Stub Cotton

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Pink bollworm. More moths (2.6X) from overwintered pink bollworm larvae emerged in stub cotton than in planted cotton. Approximately 62% of the moths emerging in stub cotton compared to 10% of the moths emerging in planted cotton had host material (squares) available for reproduction as a result of the earlier growth of the stub cotton. Significantly more pink bollworm infested flowers and bolls were found in stub cotton exposed to moths from outside sources for 8 weeks before being protected by field cages than in stub cotton caged earlier in the season (April 1). Also, the number of infested flowers and bolls was significantly greater in planted cotton field cages adjacent to the stub cotton open to moths from outside sources than in those protected from moths from outside sources. Boll infestations in the stub cotton were first found during the week ending June 21 and economic infestation levels of 15% or more were reached by the week ending July 26. Economic boll infestations occurred in adjacent planted cotton during the week ending Aug. 16 and in distant (265 meters) planted cotton during the week ending Aug. 30. The percentage of larvae in diapause was not different in stub and planted cotton. The percentages of larvae in diapause remained low through mid-September, then increased rapidly and reached 82% by Oct. 7.

Boll weevil. The number of overwintering boll weevil adults captured in grandlure baited traps placed adjacent to 1979 infested cotton fields fluctuated from 1 to 120 per trap from late January through March 1980. Boll weevils were trapped up to 5.6 kilometers from the infested fields. Reproductive males were found by Jan. 18 and females with one or more eggs in the oviduct were found by Feb. 4. The first boll weevil infested squares (0.1%) in 19.2 hectares of stub cotton were found on April 15. Square infestations on May 6, June 10 and June 30 were 2.2%, 12.4% and 31.6%, respectively. Peak boll infestations occurred July 16-23 with 23.3% of the bolls infested with 13.6 boll weevils per 50 bolls. Grandlure-baited boll weevil traps caught one or less boll weevil per trap/day through July 6. From July 7-10, traps on the edge of the infested fields caught an average 5.7 adults per day. The boll weevil infested fields were treated with 6 applications of diflubenzuron, 25 applica- tions of organophosphates, and one application of synthetic pyrethroid on 22 application dates from April 25 to Aug. 4.