Survey of manure fertilizer of vermicompost sewage sludge composting

H. Alidadi
1. Assistant Prof. of Mashhad

Decomposition and stabilization of municipal wastewater sludge with and without earthworms (Eisenia fetida) was tested in a pilot study. The earthworms were fed at the optimum level of 0.75 kg of food/kg of worm/day. Decomposition and stabilization of wastewater sludge occurred both in the presence and in the absence of earthworms during 9 weeks but the process was accelerated in their presence. Phosphorus content increased in the sludge with earthworms but decreased in the one without earthworms. Nitrogen content in the resulting vermicompost showed no difference with its quantity in the original substrate while it increased in the control.

Keywords: Sewage sludge, Composting, Windrow

1 Corresponding author E-mail: halidadi@yahoo.com