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Modelling plant resistance deployment: the R package {landespi}

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The R package {landsepi} provides a general modelling framework to help compare plant resistance deployment strategies and understand the impact of epidemiological, evolutionary and genetic factors for a wide range of pathosystems. The model is based on stochastic geometry for describing the landscape and the resistant hosts, a dispersal kernel for the dissemination of the pathogen, and a SEIR (Susceptible-Exposed-Infectious-Removed) architecture to simulate plant response to disease. The package includes a web interface, coded in R-Shiny, for pedagogical purposes.

Mots-clefs : Modélisation – Pathologie Végétale– Package

Développement

Poster format portrait

Références

- <https://cran.r-project.org/web/packages/landsepi/>
- <https://hal.inrae.fr/hal-03368375/>

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