

GROWERTALKS

GT in Brief

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Zapping Bugs With Lasers

Chris Beytes

At Wageningen University & Research in the Netherlands, researcher Estuardo “EJ” Hernández Olesinski and his team are seeing if lasers can be used in the greenhouse to kill insect pests. They're delivering the laser light in a triangular shaped “wall of light” that can be installed in the ventilation system of a greenhouse to zap them as they enter, or even used preventatively by actively scanning for pests. The laser does have enough power to burn human skin at the target point of the machine, but it quickly disperses and isn't hazardous within a few meters.

Currently, they're focused on fighting thrips and aphids, which can be killed even when located underneath the leaf. The laser doesn't harm the plants. They say the system can be “tuned” for different insects, and natural enemies in the greenhouse can remain safe when discriminated based on their size (bigger insects require more energy), making the system a suitable addition to a beneficials program. EJ says there are even opportunities to use lasers in open-field cultivation.

The project— “Lasers In Greenhouses and Horticulture against Thrips and pests” (LIGHT)—is a public-private partnership between Lion Laser Systems, Ekyw, Glastuinbouw Nederland, Octiva, Royal Brinkman, Stichting Kijk, and The Greenhouse Horticulture and Flower Bulbs Business Unit of Wageningen University & Research. **GT**