Evaluation of Pyrethroid for Control of Corn Earworm in Sweet Corn (Field 5B) Greg Cronholm

Objective: To evaluate a new pyrethroid (Proaxis) with two standards (Warrior and Baythroid) for control of corn earworms in sweet corn.

Methodology: Proaxis DE225 was evaluated at rate of 3.84 oz/a. compared to Warrior at 3.84 oz/a and Baythroid at 2.2 oz/a. An untreated control was included and plots were randomized and replicated four times. First application was initiated on July 1, 2004 with 80% of the ears in the green silk stage and 20% not yet silking. The first application was planned for 1 to 2 days prior to this, but the field could not be reached with equipment because of 2 to 3" of rain which fell over the area from June 28 to 30th. The field was treated in the late afternoon because the furrows were too wet to walk in that morning. Plots were arranged in a randomized complete block design. Plans were for 3 applications at 3 to 4 day intervals. The 2nd planned application could not be made due to irrigation by the center pivot and rainfall. A second application was made on timing for a third application on July 8, 2004. The corn stage when the second application was made was 20% green silk and 80% brown silk. Due to recent irrigations the field was still very wet in the diked rows. Plots were examined on July 12 and all ears were in the brown silk stage. Very few corn earworm eggs were found so a third application was not initiated. Post treatment ratings were made on July 16, eight days after the last application.

Results: The pyrethroid applications reduced the number of medium and large larvae per 10 plants when compared to the untreated plots. The percent of ears infested with corn earworms and total ear damage were significantly reduced by the insecticide applications. Higher levels of control would be expected if three applications or better timing could have been achieved, but rainfall and irrigation timing prevented this.

