PhopGV baculoviruses for control of *T. absoluta* in tomato and *P. operculella* and *T. solanivora* in potato

Andreas Larem[1], Eva Fritsch[1], Karin Undorf-Spahn[1], Johannes A. Jehle[1]
[1] Julius Kühn-Institut, Institute for Biological Control, Darmstadt
Email of corresponding author: andreas.larem@jki.bund.de

A promising method for the biological control of insect caterpillars is the usage of baculoviruses. Several different baculoviruses have already been commercialized as highly selective biocontrol agents for insect pest control. The tomato leaf miner *Tuta absoluta* has shown resistance to chemical insecticides, therefore biological alternatives are searched to control this pest insect. Previous studies have shown that there may be the opportunity to use a single baculovirus isolate to control three different but close related insect species, i.e. *Phthorimea operculella* (potato tuber moth), *Tecia solanivora* (Guatemalan potato moth) and *T. absoluta* (tomato leaf miner). Isolates of *Pthorimea operculella* granulovirus (PhopGV) were found to infect all of these three pests. To find a highly virulent isolate to control these three pests it is necessary to characterize different isolates by biological and molecular means. As an outcome of this research the development of a combined control of different pests by highly selective baculoviruses is aimed at.