

ARIZONA PINK BOLLWORM ERADICATION PROGRAM UPDATE 2011**Leighton Liesner****Larry Antilla****Michael Whitlow****Arizona Cotton Research & Protection Council****Phoenix, AZ****Robert T. Staten****USDA, APHIS, PPQ, CPHST - Retired****Phoenix Laboratory****Phoenix, AZ****Abstract**

The Arizona Cotton Research and Protection Council initiated activities to eradicate pink bollworm, Pectinophora gossypiella (Saunders) in 2006. The main components of the program include Bt cotton, pheromone mating disruption, sterile moth releases, trapping and limited insecticide treatments on an area wide basis. Reductions in pink bollworm populations have been progressive and dramatic since program inception. No pink bollworm life stages have been found in boll samples in two or more years across the three management areas in Arizona. Small but significant numbers of moths that are not readily identifiable as released sterile insects continue to be present in program traps in some areas. These moths likely fall into one of three categories; sterile moths that over time or due to microbial activity cease to retain the red dye marker ingested in rearing, the rare product of sterile-sterile mating which is not a reproductive threat to the program, or background native populations current sampling methods are unable to measure. Program data indicates the possibility of a connection between the fields receiving the highest levels of sterile release and the presence of suspect native moths. Desert migration line trapping produced zero native moths in 2011 and does not seem to support the possibility of migrating populations of pink bollworm, but is not conclusive alone. The program is pursuing several approaches in an attempt to determine the source or eliminate the presence of suspect native moths across the program management zones in Arizona for the 2012 growing season.