

Interactive comment on “Nematode diversity, abundance and community structure 50 years after the formation of the volcanic island of Surtsey” by K. Ilieva-Makulec et al.

Anonymous Referee #1

Received and published: 10 October 2014

General comments

The manuscript “Nematode diversity, abundance and community structure 50 years after the formation of the volcanic island of Surtsey” focuses on the effects of volcanic island formation on soil nematode communities. The study found some nematode genera which were not found before in Surtsey. Therefore, the study has a certain significance to some extent. However, there are three big problems the authors should be clarified. First, the MS is not well focused on this topic (50 years after the formation of the volcanic island of Surtsey), and more focus were put on the effect of seagull colony. What is the relationship between them? Perhaps you have your reasons, but now it is not very clear. Second, the study was lack of novelty from the view of the

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study on soil nematode communities. The innovative aspect of the research and not the local importance is required for an international publication. In addition, I still think the English language is not good enough, which make some sentences are not easy to be understood.

Specific comments and technical corrections

Page 2, L21-25: The expressions on “outside the gull colony”, “inside”, “in the fertile area” and “within the gull colony” are not consistent, which should be clarified or presented in advance as sampling position in the Abstract.

In Abstract, only common or usual results were present. I can not see what the new one from your study.

P3, L14-16, L17-18: The sentence is too long and not clear.

In introduction, many previous studies from 1970 to 2001 on soil nematodes in Surtsey were listed, but what is the importance or significance of your study? Please enhance it.

P4, L4-6: what are the relationships between and the position of seagull colony? Whether the later also help to illustrate soil nematodes after 50 years formation or not?

L7-8: I think this is not the aim of your study. Perhaps your aim is to find what the relationship between them is or what influence soil nematode communities.

L12-13: What is the position of sampling site (longitude and latitude)?

P5, L5: What is the meaning of “4 samples were processed”? What is the replication and how many?

P6, L1: delete “for”

L1-2: what is the objective to evaluate the significance of the differences between the

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mean values?

L13-14: change to "The abundance of nematodes was significantly higher inside than that outside the seagull colony ($P < 0.05$)" The unit of nematode abundance is ind. cm⁻², but what is the sampling area? The author did not explain it in the "nematode sampling".

L13-16: Abundance or density? The author had better only use either one. A unified name will be clearer for readers.

L25: delete "found in plots"

L26: change to "In both habitat types,"

L26: Which is similar to? Not clear

L22-31: The paragraph had better be rewritten.

P7, L1: Change "Diversity" to "diversity"

L1-2: not clear

Discussion It fails to provide a convincing story because it is excessively long and merely repeats the results.

P9, L11-12: I think it may be different from the referenced research. The "primary succession" was mentioned many times in the manuscript. But which succession process happened? It is not clear.

L14-15: "was similar to the increase which has been observed in vascular plant species richness" What is the similarity? Trend or quantity?

L20-21: Why compare with the results in grassland in 1979?

L28-29: Whether there is some statistical data to support the conclusion on "patchy and their abundance highly variable within the island"

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P10, L5-6: I think this conclusion is not exact.

L13-14: Why and how to the seagulls increased significantly the soil fertility and organic matter contents, etc.? I think this is the key to explain the results.

L27-29: Have the authors considered the relevance or otherwise of the intermediate disturbance hypothesis to their data?

P11, L1-2, L6-10: Authors made some statement many times without providing extra data for supporting. Results cannot be generalized beyond this study.

P13, L21: delete "4.5"

L30: Why compare with the results of Krakatau, in which has different geographic, climatic and edaphic factors?

Interactive comment on Biogeosciences Discuss., 11, 14239, 2014.

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