

similar to damage resulting from mineral oil-pyrethrum treatments. Later studies with atomized oil-based insecticide sprays indicate that excessive tip damage may be avoided by fewer applications and proper timing. This problem is receiving active study at the Everglades station and the atomized oil treatment is not recommended until these studies are complete.

Discussion of Experimental Results

In the three sections of experimental data presented, most of the more promising control methods and materials have been evaluated. The rapid revolution in insect control makes necessary a more or less continuous research program to improve the control of insects attacking corn, or any other crop. Certain differences in control obtained with similar treatments at the three branch stations serve to demonstrate the complexity of the problem of insect control. By combining and analyzing the research data, a recommended control program is presented for insects attacking sweet corn.

Budworms have been controlled satisfactorily with a number of insecticides, in bait, spray and dust formulations. Poisoned baits have given the most effective control when applied by hand to the buds. However, cost of application limits this method to small acreages. Sprays applied with power sprayers have proved most satisfactory to commercial sweet corn producers and are superior to dusts. Ground-powered dusters have been fairly effective when the treatments were thorough and properly timed. DDT, methoxychlor, DDD, parathion, toxaphene and chlordane have all given good control of fall armyworms in corn buds. DDT emulsion is recommended for most purposes because it (1) has been thoroughly tested, (2) is relatively inexpensive and (3) is comparatively safe to apply. Methoxychlor should be used for budworms if the crop remains are to be fed to livestock.

Oil-pyrethrum injection dusts and sprays have each given fairly satisfactory control of corn earworms in certain instances. DDT, methoxychlor, parathion, chlordane and toxaphene have shown promise in at least one test. The oil-pyrethrum injection method has consistently given the best control of corn earworms. However, cost of application and time required for making the treatment limit its use. Dust formulations have been most thoroughly tested and application with ground-powered dusters and airplanes make this method of treatment most satisfactory

