

## A Dynamic Knowledge Model for Optimal LAI in Cotton

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**Abstract:** By analyzing and extracting the newest researches on LAI in cotton, a dynamic knowledge model for LAI of cotton in relation to yield

targets, planting densities, ecological factors and production conditions was developed through knowledge engineering and system modeling methods. Case studies on the knowledge model with the experiment data of different ecotypes, varieties, planting densities, yield targets indicate good performance of the model in prediction and adaptation.

**Key words:** cotton; knowledge model; LAI