AIST RESEARCH HOT LINE

UPDATES FROM THE CUTTING EDGE

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Life Science & Technology

Application of the Biosensor for a Diagnosis of Soil Disease

- Plant disease is predicted by a biosensor -

A sick problem which has arisen in human society has arisen also in the agricultural fields. Soil disease is caused by soil microbe which is infected with crops. However soil microbes are not only pathogenic microbe, but are also good microbe (antagonist). Many good microbes live in healthy soil.

We invented the new instrument which predicts occurrence of the soil disease, cooperated with Sakata-Seed Corporation.

The principle of this instrument is based on the diagnosis for the reduction of the oxygen concentration that depends on the amount of respiration of each microbe, antagonist and pathogen.

Chlamydospore of Genus Fusarium isolated from carrot

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