

EVALUATION OF THE POTENTIAL FOR PERMANENT ESTABLISHMENT OF THE LYGUS PARASITOID

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The western tarnished plant bug and other lygus species are key pests of cotton in western arid cotton production regions. Lygus bugs in cotton are difficult to manage because of their wide host range and the mobility of adults, and control efforts rely primarily on conventional pesticides. Introduction of new natural enemies capable of attacking lygus in multiple crop and non-crop habitats may reduce equilibrium populations levels and reduce the frequency of injurious lygus populations in cotton and other crops. A strain of the braconid parasitoid, *Peristenus relictus*, was recently collected from Morocco. This strain is believed capable of surviving the high temperatures typical of the Central Valley of California. We propose to evaluate over a 3- year period the potential for permanent establishment of this parasitoid in the southern San Joaquin Valley.