Whiteflies cause millions of dollars in damage each year

More Time on the Computer to Help Alleviate African Hunger

It is not immediately obvious how a Computational Biologist in Australia can help fight hunger around the world but Dr Laura Boykin at The University of Western Australia does just that.

The connection is whiteflies or Bemisia tabaci – a highly invasive pest with the capacity to not only completely destroy crops but completely destroy hope for many to avoid starvation.

These whiteflies are particularly hazardous in sub-Saharan Africa where they devastate vegetables, cassava and sweet potato yields through both feeding and the transmission of viruses, causing millions of dollars in damage each year. Boykin's computational work known as species delimitation distils how individuals and various populations of whiteflies fit into natural groups. Importantly, she connects the work of other scientists such as evolutionary biologists and identifies how it could be and should be used when making key decisions about global biosecurity.

This information gives farmers insight into how to specifically target the whiteflies before they have the chance to cause mass devastation.

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