

PEST MANAGEMENT

6/2	0.001	0.2	0.022	0.9
6/10	0.001	0.2	0.004	0.3
6/18	0.02	0.2	0	0
6/25	0.001	0.1	0	0
7/2	0.012	0.2	0	0
7/9	0.003	0.2	0	0
7/15	0.005	0.2	0	0
7/22	0	0	0	0

Spotted-wing Drosophila Biological Control – An Update

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Ganaspis brasiliensis, a parasitoid of spotted-wing drosophila (SWD), was released for the first time in New Jersey on Monday July 18, 2022 (see pictures). This marks a historic moment for what we hope will be the long-term biological control of this pest. This biocontrol agent is originally from Asia, where SWD comes from, and thus, unlike the larval parasitoids already present in the USA, it is well adapted and specific to attack SWD larvae. The reason for this is that SWD larvae has a strong immune mechanism that allows them to avoid being attacked by the parasitoids present in the USA. However, the parasitoids from Asia, such as *G. brasiliensis*, have overcome this immune response.

We are releasing *G. brasiliensis* in non-crop habitats surrounding blueberry farms. We hope that this biocontrol agent will establish, and be able to regulate SWD populations, in these habitats. During this first year, we are making releases in five commercial blueberry farms, where we are studying *G. brasiliensis* establishment and impact on SWD. Based on the results, we will expand releases to more sites in following years. We will keep updating growers on these efforts, which are being funded by the USDA Specialty Crop Research Initiative (SCRI) and USDA Crop Protection and Pest Management (CPPM) programs. This work is being conducted in collaboration with the New Jersey Department of Agriculture Phillip Alampi Beneficial Insect Rearing Laboratory in Trenton, NJ.



Pictures showing mass releases of the SWD parasitoid *G. brasiliensis* near blueberry farms in southern New Jersey.

Photos by Patricia Prade.

Cooperating Agencies: Rutgers, The State University of New Jersey, U.S. Department of Agriculture, and Boards of County Commissioners. Rutgers Cooperative Extension, a unit of the Rutgers New Jersey Agricultural Experiment Station, is an equal opportunity program provider and employer.