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Incidence of Sweetpotato Root Rot based on Soil Environment and Residual Soil

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[Introduction]
Sweetpotato root rot is one of the fatal diseases during post-harvest storage and have been known to be caused by soil-derived *Fusarium* spp. However, little is known about the infection route between cultivation soil and storage period. To elucidate how the incidence of sweetpotato root rot is related to cultivation soil, root rot from soil inoculation and the physicochemical characteristics of the soil were investigated.

[Materials and Methods]
Sweetpotatoes were treated with the cultured-soil of *Fusarium* spp. to identify the incidence of root rot from the residual soil. In the cultivation regions, physicochemical characteristics of the soil were analyzed to investigate relationship with the root rot.

[Results and Discussion]
Sweetpotato tubers treated with the *Fusarium* spp. cultured-soil showed disease symptoms. In cultivation regions, the incidence rate of root rot differed based on the characteristics of growing soil in spite of the same curing and storage conditions. Diseased soil had lower EC and organic matter, and higher various inorganic nutrients than healthy soil. These results suggested that sweetpotato root rot during post-harvest was affected by residual soil, and that the physicochemical properties of the soil could be related to the susceptibility of sweetpotato to *Fusarium* spp.

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