CERCOCAP : a future tool to manage *Cercospora beticola*

ITB Institut Technique de la Betterave

CERCOCAP aims to provide growers with a independent tool for cercospora leaf spot management. This foliar disease puts at stake both economic yield and environmental footprint, thus obliges precise spraying timing. An interactive tool will be developed thanks to coupling between an epidemiologic model and a complex phenotyping algorithm.

Epidemiologic modeling

METEO FRANCE

+ 10+ years of trials and observations

+ Hundreds of sites

+ Precise re-analysed weather data

+ Data driven approach

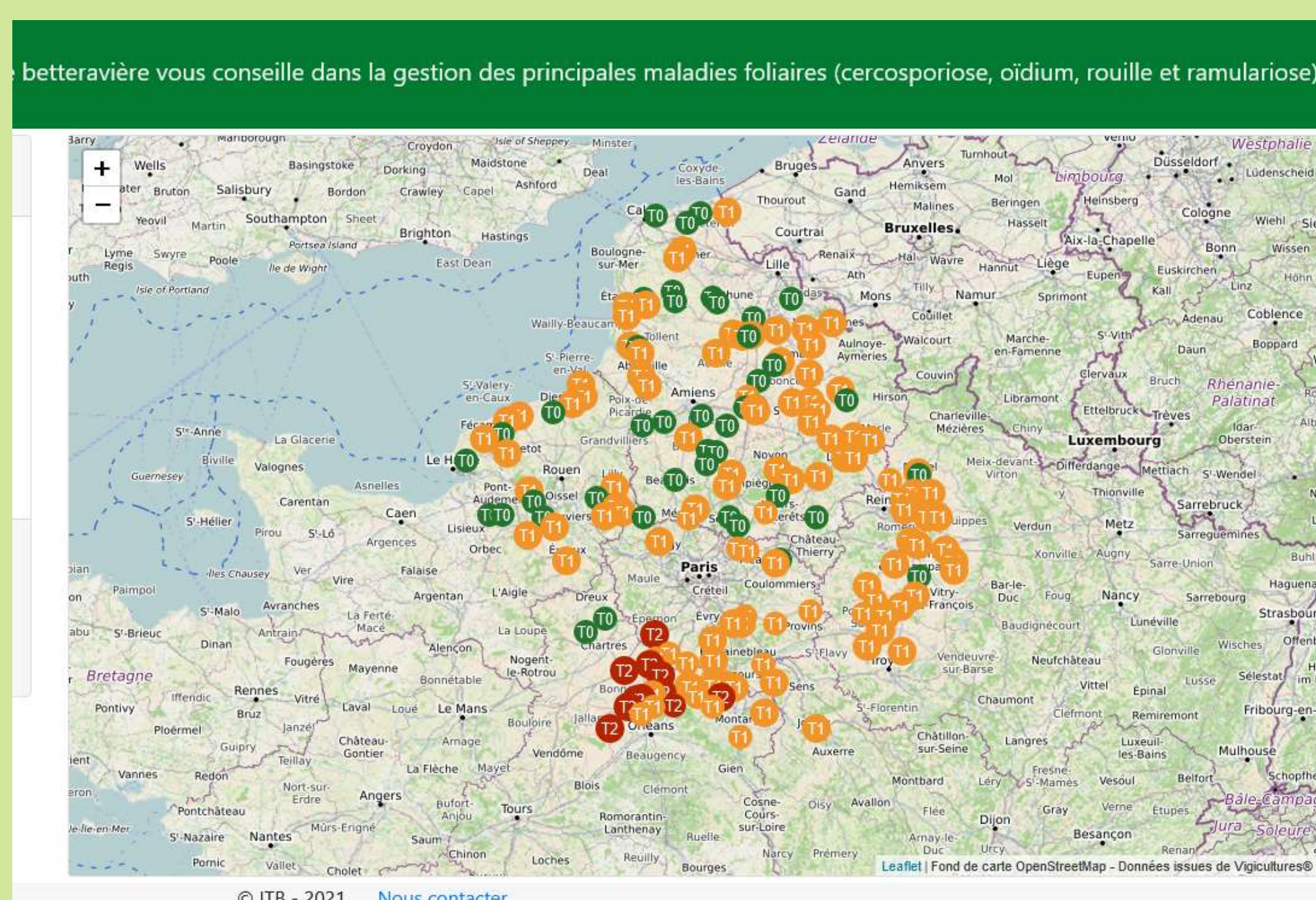+ Machine learning with random forests, gradient boosting and neural networks

+

Automated monitoring

+ Train set of 1000+ images & annotations of symptoms, artificially augmented

+ IoT cameras in the field

+ Automated segmentation via deep learning

=

Decision-support tool

+ Farmers input

+ Model & data coupling

+ Agronomic & spraying advice

+ API

test in 2022