

Lotus Crop Thrip Control with the MG-1S

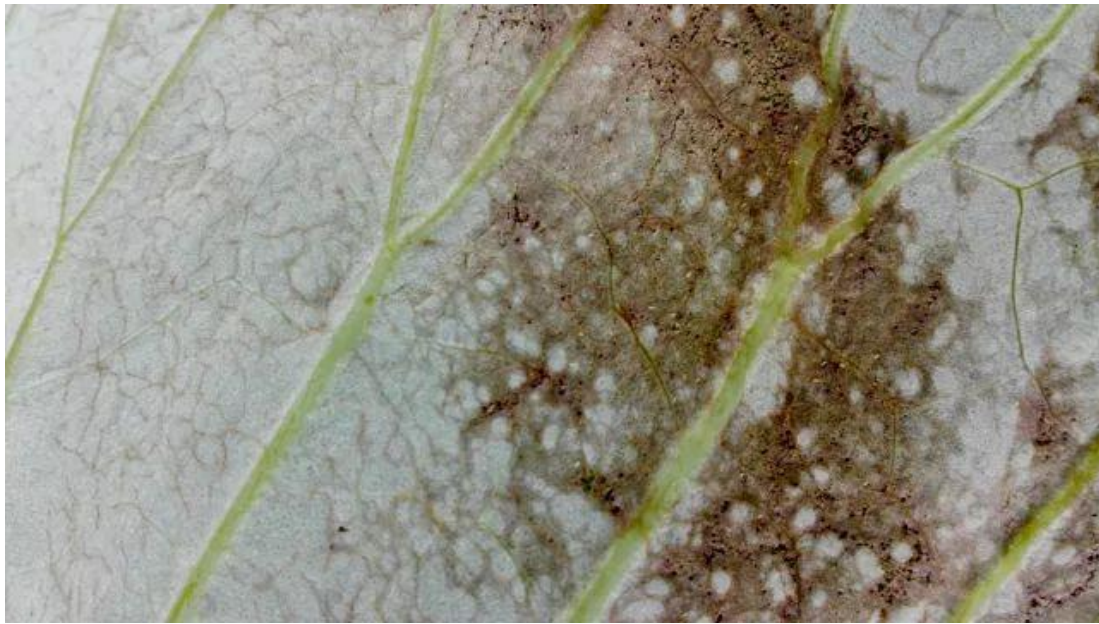
The Lotus is a perennial aquatic plant grown or planted in lakes, ponds, and marshes. Its roots and seeds are both edible. Lotus seeds, roots, leaves, flowers, and cores of are common ingredients in Chinese herbal medicines.



Recently, over 16.5 acres of lotus were infested by thrips in the Chinese city of Taishan in Guangdong Province. With rasping-sucking mouthparts, thrips pierce the pellicle tissue of lotus leaves and suck out their fluids, causing the leaves to wither and lowering the output of lotus roots and seeds.



The Hehai UAV Plant Protection Team was asked to help control these pests with their MG-1S. Rampant thrips had already damaged plants in part of the area by the time they arrived.

**Objective**

Use the DJI MG-1S to prevent thrips from harming lotus leaves.

Environment Information

Manual crop spraying is difficult for lotus plants, which grow in aquatic environments. Some farmers give up protecting lotus plants at certain growth stages, which leads to lower production.



The DJI MG-1S allows farmers to spray aquatic crops, like the lotus, more easily.

Date	September 7 th , 2017
Location	Nansheng Laowu Village of Wencun County, Jiangmen Taishan City, Guangdong Province
Terrain	Pond
Weather	Windy Cloudy 28°C

Chemical Information

To avoid drug resistance, this operation used the chemicals below according to past experience.

Name	Type	Concentration	Chemicals per Acre
Spirotetramat	Suspending Agent	22.40%	122.6ml
Imidacloprid	Water Dispersible Granule	70%	910.5g

Operation Parameters

To control rampant pests, another XR110015 nozzle was used to increase the spraying rate.

Operation Mode	Smart Operation Mode	Flying Speed	4.5m/s
Flight Altitude	2.0m	Distance between Neighboring Flight Paths	4.5m
Liquid per Acre	6.07L/Acre	Nozzle Model	Fan-type XR110015

Operation Result

Before spraying, there were about 100 thrips on each unfolded lotus leaf and 10-20 thrips on folded lotus leaves.



Four days after spraying, Hehai staff picked leaves at various growth phases in different locations, and no thrips were found. The MG-1S performed the job well, and the customers were satisfied.