Section 1
Mites and Sap-Sucking Insects

MITE AND APHID CONTROL ON HOPS
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Testing new miticides on hops assumes additional importance with the voluntary cancellation of registration of cyhexatin by Dow. Foliar sprays were applied at 3-wk intervals (July 1, July 22, Aug. 12) using a handgun from a Rears air blast sprayer at 300 psi. Volume (l/ha) was 1300. Acaricides tested were (kg Al/ha): Biphenthrin (0.088), dicofol, cyhexatin, and propargite (all 1.1). All provided adequate mite control (1-3/leaf). Biphenthrin did not suppress mites for the full 3-wk treatment interval. Long residual ovicides clofentezine (0.22), hexythiazox (0.088), and Avermectin (0.055) all provided excellent early season control. Mite nos. in clofentezine-treated plots exceeded those in the untreated check during late August. Male mite sex attractant Stirrup M (0.22) did not significantly increase mite mortality. Hop aphid control by diazinon (1.1) was compared with methamidophos (0.55), methidathion (1.1), endosulfon (1.1), mevinphos (0.55), methomyl (1.1), cypermethrin (0.22), biphenthrin (0.088), fluvalinate (0.165), chlorpyrifos (1.1), disulfoton (0.55 & 0.825). Disulfoton and fluvalinate were superior, but all provided adequate control with the exception of endosulfon. Methomyl was registered (tol. 7 ppm) for use on German hops but not for U.S. produced hops. Approximately 500 samples (fresh green and dried cones) are prepared for analyses during the period 11/87 - 5/88 to provide data to support requests for U.S. registrations on hops. Nine commercial hop yards were sampled to develop a sequential sampling plan for hop aphids.