

Markov Models for Optimizing Food Forests

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1 Results

1.1 Applications

1.1.1 Disease Control

In China, Markov models have been used to predict the spread of Pine Wilt Disease (PWD) in the Anhui Province for 2030 (Liu & Zhang, 2022). The model was able to make predictions with an overall accuracy of 93.19%. In food forests, this could be applied; however the Markov model used, modelled an area of area of 4.17×10^6 ha, while food forests in the Netherlands are usually only between 0.5 ha and 0.25 ha (Roodhof, 2024).

References

- Liu, D., & Zhang, X. (2022). Occurrence prediction of pine wilt disease based on ca-markov model. *Forests*, 13(10), 1736.
- Roodhof, A. (2024). Understanding the emerging phenomenon of food forestry in the netherlands: An assemblage theory approach. *Journal of Agriculture, Food Systems, and Community Development*, 13(2), 193–207.