure:** We first demystified the cause of the outbreak of floating weeds, then analyzed and determined the method of treating the weeds, then independently made a floating weed collector and put it into use, then analyzed and investigated the source of pond water and made a simple water purification model and analyzed the results, and finally summarized and shared the results and provided reasonable suggestions for the school. **Results:** At the end of the study and after the school had actively used our recommendations, the pond ecosystem was recovering at a visible rate and the number of floating weeds was within a stable range. **Conclusions:** This study not only solves the ecological problems of campus ponds, but also provides a convenient and effective model for similar environmental problems.