Pitahaya or Dragon Fruit (*Hylocereus* spp.): A New Water Efficient Crop for Southern California Small Scale Farmers

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**The Issue:**
The drought that has affected California for the past several years has drastically reduced the availability of water for agricultural use in Southern California. The drought, combined with some of the highest prices for agricultural water, have caused a steady decline in profit margins for citrus and avocados, the major crops grown in the region. Many growers have been forced out of production and others are in great need of water efficient, more profitable crop alternatives for their farming operations.

**Results/Outcomes**
Pitahaya research and extension activities have demonstrated that it can be a commercial, profitable crop alternative for small scale producers in Southern California. Specific results from the project include:

- Organized seminars and field days attended by 200 pitahaya growers and interested farmers annually.
- Distributed 10,000 pitahaya cuttings to growers.
- Two different trellis systems under evaluation at UC South Coast REC.
- Genotyped 280 pitahaya accessions using Amplified Length Polymorphism (AFLP) markers.

**Pitahaya or Dragon Fruit:**
Pitahaya or dragon fruit (*Hylocereus* spp. and *Selenicereus megalanthus*) is the name of a vining cactus and the edible fruit it produces. Pitahaya adapts very well to Southern California climates and require less water than traditional crops for commercial production.

**Consumer Demand**
The demand for the fruit has grown as consumers look for new, exotic, nutritious fruits for their diets. The interest for this crop has increased among small-scale producers and the acreage planted has expanded considerably.

- Screened pitahaya plant material for Cactus Virus X (CVX).
- Developed post harvest and pest management information.

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