

New discovery will help fight lethal oilseed rape disease

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Researchers at the University of Hertfordshire have found a way to



improve the resilience of oilseed rape and reduce the estimated £100m annual loss to phoma stem canker, one of the most important winter diseases of oilseed rape in the UK.

Published in *Molecular Plant Microbe Interactions*, researchers in the Department of Biological and Environmental Science found a previously undetected virus in Leptosphaeria biglobosa, a fungus that causes phoma stem canker in <u>oilseed rape</u>, which can potentially be exploited to improve the immune system of the plant and protect it against more aggressive fungi.

Oilseed <u>rape</u> belongs to the mustard or cabbage family and is a major source of vegetable oil, livestock feed and biodiesel worldwide. Phoma stem canker can be fatal to <u>plants</u>, cutting off their supply to food and water which often leads to premature aging and death.

"Our research is setting the groundwork for the biological control of phoma stem canker. What we've found can be used as part of an integrated pest management program aimed at reducing the severity of disease symptoms and improving yield, helping decrease the annual loss to disease every year," says Dr. loly Kotta-Loizou, visiting lecturer at the University of Hertfordshire.

More information: Unnati A. Shah et al. Mycovirus-Induced Hypervirulence of Leptosphaeria biglobosa Enhances Systemic Acquired Resistance to Leptosphaeria maculans in Brassica napus, *Molecular Plant-Microbe Interactions* (2019). DOI: 10.1094/MPMI-09-19-0254-R

Provided by University of Hertfordshire

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