

Tamarisk leaf beetle species distribution, tamarisk phenology and tamarisk leaf beetle molecular identification within the Lower Colorado River, Hassayampa River, Centennial Wash Gila River, AZ/NM, Little Colorado River, Salt River, San Pedro River, Tonto Creek, Verde River and Rio Grande River, NM Watersheds.

Prepared by:

Matthew Johnson, Zeynep Ozsoy, Amanda Stahlke, Levi Jamison, Chris Calvo, Ryan Gillespie and Raemy Winton

EcoPlateau Research

1530 W. University Heights Dr. S.

Flagstaff, AZ 86005



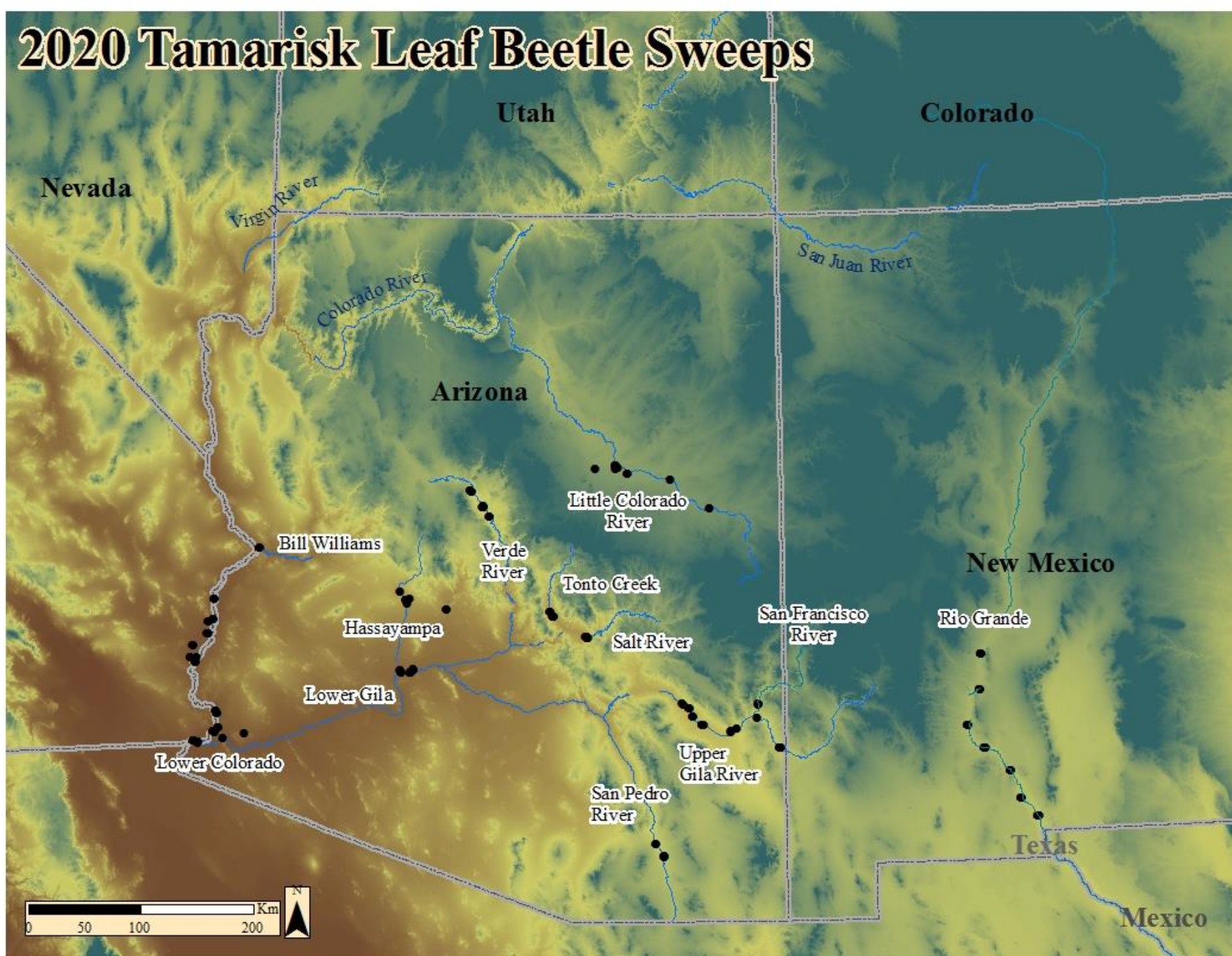
OBJECTIVES

Our objectives are to: 1) Conduct Tamarisk Leaf Beetle surveys and identify its distribution within Lower Colorado River, Hassayampa River, Centennial Wash Gila River, AZ/NM, Little Colorado River, Salt River, San Pedro River, Tonto Creek, Verde River watersheds;

2) Track tamarisk defoliation, refoliation and mortality by Tamarisk Leaf Beetle; and 3) Examine molecular analysis of Tamarisk Leaf Beetle populations.



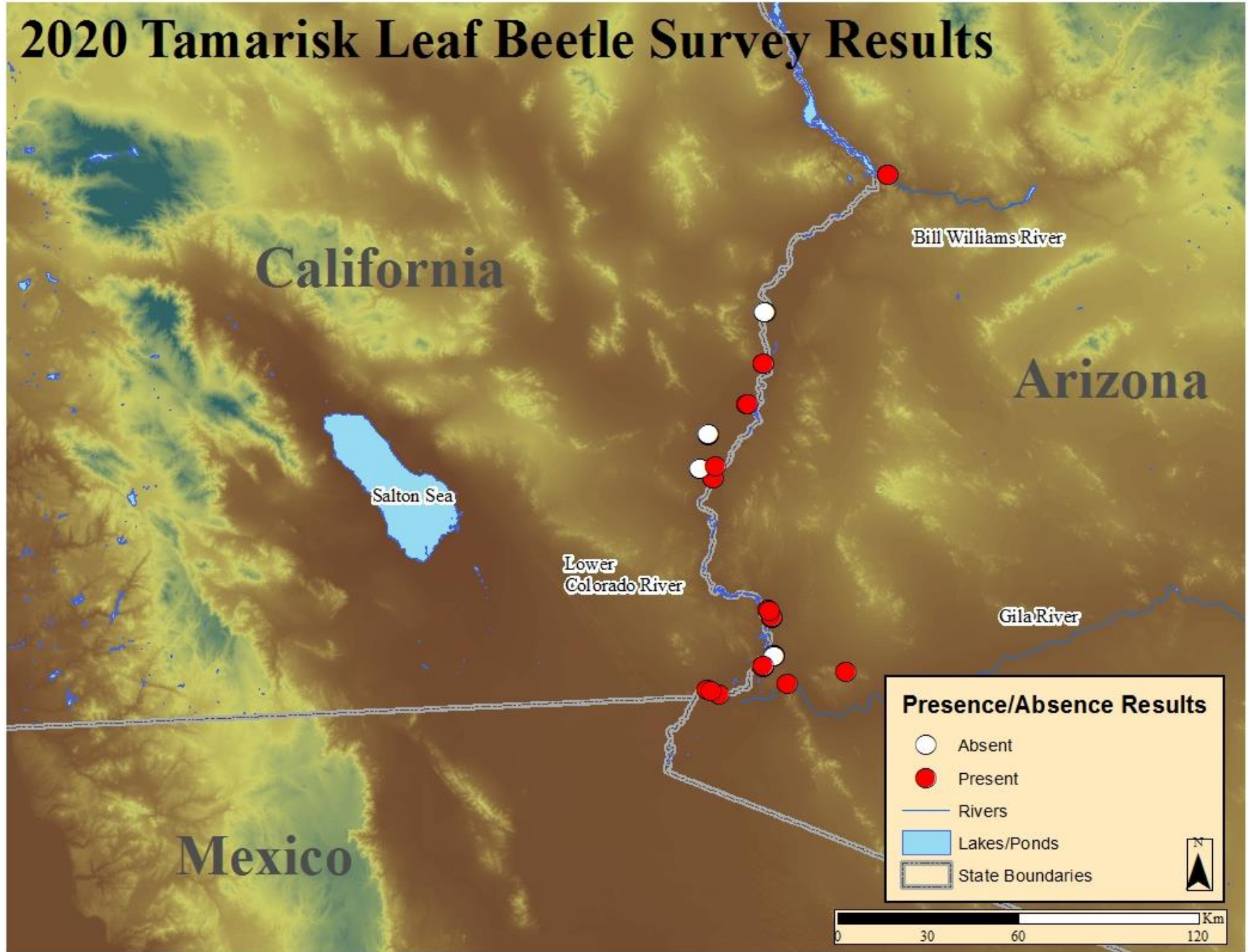
2020 Tamarisk Leaf Beetle Sweeps



2020 Tamarisk Leaf Beetle Survey Results



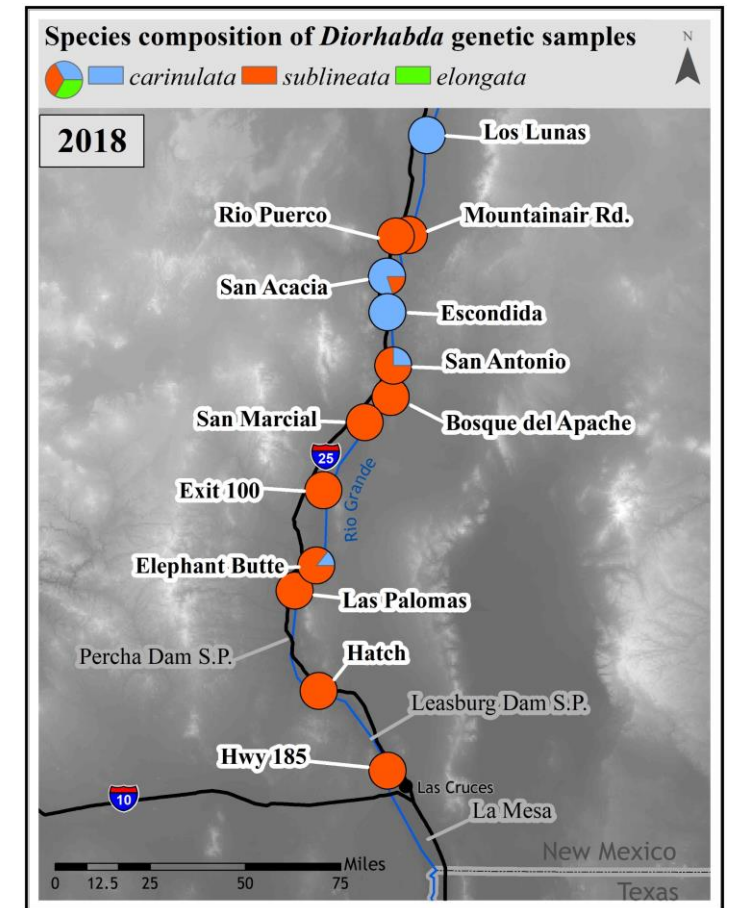
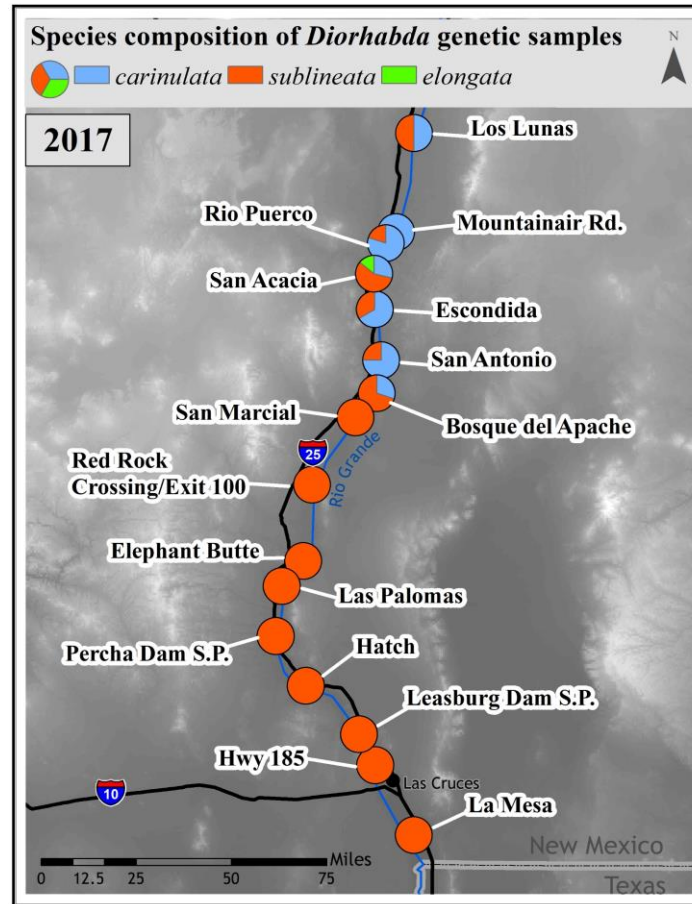
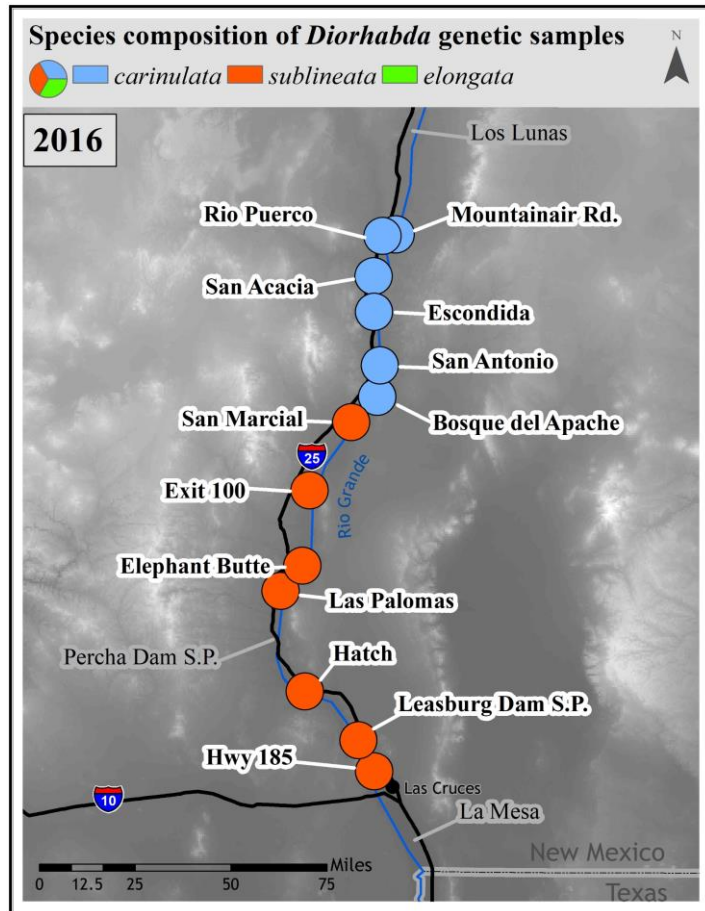
2020 Tamarisk Leaf Beetle Survey Results



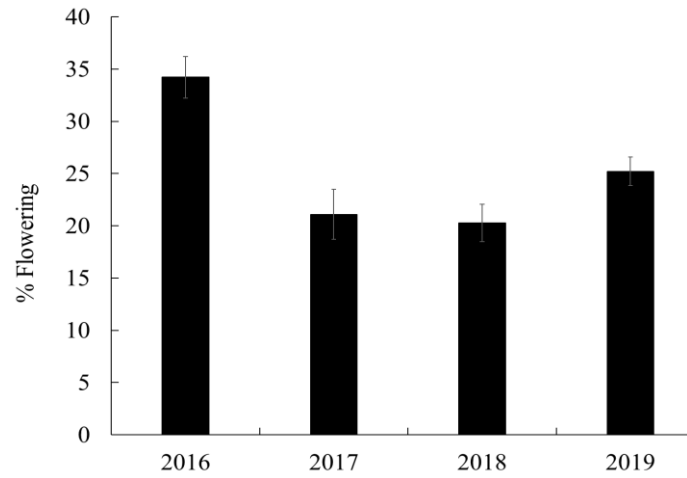
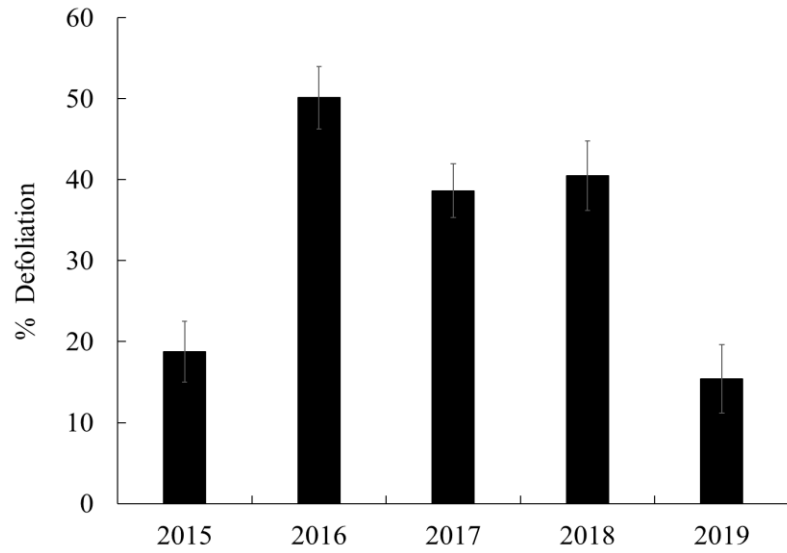
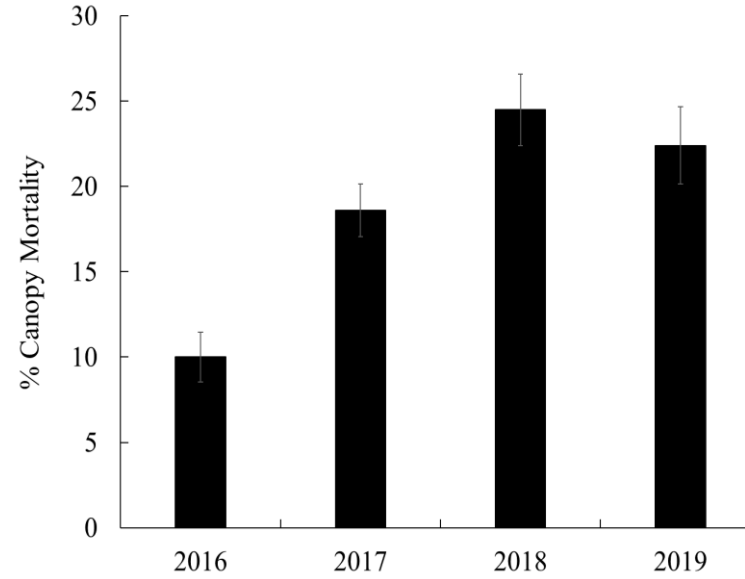
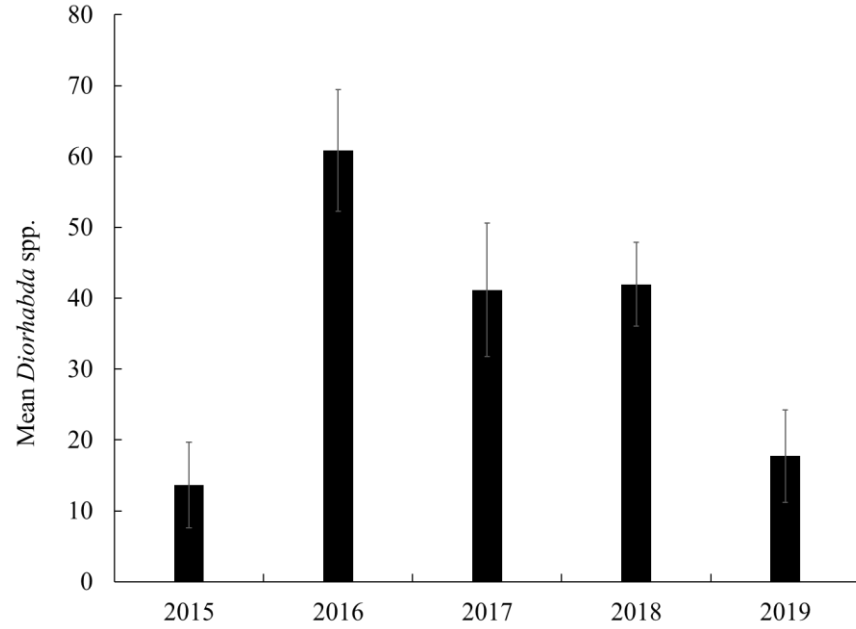
2020 Tamarisk Leaf Beetle Survey Results



Distribution of tamarisk leaf beetles (*D. carinulata*, *D. sublineata* and *D. elongata*) according to 2016, 2017, 2018 genetic species identification distribution along the Rio Grande, NM.



RIO GRANDE RIVER TAMARISK LEAF BEETLE 2015-2019 PHENOLOGY CHANGES



LOWER COLORADO RIVER TAMARISK LEAF BEETLE 2015-2019 PHENOLOGY CHANGES

