

## **EVALUATION OF HAIRY NIGHTSHADE AS AN INOCULUM SOURCE FOR THE APHID MEDIATE TRANSMISSION OF PLRV**

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Potato leafroll virus (PLRV) is one of the most serious aphid-transmitted diseases that affect yields and quality of potatoes grown in the US. The green peach aphid (GPA) is considered by far the most effective vector of this virus. Even the most intense aphid control may not prevent spread of PLRV unless measures are also taken to keep virus-source plants at a minimum. Since nightshades are one of the preferred weeds for GPA, we decided to investigate the potential of this weed as a source of the virus and its spread or perpetuation. With the use of ELISA, we confirmed that GPA can transmit PLRV to hairy nightshade and that “clean” aphids can become viruliferous after feeding on infected nightshades. We also present data regarding production of infected new plants from hairy nightshade seeds obtained from infected plants.