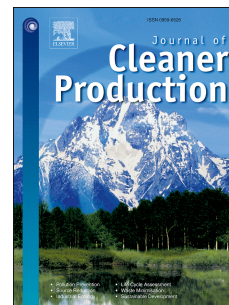


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Biowaste-derived hydrolysates as plant disease suppressants for oilseed rape

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Abstract

Water soluble substances, obtained by aqueous alkaline hydrolysis of fermented urban kitchen and garden waste, have been reported enhancing the productivity of several food and ornamental plants. The present work reports unknown new property of these substances as plant disease suppressants. It describes a case study where oilseed rape cotyledons were protected by pre-treatment with two different types of soluble substances against a fungal pathogen *Leptosphaeria maculans*. One type was isolated from the digestate of a biogas production reactor fed with kitchen wastes. The second type was obtained from a compost made from a mix of biogas digestate, gardening residues and sewage sludge. The results demonstrate that the alkaline hydrolysate exhibited the following

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