## **Instructions for Submission of the Manuscript**

## 01) Format for typesetting

- **Page setup:** A4 size  $(210 \times 297 \text{ mm})$  typed single side only.
- Margins: All sides with margins of 25 mm.
- **Line spacing:** 1 (12 points) throughout the text.
- Page and line numbering: All pages should be sequentially numbered using Arabic numerals on bottom centre starting from title page. All line numbers should be removed.
- **Font:** Cambria size 11 except in the title, names, affiliations, and footnotes. Use font size 8 for footnotes and page numbering, and size 14 for title.
- Language/spelling: UK English only. Use UK English in language setting (Tools Lnguage seeting)
- **Software:** Authors may use MS Word<sup>®</sup> 2007 for Windows or a newer version.

### **02) Title**

• Title should be in bold letters left-aligned on the page with font size 14, each word of the title starting with a capital letter except the articles, conjunctions, prepositions and species names *viz*. of, and, the, from, on, *etc*. No space should be left above the title, and leave two-line spaces below the title.

#### 03) Name/s and affiliation/s of author/s

- Lower case letters except the first letter of each word, font size 9, left-aligned on the page.
- Leave 2 line spaces between names and the affiliations. Affiliations of all the author should be mentioned below the title (please see the specimen). Leave two line spaces below the affiliation.
- Place "and" just before the last author's name.
- E-mail address of the corresponding author should also be placed in the footnote. The Corresponding author should be identified by an asterisk after the name on the list of authors.

#### 04) Abstract and key words

- Should be strictly limited to 250 words.
- Up to a maximum of five (05) key words arranged in alphabetical order should be identified and included immediately after the abstract. Must not repeat words in title.
- No references, no abbreviations, tables or figures should be included in the abstract.

# Abundance and Characteristics of Microplastic in Commercially Available Composts in Sri Lanka

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Compost is a widely used soil amendment in the agricultural sector in Sri Lanka. Applying compost could improve soil quality in degraded agricultural lands. However, low-grade compost that contains pollutants may have adverse effects on the quality of the agro-ecosystem. Microplastic is a possible contaminant that can be moved into the agroecosystem through the land application of poor-quality compost. The present study was conducted to assess the abundance and characteristics of microplastics in locally produced municipal solid waste and agricultural waste composts. Representing commercial-scale agricultural and municipal solid waste composting facilities, 20 compost samples with three replicates were collected. A combination of methods (manual separation, oxidation digestion plus density separation) was used to separate and detect microplastics from compost samples. This study revealed that microplastics are present in both agricultural and municipal solid waste composts. Municipal solid waste compost contained significantly (p<0.05) higher microplastic content than agricultural waste compost; on average 0.63% and 0.033%, respectively. The average amount of soft plastic content in municipal solid waste compost (1321 items/kg) and agricultural waste compost (71 items/kg) were higher than the hard plastics (388 items/kg and 37 items/kg, respectively). The study confirmed that compost could act as a carrier of microplastics in the agricultural ecosystem. It can be recommended that quality standards should be implemented to minimize the microplastic content in composts, and the code of practices for municipal solid waste compost production should be updated to control microplastic contamination to safeguard the quality of agroecosystems.

Keywords: Agricultural waste, Contaminant, Municipal solid waste, Organic amendment

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