人工湿地在猪场污水净化中的应用

The Application of Effluent Purification on Constructed Wetlands in Pig Farm

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中文摘要：

人工湿地具有良好的净化污水的功能,它是一种推流式生物反应器。文中主要叙述人工湿地结构与净化猪场污水机理;并分析了人工湿地从开始运行到成熟过程,湿地结构成分变化及对污水净化效果的影响;经筛选,人工湿地中的植物为鸭舌草,它是适于这类型人工湿地种植的良好草种。经运行测试分析表明:BOD_5去除率达88.04%,COD_{Cr}去除率达88.56%,SS去除率达90.77%,硫化物去除率达88.29%,铜化物去除率达95.74%。人工湿地因出水水质好,运行维护方便,在猪场污水处理系统中使用较为理想。

英文摘要：

Constructed wetland is a push-flowing bio-reactor with great ability of effluent purification. The structure of constructed wetland and the mechanism of effluent purification in pig farm is demonstrated. It has been shown that the component structure of the wetlands and the effect on effluent purification would be changing during the process from the beginning of operation to maturity. It has been discussed how to select the proper plant-seeds for the constructed wetlands, and "YaShe" is the best one selected It has been demonstrated that all of these index measured were reduced, including BOD_5, COD_{Cr}, SS, S^{2-} and Cu^{2+} reduced respectively 88. 04%, 88. 56%, 90. 77% , 88. 29% and 95. 74%. It is an ideal bio-technology to be used in the treatment system of effluent in pig farm owing to its high quality of water output and its convenient manner in management.

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