

**Research Article**

# Nutrient rich organic wastes as source of manure for establishing forest nursery saplings

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Received : 04.02.2014; Revised : 10.05.2014; Accepted : 21.05.2014

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**Summary**

The large quantities of organic wastes (sludges) generated by industries are plant nutrients. Thus in point of national development, safe disposal of these wastes play a major role. On other hand, rising of sapling in forest nursery has been incurred large production cost due to higher nutrient demand. Thus, nutrient rich organic wastes provide an opportunity to utilize them as nutrient source in place of conventional organic manures. In this context, an attempt was made to utilize nutrient rich organic wastes as source of manure in forest nursery. The various organic wastes collected from different sources were analyzed for their nutrient content. The organic wastes were mixed in the ratio of 1:1:1 and 1:1:2 of sand:soil:organic wastes and then filled into polyethylene bags. Two months native saplings of *Acacia auriculiformis*, *Pterocarpus marsupium*, *Azadirachta indica*, *Holoptelea integrifolia* and *Tectona grandis* were planted and growth parameters were monitored at monthly interval. The plants growth varied significantly due to application organic wastes at both the level. The growth was influenced by the wastes in the order of distillery sludge > municipal sludge > sugar mill sludge > FYM > paper mill sludge. In general the wastes at higher level recorded higher growth compared to that of lesser rate. Among the different species selected for the study the height (cm), collar diameter (mm) and bigmass (g) was measured in the order- *Azadirachta indica* > *Acacia auriculiformis* > *Tectona grandis* > *Holoptelea integrifolia* > *Pterocarpus marsupium*. The overall results suggest that the sewage sludge and agro industrial wastes can be effectively and efficiently used for raising of forest nursery.

**Key words :** Organic wastes, Forest saplings, Soil nutrients

**How to cite this article :** Prabhakara Reddy, G.V., Nagaraja, M.S., Vasanthi, B.G. and Srinivasamurthy, C.A. (2014). Nutrient rich organic wastes as source of manure for establishing forest nursery saplings. *Asian J. Soil Sci.*, 9(1): 103-106.