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

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Potential competing interests: No potential competing interests to declare.

The paper presents a mere application of a method to classify the physico-chemical fertility of a soil based on the combination of geostatistics with neural networks. It is not clear what the novelty of the work is since the method was previously defined. The objectives are also not clearly defined, since they cannot be reduced to the mere application of an already defined method.

The introduction is very brief, lacking a description of the state of art and an emphasis on why the proposed method should be preferred to other more traditional clustering techniques such as k means or fuzzy k means. In any case, the proposed method is not a spatial method since it does not include geographic coordinates and does not account for spatial correlation explicitely. The methods are generally described concisely and are sometimes showing inexactitudes. In addition, the jargon is often not the scientifically appropriate jargon. I recommend seeking the assistance of an experienced statistician.

An extensive discussion of the results and their impact on agronomic management in terms of, for example, agronomic fertilization is completely lacking.

I believe the work should be thoroughly reviewed before submission to a scientific journal.

I attach my revised version of the article where I detail what I consider to be the weaknesses of the work and sometimes propose possible solutions.