

Plant disease control agent containing a bacteriophage

Easy to handle with a great effect on disease control!

Abstract

Burkholderia glumae and *B. plantarii* are pathogenic bacteria and cause rice seedling rot which is one of the most serious problems in the process of raising seedlings for rice cultivation. The main method for controlling plant diseases is application of chemical pesticides. However, risks for emergence of the drug-resistant bacteria and negative impact of chemicals on the environment should be minimized. The present invention proposes an environmentally friendly method, without chemical pesticides, of plant disease control using novel jumbo phage which is isolated from organically farmed soil.

Effect

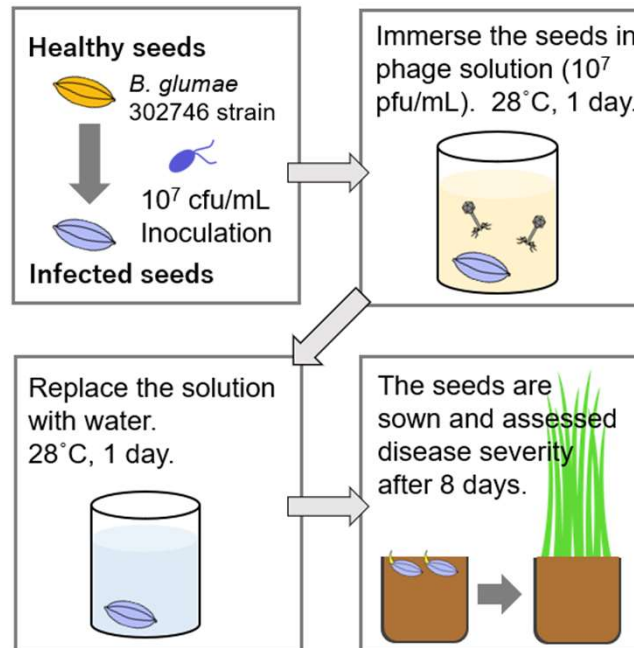
- By immersing the pathogen-infected seeds in a phage solution, over 95% of rice seedlings grew healthy (see Figures).
- The disease occurrence can be easily suppressed, with simple treatment in a small area such as a nursery box.
- Multiple plant diseases, including bacterial wilt, can be suppressed at the same time.
- The phage agents can also be used in organic farming.

Patent Data Sheet

Patent application number: JP2020-151404 (T20-032)
 Inventors: TAKAHASHI Hideki, SASAKI Ryouta, ANDO Sugihiro, MIYASHITA Shuhei

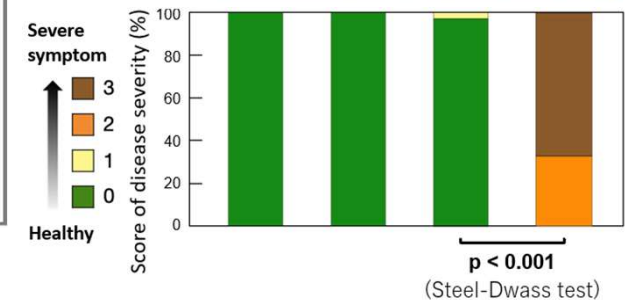
Disease control of rice seedling rot by the phage

■ Evaluation method of disease control effect by phage treatment



Phage:

Healthy seeds	Contaminated
+	-
-	+
-	-



★ Remarkable suppression-effect on the disease is confirmed.

Contact

Tohoku Techno Arch Co., LTD
 TEL:+81-22-222-3049, FAX:+81-22-222-3419
[Click](#) to contact