Prediction of production in Stevia plants using artificial neural networks

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The objective of this research is to evaluate different types of artificial neural networks, which allow to understand, analyze and predict the response of Stevia plants, at different concentrations of nutrients in order to increase production. To carry out the aforementioned, a database with photographs of different leaves of each Stevia plant for 3 months was generated. These data were processed in order to implement them as input vectors in the network. Subsequently, from each leaf, the area was calculated for its implementation as objective vector. Once the network was trained to process the data, the respective production predictions were generated in Stevia plants, for later experimental verification.

Keywords: Stevia, plants, artificial neural networks, analyze, predict, increase, production