

COTTON WINTER NURSERY IN COSTA RICA

The Cotton Winter Nursery (CWN) has been a vital part of the cotton research community for over 60 years. It serves to drive genetic gain and generation advancement by allowing two growing seasons to be completed each calendar year. For the first 50+ years the CWN was located in Mexico, but due to the retirement of the 40-year manager plus mounting safety concerns, it was relocated to Costa Rica in 2015. Mr. Alfonso Palafox manages the CWN now in its 4th growing season 9km northwest of Liberia, Costa Rica.



Costa Rica was chosen primarily because of the suitable cotton growing environment, affordable labor force, available water, and reliable flights. Our farm office is located in a building 60'x50' and provides space to process, gin, and ship seed. We developed and built an acid delinting system so 'black' seed could be shipped to users in the US, reducing the time required to transport seed from the CWN to users by 2-3 weeks. Alfonso traveled to the US to build a similar system for one university breeder in 2018, and additional requests have been received from numerous other breeders for similar help for programs across the cotton belt.



A drip irrigation system was installed which allows for efficient use of water. Other improvements in the past year include addition of bushes for wind breaks and precise land leveling. A significant accomplishment of the CWN in the current season has been advancement of germplasm identified in late 2018 as putatively resistant against FOV4.

The CWN is critical for proper characterization of 35% of the photoperiodic accessions in the National Cotton Germplasm Collection, and without the funding from SAAESD, the CWN could not exist.

