【他誌揭載論文要旨】

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Title: Relationship between growth stage of *Brassica rapa* var. *perviridis* and the abilities for uptake and translocation of pesticides in soil

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Summary: The relationships between plant growth stage and pesticide-uptake ability were investigated *via* cultivation of *Brassica rapa* L.var. *perviridis* in soil to which was added four pesticides of relatively high log K_{OW} : fenobucarb, procymidone, flutolanil, and tolclofosmethyl. The root concentrations of pesticides were low in very young seedlings with undeveloped root systems, highest in seedlings with developed root systems, and tended to decrease until the usual harvesting stage. Additionally, the shoot concentrations of tested pesticides showed the same trends as the roots. The pesticide-uptake abilities of roots were lowest in very young seedlings and then constant for seedlings until the harvesting stage. In contrast, the pesticide-translocation abilities from root to shoot were constant regardless of growth stage. The results indicated that changes in shoot concentrations with growth stage were affected by the development of the root system and pesticide-uptake ability of roots.

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