SOYBEAN LOOPER CONTROL WITH REDUCED RATES OF SELECTED BIOLOGICAL INSECTICIDES, 1991: Selected microbial insecticides (Biobit, Condor, Dipel ES, Agree, Javelin, EXP 60516A and Delta Bt) were evaluated for efficacy against the soybean looper. Soybeans were planted 3 Jun on a Sharkey clay soil at the Northeast Research Station, St. Joseph, LA. Plots were 19.82 m X 4 rows (1.02 m row spacing), replicated 4 times in a randomized complete block design. Test treatments were applied with a tractor mounted boom equipped with a compressed air system for spraying small plots. Spray volume was calibrated to deliver 93.5 liters/ha with two 80015 flat fan nozzles/row. Application was to all 4 rows of the plots on 23 Aug. The soybeans were in the R5 growth stage at the time of application. Fifty sweep samples per plot were taken at 3 and 6 DAT using a 38.2 cm diam sweep net. Rainfall amounts were 0.31 inch on 22 Aug, 0.28 inch on 26 Aug and 0.31 inch on 28 Aug.

Soybean looper populations were below threshold on 23 Aug, but were rapidly increasing. At 3 DAT, Condor SC, Dipel ES, and Larvin 3.2 F were the only treatments to significantly reduce soybean looper counts. At 6 DAT Condor SC and Larvin 3.2 F were the only treatments to maintain significant reduction in soybean loopers. Rainfall probably affected the performance of the insecticides.