

## REVIEWER'S REPORT

Manuscript No.: IJAR-58542

**Title: EARTHWORMS (ANNELIDA: OLIGOCHAETA) IN CAPE BRETON SOILS ACCORDING TO SOIL SERIES, AND THEIR IMPLICATIONS FOR AGRICULTURE.**

### Recommendation:

Accept as it is .....

**Accept after minor revision.....**

Accept after major revision .....

Do not accept (*Reasons below*) .....

| Rating         | Excel.    | Good | Fair | Poor |
|----------------|-----------|------|------|------|
| Originality    |           | Good |      |      |
| Techn. Quality | Excellent |      |      |      |
| Clarity        | Excellent |      |      |      |
| Significance   | Excellent |      |      |      |

Reviewer's ID: Dr. Sumathi

### *Detailed Reviewer's Report*

1. Earthworms are tube-shaped, soft-bodied animals without backbones that live in the dirt and eat dead plants. They are helpful garden helpers that make the soil rich and healthy for growing flowers and food.
2. *Lumbricus terrestris* is a common earthworm, or nightcrawler, which is native to Europe and has recently received attention for its invasion of North America. It has invaded areas of Canada, the northern United States and parts of northeastern Europe.
3. A soil series is the lowest and most narrowly defined categorical level in the U.S. and many international systems of soil taxonomy. It groups together soils with virtually identical profiles—including color, texture, chemistry, and layer arrangement—making them react similarly to agricultural and engineering management.
4. An invasive species is a non-native organism that spreads widely and causes harm to the environment, the economy, or human health. Well-known examples include the Burmese python, zebra mussel, and kudzu vine.

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- 5. Soil ecology is the study of how living organisms in the ground interact with each other and their physical and chemical surroundings. Key components include bacteria, fungi, and earthworms. These tiny and large life forms drive essential natural functions.**
- 6. Agricultural soil is the primary foundation for food production, serving as a dynamic living ecosystem that provides crops with physical support, essential nutrients, and water retention. Ideal soils are well-draining, nutrient-rich loams that balance mineral particles (sand, silt, clay) with organic matter.**
- 7. Soil structure is the arrangement of primary sand, silt, and clay particles into groups called aggregates or peds, specifically granular, blocky, and platy. These shapes and the spaces between them control how air, water, and plant roots move through the ground.**
- 8. Nutrient cycling is the continuous movement and transformation of essential elements (like carbon, nitrogen, and phosphorus) through living organisms, soil, water, and the atmosphere. This natural recycling process ensures that vital resources remain available to sustain all life on Earth.**
- 9. Transforming global food systems toward healthy diets, better productivity, and halved food waste by 2050 will cause a 6% median decrease in agricultural land, a 17% drop in total production, and an 85% cut in land-use emissions.**
- 10. Key words are excellent.**
- 11. Pie chart with tables are impressive.**
- 12. Summary points only can be added.**
- 13. After a small changes good to publish in your journal.**