Algemene gegevens	
PPS-nummer	1409-045 / U-TKI-2014-10
Titel	Mechanism of thrips resistance in Capsicum
Topsector en innovatiethema	T&U, Meer met Minder
Projectleider (onderzoek)	Ben Vosman
PPS-coördinator (namens private partij)	Alejandro Lucatti
Contactpersoon overheid	Jan van Vliet
Status (lopend of afgerond)	lopend
Type onderzoek (F, T of V)	Basic research
Werkelijke startdatum	June 1, 2015
Werkelijke einddatum	September 1, 2019
Korte omschrijving inhoud	Recently we have discovered an effective source of thrips resistance in pepper and shown that the resistance was based on inhibition of larval development. The goal of this project is to elucidate the mechanism and identify the gene(s) involved.

Highlights

Thrips are among the major pests worldwide. Thrips puncture plant cells and feed on the content, causing silvering of the leaves. More importantly, they can transmit viruses that can destroy a complete crop in a matter of weeks. Thrips are invasive species with a high reproduction rate that can spread rapidly over a large area. Several thrips species have a worldwide distribution. Thrips are also difficult to control because of their cryptic habit, the larvae hide in closed buds and pupate in soil. This makes them difficult to reach by pesticide sprays, which limits their effectiveness. Recently we have discovered an effective source of resistance against thrips in pepper and shown that the resistance was based on inhibition of larval development. A single QTL for larval development and thrips damage was found in an F2 population. The goal of this project is to elucidate the mechanism of thrips resistance in pepper through identification of the gene(s) involved. The project started with the appointment of the PhD student. A startup meeting was organized on 14-09-2015. Practical work on the project has started with screening F3 plants for recombination in the QTL region.