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**Study on domestic wastewater treatment and reuse by using stabilization
pond planning Para grass**

Abstract:

In recent years, rapid urbanization in Vietnam has made the problem of wastewater pollution more and more serious. Many wastewater treatment methods have been studied and applied. However, traditional wastewater treatment systems have undergone complex treatment periods and formed by-products cause pollution environment.

The use of a stabilization pond combined with aquatic plants to treat wastewater is an environmentally friendly method. Para grass has some outstanding features such as Para grass can form floating rafts on the pond and it is not degenerative. Para grass is able to recover high after cutting periodically and developing very quickly in the condition of high nitrogen. In this study, Para grass is planted in a stabilization pond to treat wastewater continuously.

The main objective of the study is to find solutions for domestic wastewater treatment in one –stage process with low cost, easy operation, environmentally friendly, towards sustainable development and use plant species which are available in Vietnam. Domestic wastewater after treatment can be reused and Para grass after treatment can be utilized as a feed source for livestock.

Keywords: Para grass, sustainable development, wastewater treatment, environmentally friendly.