

First report of powdery mildew on phasey bean in Florida could spell trouble for papaya

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Phasey bean, also known as wild bush bean, is an invasive species native to the tropical Americas and the Caribbean. In 2017, the Florida Exotic Pest Plant Council (FLEPPC) listed phasey bean under Category II on the invasive species list, indicating that the species has increased in abundance, especially in south Florida and the Keys, but not yet altered Florida plant communities.

In the fall of 2017, leaves of phasey bean plants in Homestead, Florida, displayed powdery fungal growth, which appeared in the form of white spots on both sides of the leaves. Plant pathologist Shouan Zhang and a former postdoctoral associate Bindu Poudel (now with the University of Arizona Cooperative Extension) conducted analysis by sequencing genes of genomic DNA and identified the fungus as *Erysiphe fallax*, which causes a disease known as powdery mildew. To their knowledge, this is the first report of powdery mildew on phasey bean in the United States.

While phasey bean does not have any economic value, it may possess the ability to harm a species that does: papaya, another known host of *Erysiphe fallax*. Phasey bean is prevalent year-round in south Florida, including Homestead, which contains approximately 300 acres of papaya. If unmanaged, phasey bean could serve as a reservoir of [powdery mildew](#) with the potential to infect papaya and may result in [financial losses](#) for the papaya industry.

More details about this development can be found in "First Report of *Erysiphe fallax* Causing Powdery Mildew on Phasey Bean (*Macroptilium*

lathyroides) in the United States" published in *Plant Health Progress* Volume 20, Issue 1.

More information: Bindu Poudel et al, First Report of *Erysiphe fallax* Causing Powdery Mildew on Phasey Bean (*Macroptilium lathyroides*) in the United States, *Plant Health Progress* (2019). [DOI: 10.1094/PHP-11-18-0071-BR](https://doi.org/10.1094/PHP-11-18-0071-BR)

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