

【他誌掲載論文要旨】

J. Pestic. Sci. 43(4), 248–254 (2018)

DOI: 10.1584/jpestics.D18-041

Title: The influence of *Brassica rapa* var. *perviridis* growth conditions on the uptake and translocation of pesticides

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Summary: We cultivated *Brassica rapa* var. *perviridis* in soil mixed with four pesticides (fenobucarb, procymidone, flutolanil, and tolclofosmethyl) at different temperatures, day lengths, and soil water contents. We compared plants' uptake and translocation abilities of the pesticides as affected by growth conditions. The root concentration factor (RCF) of pesticides tended to increase with rising temperature; however, but the influence of temperature on the transpiration stream concentration factor (TSCF) differed for each pesticide. The RCFs and TSCFs of pesticides were high for short days. The soil water content had little or no effect on the uptake and translocation of pesticides. These results showed that it is necessary to consider growth conditions, especially the temperature and day length in plant uptake models for these pesticides.

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