**Efficacy of Millicompost and Vermicompost on Kitchen wastes**

**G.Rajkumar, R.Gnanamani and P.Alagesan**

**PG and Research Department of Zoology, Yadava College, Madurai-625014.**

**Abstract**

**Purpose:** The present research work was carried out with the aim of analyzing the efficiency of millipede and earthworm; and exploration of millicomposting and vermicomposting process with the help of millipede, *Arthosphaera magna* and earthworm *Perionyx excavates* by using kitchen wastes of yadava college hostel. Both millicompost and vermicompost are ecofriendly and economically viable to agronomist to replace the chemical fertilizers. **Methods:** Millicompost and vermicompost were produced with the kitchen wastes. Macronutrients such as Carbon, nitrogen, phosphorous, potassium and calcium were estimated at initial (0) day, 15th, 30th,45th,60th days of experiments. **Results:** Millicompost showed rich in macronutrients nitrogen, phosphorous, potassium and calcium (nitrogen 1.11, phosphorous 0.70, potassium 0.91 and calcium 1.30) at 60th day followed by vermicompost ( nitrogen 0.92, phosphorous 0.45, potassium 0.70 and calcium 1.12 ) at 60th day then in the conventional compost was ( nitrogen 0.78, phosphorous 0.42, potassium 0.61 and calcium 0.80 ) at 60th day . An ideal C/N ration was observed in compost procured by millipedes (30.36) after 60 days of experiments. **Conclusion:** Moreover, the millicompost produced by *Arthosphaera magna* processed higher nutrients and growth efficiency than that of *Perionyx excavates*. This study promising that millicomposting is an ecofriendly method to solve the acute problem of solid waste.

**Keywords:** *Arthosphaera magna, Perionyx excavates,* Millicompost, vermicompost