

Role of mathematics in understanding the growth of cocoa crops?

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Cocoa is a very important crop predominantly grown in Africa and it is the major ingredient used in the production of chocolate. The crop is highly sensitive to climate, and we wish to understand how climate variations will affect the behaviour of the crop. Therefore, this talk will discuss the significant role of mathematics in fostering our understanding on the growth and production of cocoa crop. Firstly, we shall consider the formulation of a model that describes the transition period from flowering to podding and ripening. Thereafter, we investigate the effect of climate variations at each stage and how to influence the crop yield.