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GERBERA: *Gerbera jamsonii* L.

Leafminer; *Liriomyza trifolii* (Burgess)

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CONTROL OF LEAFMINER ON GERBERA UNDER GREENHOUSE CONDITIONS, SPRING 1998: Plants were acquired from a cooperating grower in 3.9 liter pots. The plants were fertilized with 160 mg N/liter through heavy weight emitters every other day. We infested the gerbera with leafminers by exposing them for 4 h to an existing leafminer colony. After four days, the eggs hatched and a pre-treatment count of number of mines/plant was recorded. A single treatment was applied on the same day as the pre-treatment count. The following day, when the treatments had dried, plants were tipped over trays filled with sand, thereby collecting larvae as they emerge from the leaf to pupate. Post-treatment counts of the number of pupae were taken when all larvae had exited the leaf (7 d). In addition, pupae were collected and placed into vials, and emerged adults were counted two weeks later. Spray treatments were applied to run off using a backpack sprayer at approximately 25 psi. A RCB design was used with four replicate/blocks per treatment. An ANOVA was performed on the data set, and LSD was used to separate the means.

No phytotoxicity was observed throughout the length of the trial. Avid, Conserve, and GWN-1725 @ 64 oz significantly reduced the number of mines per plant and significantly reduced the amount of adults emerging.

Treatment/formulation	Rate amt/100 gal	No. mines/plant	% mortality ^a % control ^b larva to pupa		% mortality ^a (% control) ^b larva to adult	
Untreated check	—	21.5a	24.7a	30.3a		
Avid 0.15 EC	10.0 oz	21.8a	96.8c	(93.2) ²	99.0d	(98.8) ²
Conserve 1SC	22.0 oz	29.0a	94.3c	(88.0)	94.3cd	(87.0)
+ Latron B-1956 @ 2.0 ml/gal						
Distance 0.86 EC	8.0 oz	23.2a	30.7a	(0.0)	38.5a	(4.6)
GWN-1725 1EC	16.0 oz	22.0a	56.4abc	(13.7)	57.7abcd	(10.1)
GWN-1725 1EC	32.0 oz	21.5a	37.1ab	(0.0)	45.9ab	(0.0)
GWN-1725 1EC	64.0 oz	20.5a	73.4bc	(54.5)	76.7bcd	(59.1)
Mesurol 75W	1.0 lb	22.5a	48.0abc	(15.1)	62.7abc	(47.5)
Mesurol 75W	2.0 lb	22.8a	20.0a	(0.0)	42.7a	(4.4)

Means followed by the same letter within a column are not significantly different (LSD, P = 0.05).

^aData transformed arcsin (\sqrt{x}) prior to ANOVA.

^bAbbott's correction for control mortality.