

Pomegranate as an Alternative Crop for West Texas

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BACKGROUND

Pomegranate (*Punica granatum*, Punicaceae) is an ancient small fruit tree used traditionally as medical remedy. Due to the health benefits associated with pomegranate juice and fruits, demand for pomegranates has increased tremendously in recent years. Pomegranate performs best in areas with long, hot, and dry summers. Hence the semi-arid west Texas climate is ideal for pomegranates. Currently, California and Florida are the only states producing pomegranates commercially. However, there are scattered small acreage pomegranate trees in other states, just like Texas. With unpredictable drought and diminishing supply of high quality water, farming with high-water demanding crops like pecan trees is becoming increasingly challenging in the El Paso region. By anecdotal observation, pomegranate uses much less water and fertilizer and is very tolerant to salinity and drought. The challenges to grow pomegranate in Texas are fruit sunburn, fruit split, and fruit rot. Limited research-based information is available regarding cultivar selection, cultural practices and performance of various available varieties under Texas climate.

OBJECTIVES

- Evaluate the performance of various varieties in field trials.
- Conduct greenhouse studies to evaluate the salinity tolerance of selected pomegranate varieties.
- Conduct field studies to develop and evaluate methods to alleviate sunburn and fruit split.

EXPECTED RESULTS AND BENEFITS

- Based on our initial greenhouse studies, pomegranate is highly tolerant to salinity.
- We expect to develop culture practices to alleviate sunburn and fruit split. Field trials are being conducted at Marcelino Nursery, Tornillo, TX.
- Based on our field trials, we will identify the best performing cultivars for west Texas climate.
- Research results will demonstrate to farmers that market for pomegranate can be developed.

Pomegranates at Marcelino Nursery, Tornillo, TX



Salt tolerance study in a greenhouse

