

Impact of the Tamarisk Leaf Beetle (*Diorhabda spp.*) on Salt Cedar (*Tamarix spp.*) and Athel (*T. Athel*) Along the Rio Grande River in Presidio and Brewster Counties, Texas

Christopher M. Ritzi^{*1}, Anne Marie Hilscher¹ and Jack DeLoach²

* critzi@sulross.edu

¹Sul Ross State University, Box C-64, SRSU, Alpine, TX 79832

²USDA-ARS, Temple, TX

Salt cedar (*Tamarix spp.*) is a deciduous shrub or small tree that was introduced into the United States from Eurasia in the early 1800's to stabilize riverbank erosion and to serve as a windbreak and ornamental. However, due to a high reproductive potential and the absence of natural predators, salt cedar has become invasive on many river systems in the Western United States such as the Colorado and Rio Grande. Additionally, athel trees (*Tamarix aphylla*) have also been introduced into the border region of Texas and Mexico as well for windbreaks and shade trees. In 2006, attempts to establish the Tamarisk leaf beetle (*Diorhabda spp.*) at three locations along the Rio Grande was conducted in an attempt to control the spread of salt cedar and restore the riparian corridor which has become populated by a monoculture of salt cedar. Currently, 12 release sites along the Rio Grande are being monitored at varying levels of establishment. In particular, a comparison of the establishment and efficiency of the Subtropical Tamarisk Beetle (*Diorhabda sublineata*) on salt cedar and athel trees in the vicinity of Presidio, TX is being conducted. Current results show *D. sublineata* initially prefer salt cedar, but will defoliate athel secondarily within a region. Impacts on regrowth and continued defoliation by the beetles on both plants is under examination.