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## ***Setting up of a bioassay intended to evaluate the resistance induced by compost***

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**Résumé** : One of the aim of agronomical research is currently to find a new way to reduce plants diseases avoiding the use of pesticides. Some publications have showed that some composts have a suppressive effect against diseases. Various mechanisms are hypothesized to drive this phenomenon. One of these is the resistance induced in the plant. RITTMO Agroenvironnement takes an interest in advances made in this field of knowledge. That is why the purpose of this study was the setting up of a bioassay intended to evaluate the resistance induced by compost. For that, cucumber plants were inoculated with *Botrytis cinerea*. Two ways of inoculation were tested: inoculation with a spores solution which was not conclusive, and inoculation thanks to *Botrytis cinerea*'s culture discs which allowed necroses apparition. Results were however not workable because of an intra-modality heterogeneity. The experience should be repeated using less modalities and more repetitions. Even if the resistance induced by compost was not shown, it still offers good prospects for the future.

**Mots-clés** : Compost, Bioassay, Disease suppression, Induced resistance, *Botrytis cinerea*, Cucumber