

SPRAYABLE FORMULATION FOR PINK BOLLWORM MATING DISRUPTION - FURTHER DEVELOPMENTS**Michelle L. Walters****John Claus****Nelson Foster****USDA, APHIS, PPQ, CPHST****Phoenix, AZ****Jack Jenkins****Nick Jenkins****Pacific BioControl****Litchfield, AZ****Barry Barnes****USDA, APHIS, PPQ, CPHST (seasonal)****Phoenix, AZ,****Mike Whitlow****Larry Antilla****Arizona Cotton Research & Protection Council****Phoenix, AZ****Robert T. Staten****USDA, APHIS, PPQ, CPHST – Retired****Phoenix, AZ****Abstract**

The standard pheromone mating disruption product, PB-Robe L, is effective for 90 – 120 days, but requires hand or tractor application hence the need for a sprayable formulation that lasts 30 days and can be applied by tractor or aircraft and thus can be used late season. A new sprayable pheromone formulation, PB-GEL, was applied by air and ground to cotton fields in several areas in Arizona and New Mexico in 2007- 2009. Untreated fields were used as controls. Mating disruption effectiveness was measured by capture rates of wild and sterile PBW moths in pheromone-baited delta sticky traps placed in cotton fields. In 2010, the sprayable formulation was modified for ease of production and thus required additional testing. Applied first by tractor in June and then by helicopter in August to fields in Tonopah, AZ, the modified formulation suppressed trap capture for 26-40 days. The sprayable formulation appears to be an economically advantageous product for use in controlling pink bollworm mating because of the ease of application and its longevity in the field.