

Review of: "Spatial Analysis of Soil Fertility Using Geostatistical Techniques And Artificial Neural Networks"

Ionut Minea¹

¹ University of Iasi

Potential competing interests: No potential competing interests to declare.

The analysis of soil fertility represents an important scientific desideratum in the conditions that the soil resources are subject to an anthropogenic pressure that is more and more accentuated and unfavorable in the last decades. The current work tries to analyze the spatial differences of soil fertility using GIS and Artificial Neural Networks techniques.

The work is well structured, but before being accepted for publication, it needs a series of changes to be made by the authors. First of all, the authors must consider expanding the introductory part by including the results obtained by other authors in the same topic. Also, a clear description of the scientific objectives that the authors are pursuing and the elements of methodological novelty brought by the research carried out is also required.

In the material and methods part the authors must explain why they use the ordinary geostatistical kriging method for spatial analysis of soil fertility?

The results and discussion part must be reorganized. In this stage is just a description of the results obtained without any connection with the same researches made using the same methodology or in the same area. Also in the newly discussion part the authors must carry out the scientific limitation brought by the use of such a methodology on a rather small spatial surface.

Figure 7 Maps of membership function values for each of the soil fertility classes is not very clear. The legend is in Spanish language and the value has no units. Also the colors are not very well chosen and that big E is not necessary.

In the conclusion part the authors must bring a practical validation of the results obtained. At the current stage, they are nothing but descriptions of the results obtained without any connectivity with practical applications.

In conclusion, the authors must bring a series of important changes to the work in order to increase the scientific level and be accepted for publication.