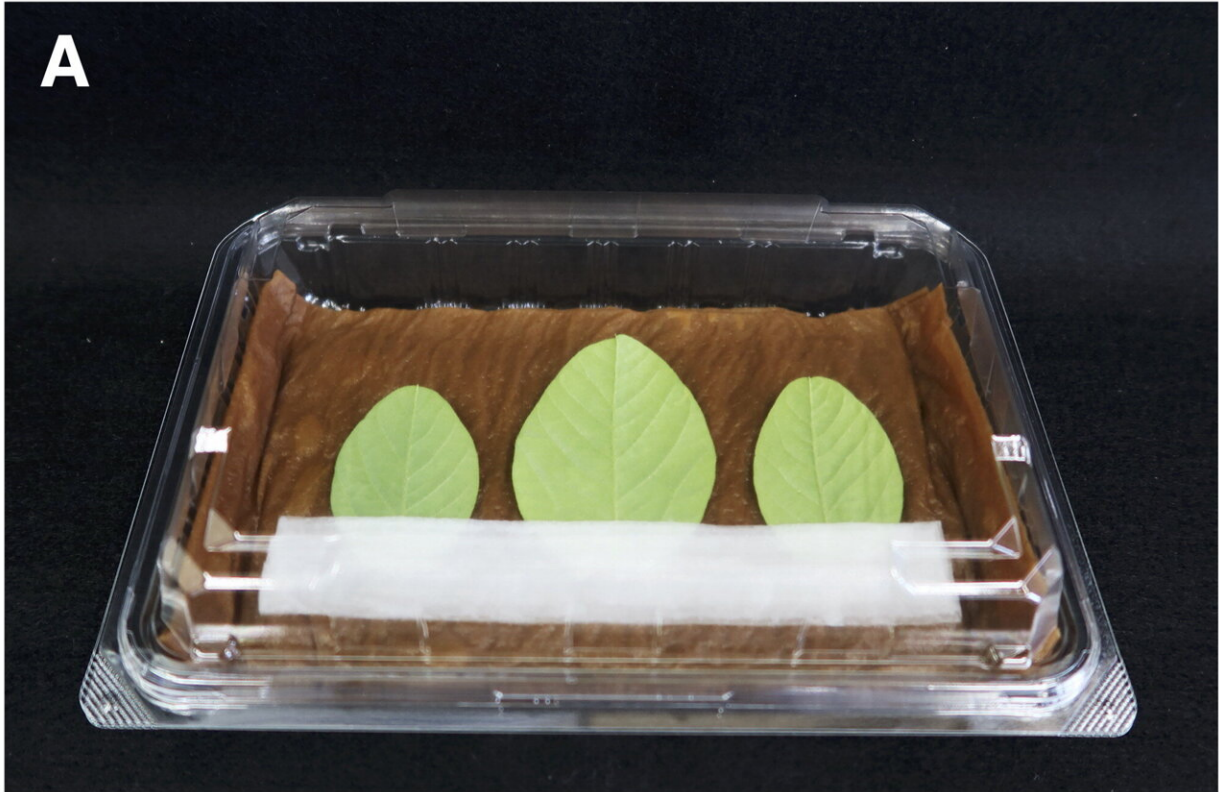


# **New inoculation method can protect soybeans against devastating leaf blight**

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Leaf culture inoculation method for *Cercospora kikuchii*. Leaflets were placed

in a disposable plastic case and kept in high humidity for 9 days to promote infection. A, Picture of the plastic case with soybean leaflets. B, Leaf pieces after spray inoculation. Credit: Takeshi Kashiwa, Miguel Angel Lavilla, Antonio Diaz Paleo, Antonio Juan Gerardo Ivancovich, and Naoki Yamanaka

Reported in three major soybean-producing countries in South America (Argentina, Brazil, and Paraguay), *Cercospora* leaf blight (CLB) is a global threat to soybean. CLB causes dark-purple lesions on leaves and premature defoliation, which can diminish soybean production.

Currently there are no CLB-resistant [soybean](#) cultivars, and fungicides are becoming less effectiveness as CLB develops resistance. To combat this devastating disease, it is imperative to breed resistant soybeans.

Thanks to a collaboration between scientists at the Japan International Research Center for Agricultural Sciences in Japan and at the National University of Northwestern Buenos Aires and the National Institute of Agricultural Technology in Brazil, we now have an inoculation method that can identify resistance against one of the CLB pathogens.

"Developing an inoculation for this disease was difficult but we finally developed the prototype of this method," explained Takeshi Kashiwa. Their method uses only leaflets for inoculation, which gives a big advantage for the screening of soybean genetic materials through small experimental design.

"The method can help breeders select candidates for [genetic material](#) against the disease," said Kashiwa. Learn more about this new method in "The Use of Detached Leaf Inoculation for Selecting *Cercospora kikuchii* Resistance in Soybean Genotypes," published in the open access *PhytoFrontiers*.

**More information:** Takeshi Kashiwa et al, The Use of Detached Leaf Inoculation for Selecting *Cercospora kikuchii* Resistance in Soybean Genotypes, *PhytoFrontiers*<sup>TM</sup> (2021). [DOI: 10.1094/PHYTOFR-01-21-0002-TA](https://doi.org/10.1094/PHYTOFR-01-21-0002-TA)

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