Section VII Foliage & Seed Insects

CABBAGE APHID CONTROL WITH FOLIAR SPRAYS, 1994 L. K. Tanigoshi & T. A. Murray Department of Entomology Washington State University Pullman, WA 99164-6382 509/335-3724

Plots were planted 9 May on the Washington State University campus, Pullman, WA with a small plot drill at a seeding rate of 6 lb/acre in 7 rows 6 inches apart. Plots were 20 x 20 ft, replicated 4 times in a randomized complete block design. Seven insecticides were applied on 8 July to water stressed plants in the budding stage, with a CO₂-powered backpack sprayer. It was equipped with a 6.75 ft boom and 6 XR Teejet 8002 flat fan nozzles with 100 mesh screen on 19 inch spacing and calibrated to deliver 21.3 gal/acre at 30 psi. Treatments were evaluated at 3, 7, 14, and 21 DAT with 2 (180°) sweeps with a standard 15 inch diam sweep net. Data were analyzed using ANOVA and means separated by Fisher's LSD.

Thiodan, methyl parathion, Pirimor, Asana, Metasystox R and Capture provided comparable and significant cabbage aphid population reductions 7 DAT. At 14 DAT Pirimor and Metasystox R were demonstrably more efficacious than the other treatments during peak cabbage aphid population increase and cessation of plant growth due to drought. NTN-33893 provided no aphicidal activity as a foliar spray under the late season drought conditions of these trials.

Treatment	Rate lb(AI)/acre	7 July	11 July	15 July	22 July
Thiodan 3EC	1.00	360.0abc	57.50c	130.0c	204.80a
Methyl parathion 4EC	0.75	345.0abc	68.75c	147.75c	152.80ab
Pirimor 50DF	0.375	271.3c	13.0d	31.25d	3.80c
Asana 0.66EC	0.05	507.5ab	86.25bc	77.25c	545.50a
Metasystox R	0.50	562.5a	10.50d	29.75d	16.30bc
Capture 2EC	0.50	442.5ab	73.75bc	77.50c	127.80ab
NTN-33893	0.26	350.0abc	156.25b	336.25b	6432.50a
Check		325.0bc	602.50a	1025.0a	1060.0a

Means within the same column not followed by the same letter differ significantly (P = 0.05; Fisher's LSD).

Data were transformed by $log_{10}(x + 1)$ before ANOVA; original data shown.