PATNA WOMEN'S COLLEGE 1940

Zoology

Explore–Journal of Research for UG and PG Students
ISSN 2278 – 0297 **(Print)**
ISSN 2278 – 6414 **(Online)**

http://www.patnawomenscollege.in/journal

Comparative Study of Vermicompost and Vermiwash of *Eisenia fetida* and *Perionyx excavatus* and their Effect on Growth and Yield of Okra (*Abelmoschus esculentus*)

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Received : November 2014
Accepted : March 2015
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Abstract : *The application of vermicompost + vermiwash of Eisenia fetida yields better results than those of Perionyx excavatus as far as stem height and number of leaves in okra plant are concerned. But the use of vermicompost + vermiwash of Perionyx excavatus resulted in greater stem circumference, number of buds, flowers and yield of okra. Plants treated with vermiwash made them more disease-resistant than the untreated ones.*

Keywords: *Eisenia fetida, Perionyx excavatus, Vermicompost, Vermiwash, Okra.*

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Introduction :

The excessive use of chemical fertilizers and pesticides has deteriorated the fertility of soil and nutritional value of agronomic products (Davis et al., 2004).Chemically grown foods have pesticide residues (Bhatnagar et al., 1993) which cause serious diseases and developmental disorders .Millions of tons of animals, agro and kitchen wastes are produced annually and cause bad odour and pollution problems (Gupta et al., 2005; Garg et al., 2006).

Vermicompost is the faecal matter of the earthworms. As the earthworms are offered a variety of organic stuff serving as their food, they take them in the alimentary canal where it is subjected to digestion, absorption and then elimination. The eliminated matter (casting) is called the vermicompost, obtaining of vermicompost in this manner is called vermicomposting. Inorganic farming , inorganic fertilizers are replaced by organic ones, such as, vermicompost. Vermicompost is rich in NPK and micronutrients (Ansari et al., 2010). While increasing soil organic matter, it improves soil fertility with increase in nutrients and micro-