



GRANT AMOUNT \$99,164 INVESTIGATORS Kaplan, I. Holland, J. Michel, A. PROJECT LEADER

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## A multi-scale approach to forecasting plant disease epidemics by identifying vector sources and reservoirs

This study documented that, in contrast to original expectations, soybean aphid was not a major vector in these cucurbit systems. This is due to the fact that soybean aphid regional flight patterns have shifted to later in the summer and they are less abundant. This shift in distribution and timing of infestation may be weather related. In contrast during cucurbit production, researchers found that the cowpea aphid was a more abundant aphid vector early in the summer and is likely more important as a vector in this system. The shift in species dominance refocused efforts to understand the genetics of the cowpea aphid to reduce its impact on cucurbit production.

