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Simulation of Corn Yield in Carmen, North Cotabato, Philippines Using Aquacrop Model

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Abstract : This general objective of the study was to apply the AquaCrop model to the conditions in the municipality of Carmen, North Cotabato in terms of predicting corn yields in this area and determine the influence of rainfall and soil depth on simulated yield. The study revealed wide disparity in monthly yields as a consequence of similarly varying monthly rainfall magnitudes. It also found out that simulated yield varies with the depth of soil, which in this case was clay loam, the predominant soil in the study area. The model was found to be easy to use even with limited data and shows a vast potential for various farming and policy applications, such as formulation of a cropping calendar.

Keywords : aquacrop, evapotranspiration, crop modelling, crop simulation
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