

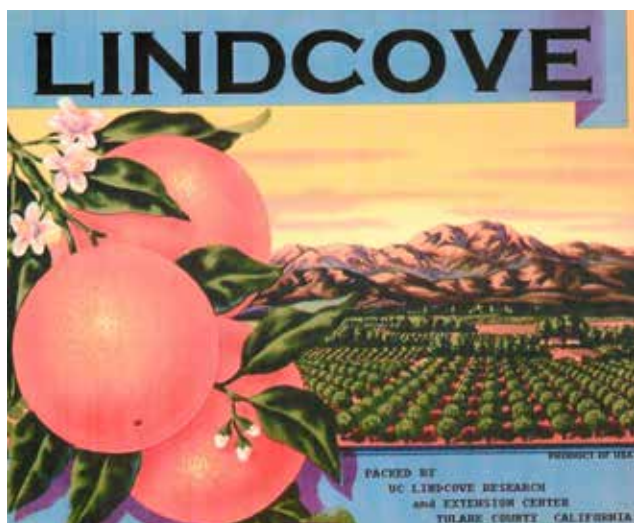
## Lindcove Research and Extension Center



Located on 175 acres in the foothills east of Visalia, Lindcove Research and Extension Center was established in 1959 by San Joaquin Valley citrus growers and the University of California, Riverside. The Center has more than 100 acres of citrus in the heart of the area

where the majority of the citrus trees are grown in California. There are also small acreages of olives, pomegranates and avocados.

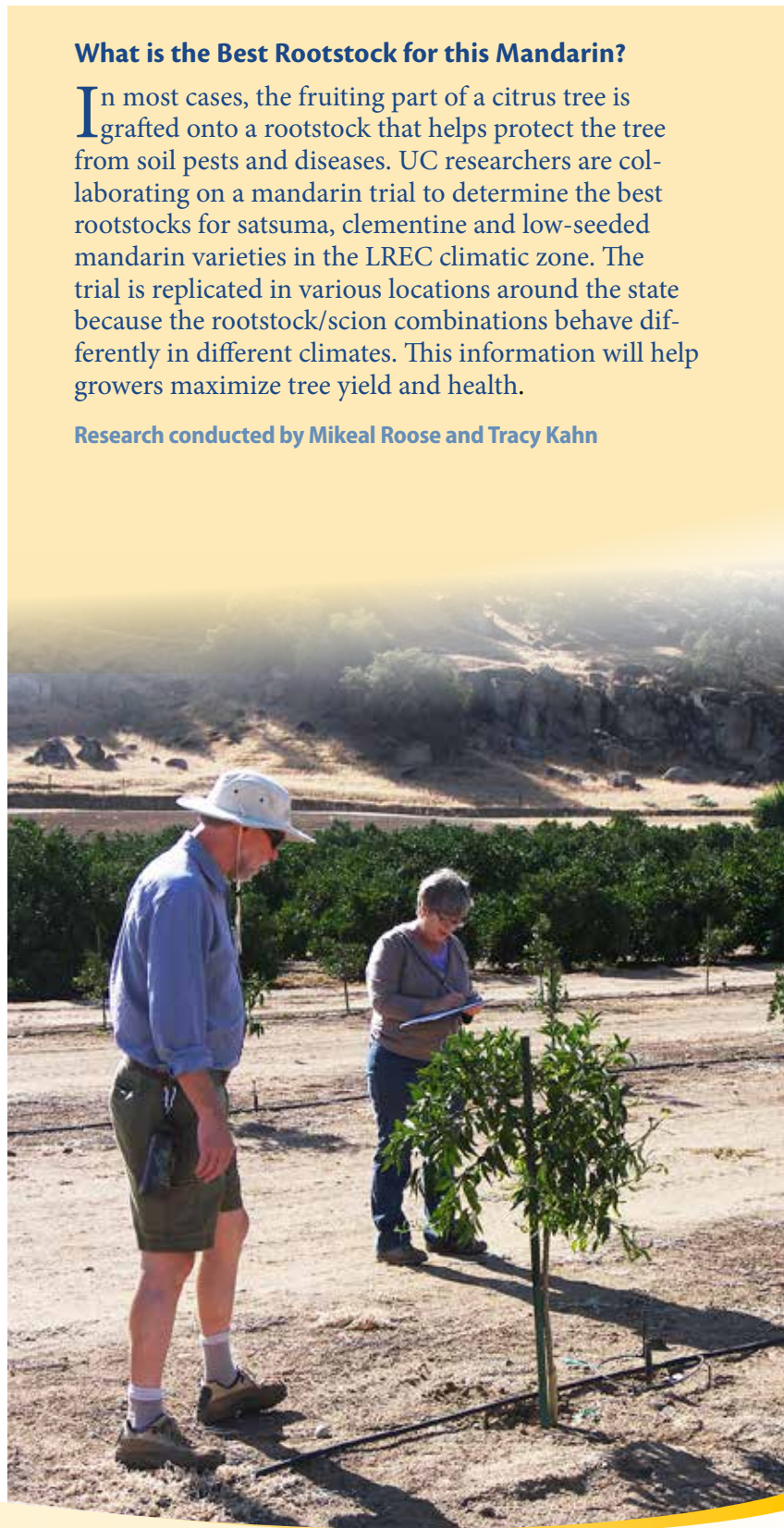
Scientists conduct research programs at LREC that evaluate new varieties of citrus, better ways to grow citrus, and new ways to manage pests. Extension programs communicate the results to citrus clientele as well as the general public.



### What is the Best Rootstock for this Mandarin?

In most cases, the fruiting part of a citrus tree is grafted onto a rootstock that helps protect the tree from soil pests and diseases. UC researchers are collaborating on a mandarin trial to determine the best rootstocks for satsuma, clementine and low-seeded mandarin varieties in the LREC climatic zone. The trial is replicated in various locations around the state because the rootstock/scion combinations behave differently in different climates. This information will help growers maximize tree yield and health.

Research conducted by Mikeal Roose and Tracy Kahn



### When a Harmless Pest Travels, It's No Longer Harmless

The Fuller rose beetle (FRB) is a weevil commonly found in citrus in California. While it is not considered a damaging pest, FRB likes to deposit eggs under the calyx at the stem end of the fruit. This becomes a problem because FRB eggs hitchhike when the fruit is exported to other countries, South Korea, for example. In Korea, FRB is considered invasive and destructive and if eggs are found on California fruit, the shipment will be rejected. South Korea imports 4-5 million cartons of California citrus worth about \$100 million.

Current methods to control this pest, using methyl bromide to fumigate the pest in Korea, are being phased out—methyl bromide is a known carcinogen and depletes the ozone layer. California growers must figure out how to manage the pest and prevent it from laying eggs on the fruit before export. This includes pruning the trees so the flightless beetles can only get to the tree



via the trunk and not via the leaves, and treating with a foliar insecticide. At Lindcove, researchers are testing these methods of controlling FRB.

Research conducted by Elizabeth Grafton-Cardwell



### Reaching Out to the Community

Lindcove has a dedicated citrus demonstration orchard for grower and general public citrus training events.

The annual Fruit Display and Tasting event takes place annually in mid-December and draws 200-300 people every year to experi-

ence more than 100 varieties of citrus that are close to maturity.

Lindcove has also partnered with First Five in the Tulare community educational system to provide citrus

fruit for grade school children, K-6, and teach them about nutrition.

### Training the Trainers

It is estimated that 60% of Californians have citrus trees in their yard. With the deadly citrus disease Huanglongbing expected to arrive in the near future in urban areas of California through a small insect called the Asian citrus psyllid, educating homeowners not to move plant material and watching for pests and diseases is critical.

Lindcove REC held a citrus training for the Fresno County Master Gardeners. The 65 participants were taught about varieties, cultural practices, pruning methods, and most particularly about invasive pests and diseases. This education is critical for training master gardeners to work with homeowners to grow their citrus better and to monitor for pests.

The trained Master Gardeners will act as ambassadors to the community to help monitor and track this serious pest.