Details of Technology

Name of Technology	Soil restoration and ecosystem conservation by utilizing functions of soil microorganisms	Agriculture, Forestry and Fisheries
Name/Post/Faculty	Takahiro Tateishi / Associate Professor / Biological Chemistry and Food Science Academic Group	
Key words	soil microorganisms, symbiotic microorganisms, arbuscular mycorrhizal fungi, soil biochemistry	

What kind of technology is this?

Outline

We are now developing a technique utilizing useful functions of soil microorganisms to maintain the soil conditions, under which plants can grow well. In other words, the technique can restore nutrient-lack soils caused by soil degradation to good conditions suitable for plant growth.

【Research output contents】

(1) Restoration of soils in degraded ecosystems

We have elucidated the nutrient uptake mechanism through the functions of soil microorganisms in plants grown in nutrient-deficient soils such as degraded lands in a cool-climate area. Such functions of soil microorganisms are applied for soil restoration and rapid recovery of vegetation in degraded lands.

What are its applications?

For research (1): soil restoration and rapid recovery of vegetation in degraded land

Related patents	Patent No. 3694739 "Identification method of fungi"
Related materials	"Various achievements from University and research institutes, 48 cases" p.35 National Institute of Science and Technology Policy (2005)

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