

1537 Screening Cotton Racestocks and Wild Cottons for Resistance to *Lygus hesperus* Knight (Heteroptera: Miridae) Under Greenhouse Conditions

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Lygus hesperus Knight (western tarnished plant bug) is a serious pest of cotton (*Gossypium* spp.) in the western areas of the U.S. The diversity of morphological traits in wild cotton germplasm collections may hold key components for development of cottons resistant to this pest. The objectives of this study are to develop an effective and efficient method for screening cotton collections for *Lygus* resistant traits under greenhouse conditions and to identify lines that negatively affect oviposition and nymphal development of *L. hesperus*. Wild collected *L. hesperus* are reared in colonies on artificial insect diet. Test nymphs are acquired from colony egg lay. Various methods of insect to host confinement are used for testing purposes. Cotton plants that respond by decreasing oviposition, and egg and nymphal development will be further evaluated to determine what type of resistance is being expressed by the plant. Results will be discussed in the poster presentation.