

BAMBOO (*BAMBUSA POLYMORPHA*) LEAF LITTER AS A VERMICULTURE SUBSTRATE FOR EARTHWORMS, *PONTOSCOLEX* *CORETHRURUS* (MULLER) AND *DRAWIDA ASSAMENSIS* STEPHENSON

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Growth and reproduction of two endogeic earthworm species Pontoscolex corethrurus and Drawida assamensis were studied in different experimental diets [mineral soil(S), soil : cow manure (SC), soil : bamboo leaf litter (SL) and soil : cow manure : bamboo leaf litter (SCL)] in controlled laboratory conditions. Highest rate of growth and cocoon production were recorded in SL diets for both the species although the results were statistically significant ($P < 0.05$) for P. corethrurus only. P. corethrurus also produced significantly more cocoons ($P < 0.05$) than D. assamensis. The rate of reproduction in terms of juvenile produced ($\text{Juvenile worm}^{-1}\text{week}^{-1}$) in D. assamensis was however substantially higher in SL diet ($P < 0.05$) compared to the other diets. In the worm worked soils of each earthworm species C/N ratio increased in mineral soils (S) and decreased in SCL diet with P. corethrurus and SL diet acted upon by D. assamensis.

Keywords: *Vermiculture, endogeic earthworms, Pontoscolex corethrurus, Drawida assamensis, bamboo leaf litter, growth rate, reproduction rate, C/N ratio.*
