

## Virus-resistant potato genetically engineered with RNAi developed but not near commercialization

RNA interference (RNAi) technology has been successfully applied in stacking resistance against viruses in numerous crop plants. During RNAi, the production of small interfering RNAs (siRNAs) from template double-strand RNA (dsRNA) derived from expression constructs provides an on-switch for triggering homology-based targeting of cognate viral transcripts, hence generating a pre-programmed immunity in transgenic plants prior to virus infection. In the current study, transgenic potato lines ... were generated, expressing fused viral coat protein coding sequences....

Regenerated lines were further assayed for resistance to virus inoculation for up to two consecutive crop seasons. Nearly 100% resistance against PVX, PVY, and PVS infection was observed in transgenic lines when compared with untransformed controls, which developed severe viral disease symptoms. These results establish the efficacy of RNAi using the coat protein gene as a potential target for the successful induction of stable antiviral immunity in potatoes.

**The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion, and analysis. Read full, original post: [RNAi-Mediated Simultaneous Resistance Against Three RNA Viruses in Potato \(behind pay wall\)](#)**