

(E63)

PEPPER (HOT): *Capsicum annuum* L. 'Jalepeno M'

Pepper weevil (PW); *Anthonomus eugenii* (Cano)

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INSECTICIDAL CONTROL OF PEPPER WEEVIL ON JALAPEÑO PEPPER, 1998: Pepper weevil remains one of the damaging pests of pepper in the southern US, Mexico and Central America. Insecticidal control is often unsatisfactory due to the cryptic habitat of immature stages and efficacious alternatives are needed. For this trial 4 beds, 32 inches wide and 240 ft long, were prepared on 6-ft centers by incorporating 800 lb/acre of 5-16-8, fumigating with methyl bromide/chloropicrin (66/33) at a rate of 300 lb/acre and covering with black polyethylene film mulch. Greenhouse-raised 'Jalepeno M' pepper plants were transplanted on 16 Apr at 10-inch spacing in single rows and fertigated with an additional 175 N/acre through Netafim™ drip tape with 12-inch emitter spacing. Plants were sprayed with a combination of Maneb 80 WP at 1 lb/acre plus Kocide 101 at 3 lb/acre weekly for disease control. Each bed was divided into 26 ft long 9 plots and assigned to 9 treatments in a RB design with four replications. Treatments were applied weekly for 4 wks beginning 10 Jun using a high clearance sprayer with two vertical and one horizontal boom fitted with ceramic "yellow" Albuz™ hollow cone nozzles delivering spray at 200 psi. Configuration was three nozzles, one overhead and one on each side spraying at a rate of 33 GPA.. Latron CS-7 was added as a tank mix adjuvant to all treatments at 0.8 % v/v. A pre-treatment count on 9 Jun on 36 plants in 3 random plots from each replication for fallen fruit due to weevil damage showed an average of 0.6 fruit/plant. On 19 Jun, dropped fruit from 15 plants/plot was collected to measure weevil pressure. Two harvests were made on 25 Jun and 8 Jul when all fruit 1.5 inches or more in length was harvested, counted and weighed. Incidence of weevil damage was confirmed by cutting open each fruit. Data was analyzed using GLM and means separated by LSD.

Most fruit was harvested from plants treated with Vydate although not significantly more than S1812 at 0.1 lb ai /acre, EXP 6168B at either rate or Alert. No treatment but Vydate produced significantly more fruit than the untreated check. Thus, no new material tested proved superior to the present grower standard.

Treatment/formulation ^a	Rate Amt (AI)/acre	No. No. fruit/15 plants/plot ^b
S1560 10WP	0.05 lb	223.25bc
S1560 10WP	0.10 lb	262.25ab
S1812 4E	0.10 lb	180.25c
S1560 10WP + S1812 4E	0.05 lb + 0.10 lb	219.75bc
EXP6168B .82EC	0.10 lb	257.50ab
EXP6168B .82EC	0.20 lb	270.00ab
Alert 2SC	0.20 lb	258.00ab
Vydate L	1 gt form.	317.00a
Untreated check		205.50bc

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

^aLatron CS-7 was added as an adjuvant to all treatments at 0.8% v/v.

^bFruits ≥ 1.5 inches long harvested from 15 plants per plot on 25 Jun and 8 Jul.