

Abstract

Potato and vegetable processing is becoming more common on agricultural farms in Finland. Fresh peeling waste is valuable feed and it can be fed to production or game animals. Wastewaters from vegetable peeling processes cause serious environmental pollution when discharged untreated because of their high concentrations and organic matter contents. The large amounts of different types of compound, and the high biochemical oxygen demand (BOD₇) in these waters make it complicated to treat. Different kinds of treatment methods were evaluated in this study. Sequencing batch reactors are one of the most competent means of treating wastewaters on farms. Biological-chemical wastewater treatment systems are able to attain high nutrient removal efficiencies. Composting is complicated in waste peels with high water content. Compost made from peeling waste and peeling waste incorporated with other materials has good nutrient content for soil enrichment and fertilization.