

## EFFECT OF SOME FUNGICIDE MIXTURES ON SOD WEBWORMS IN SOUTH FLORIDA TURFGRASSES

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A new fungicide mixture was observed to control tropical sod webworms in No-Mow bermudagrass, Everglades-1 bermudagrass, Tifgreen bermudagrass, and Bitter Blue St. Augustinegrass in South Florida.

The initial observation was made on 11 June 1964, following the termination of a test of fungicides for control of *Helminthosporium-Curvularia* infection of Tifgreen bermudagrass which was conducted at the University of Florida Plantation Field Laboratory, Ft. Lauderdale, Florida. The treatments could not be rated for disease control because the grass was eaten off by tropical sod webworms, *Pachyzancla phaeopteralis* Guenee, in all plots except those sprayed with PFL-64, which is a mixture of 3 parts 50% Captan (M trichloromethyl thiotetrahydrophthalimide), 2 parts 53% Tribasic copper sulfate, and 2 parts 75% PCNB (pentachloronitrobenzene), and those treated with Experimental Turf Fungicide-64, a mixture of 3 parts 65% Thiram (tetramethylthiuramdisulfide), 2 parts 53% Tribasic copper sulfate, and 2 parts 75% PCNB.

Both these mixtures had been applied at the rate of 7 lb. per 100 gallons of water per 1000 sq ft of turf. No sod webworms were found in the grass in any of the replications of either of these treatments. There was an average count of 20 webworms per sq ft of turf in all replications of the other 13 treatments in the test. The color, ground cover, and over-all appearance of the PFL-64 plots were outstanding, and the grass in the Expt. Turf Fungicide-64 plots was almost as good.

To check on these observations, five additional tests were run on webworm infested plots of No-Mow bermudagrass, Everglades-1 bermudagrass, and St. Augustinegrass. Single spray applications of PFL-64 at dosage rates of 1¼, 1¾, 3½, and 7 lb. of PFL-64 per 1000 sq ft of turf were applied. Expt. Turf Fungicide-64 was not tested further as it was difficult to keep in suspension and to apply.

At all dosage rates, sod webworms were controlled for from four to six weeks. A single application of PFL-64 at 1¼ pounds per 1000 sq ft on each of the three bermudagrasses, gave protection from sod webworms for six weeks. At all dosage rates the grasses showed signs of new growth within three or four days after treatment, and recovery continued throughout the periods of observation.

Individual components and combinations of two components of PFL-64 were tested but did not give as effective control as did the complete mixture.

Further study of the effect of PFL-64 at smaller dosage rates is necessary in order to learn the minimum effective dosage of this mixture for the control of sod webworms in South Florida turfgrasses.