Production Végétale

MODIFIED XANTHOMONAS AND METHOD FOR EVALUATIONG PATHOGEN RECOGNITION BY PLANTS

INRAΣ › transfert

Plant2Pro **INRAΣ › transfert**

Description

Xanthomonas is a bacterium whose pathogenesis resides in its ability to inject plants with a cocktail of 20-30 Type III effector proteins that modify the immune response and plant physiology. Some plant accessions display total or partial immunity, induced by the specific recognition of these T3Es. INRAE researchers have developed a tool for detecting and monitoring plant resistance to Xanthomonas. The patent is entitled « MODIFIED XANTHOMONAS AND METHOD FOR EVALUATING PATHOGEN RECOGNITION BY PLANTS" registered under no. 20305940.7.

Type de transfert envisagé

License agreement on patent or collaboration to be discussed with the researcher

Avantages

Generic Xanthomonas strain for testing Xanthomonas recognition on many plants. Inexpensive, robust, easy and non-destructive means of assessing T3E recognition and plant tolerance and/or resistance to them.

Applications potentielles

This tool can be used to visually detect Xanthomonas resistance in plants. A versatile tool in breeding programs for monitoring Xanthomonas resistance during selection.

Mots clés

Xanthomonas, T3E effector proteins, plant immune system, varietal selection tool

Echelle TRL   1 2 **3** 4 5 6 7 8 9

Stade de développement

Selection tool tested on Arabidopsis, cauliflower, tomato, pepper.

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