Abstract

In this work we make a proposal of design just one technological alternative for wastewater treatment that allows studying the efficiency of biological system: aerobic-anaerobic with high concentrations of organic matter. Actually, the experimental system is working at Centro de Investigaciones Biológicas y Acuícolas de Cuemanco (CIBAC), with low concentration of organics (under 300 COD), solely. The first two reactors of the three which operates in series as anaerobic system- they remove about 70 percent of organic matter. On the other hand, the aerobic reactor wet packed tower- its operate at countercurrent with the air, flowing by natural convection. This reactor can remove organic matter about 50 % of the feed. With the redesign and its study of the pilot plant, this technology aims to treat and recirculate, as far as possible, the used water into the CIBAC, and with itself, to get savings in the drinking water consumption.

Keywords

wastewater treatment, bioreactors.