

UF | IEAS

UNIVERSITY *of* FLORIDA

Root Health

Funding

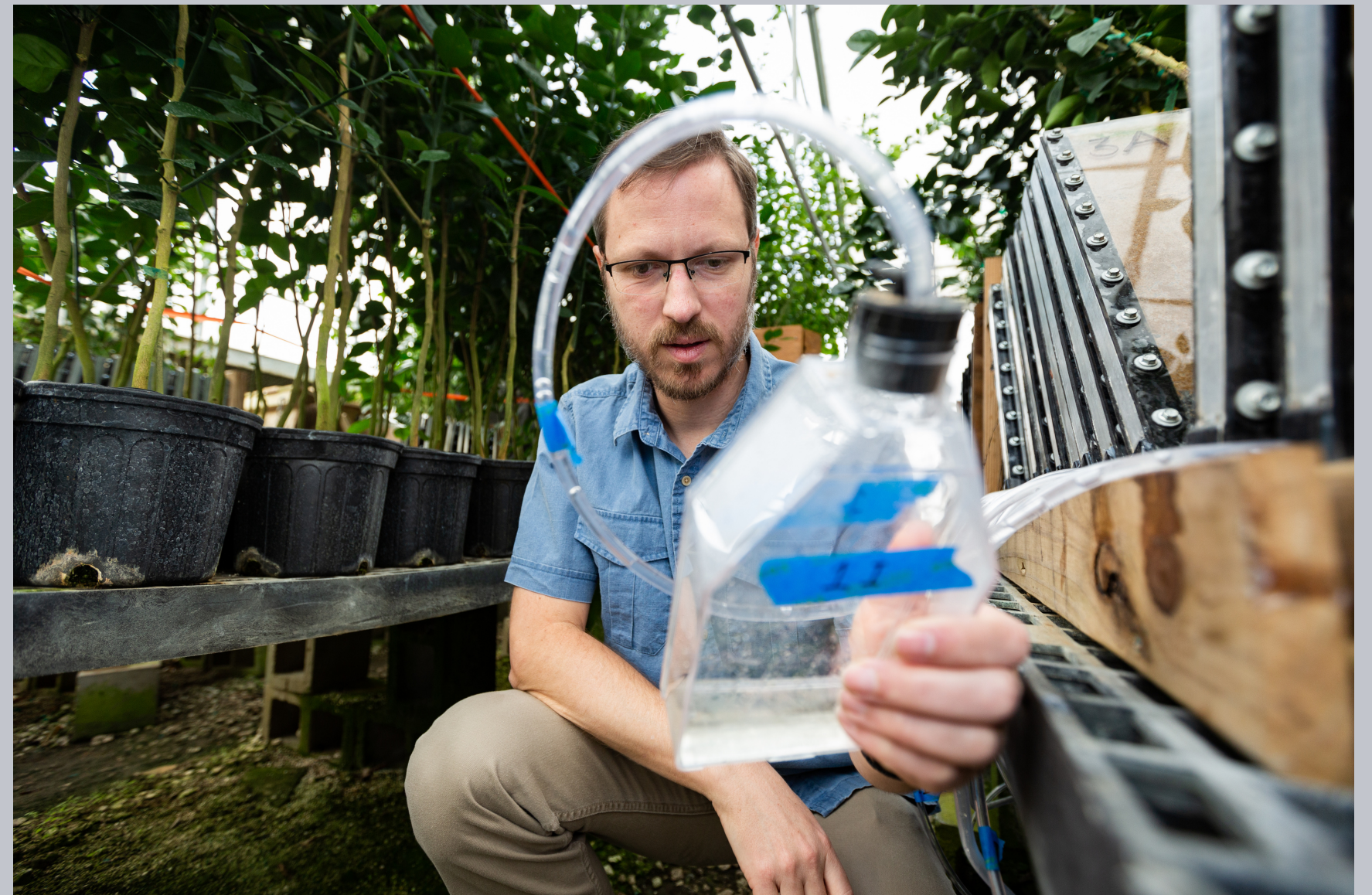


Citrus Research and
Development Foundation, Inc.

Root Health

Rootstocks and pH

- HLB shifts root pH tolerance
- Swingle and Carrizo respond well to soil acidification at the pH 5.5-6.5 range
- Shift in other rootstocks is unknown



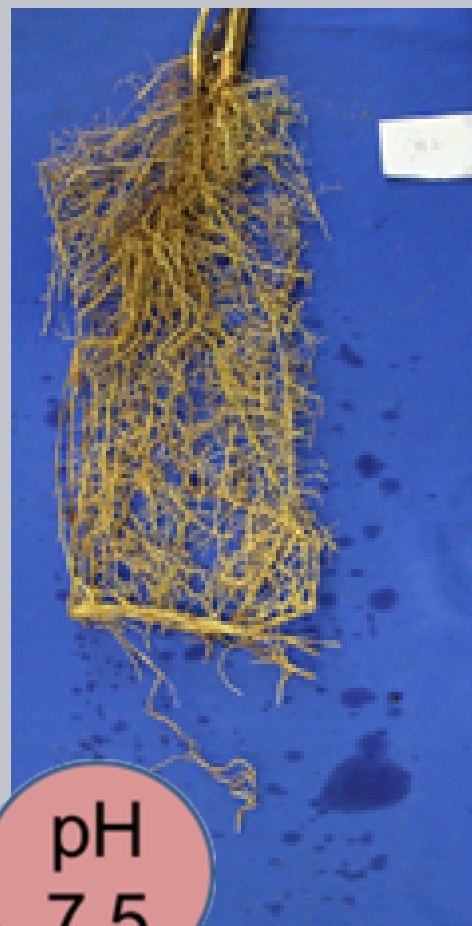
Root Health

Swingle roots prefer lower pH

Healthy trees



pH
5.5



pH
7.5



HLB trees



pH
5.5



pH
7.5

Root Health

US 942 roots prefers higher pH

Healthy trees



pH
5.5



pH
7.5



HLB trees



pH
5.5

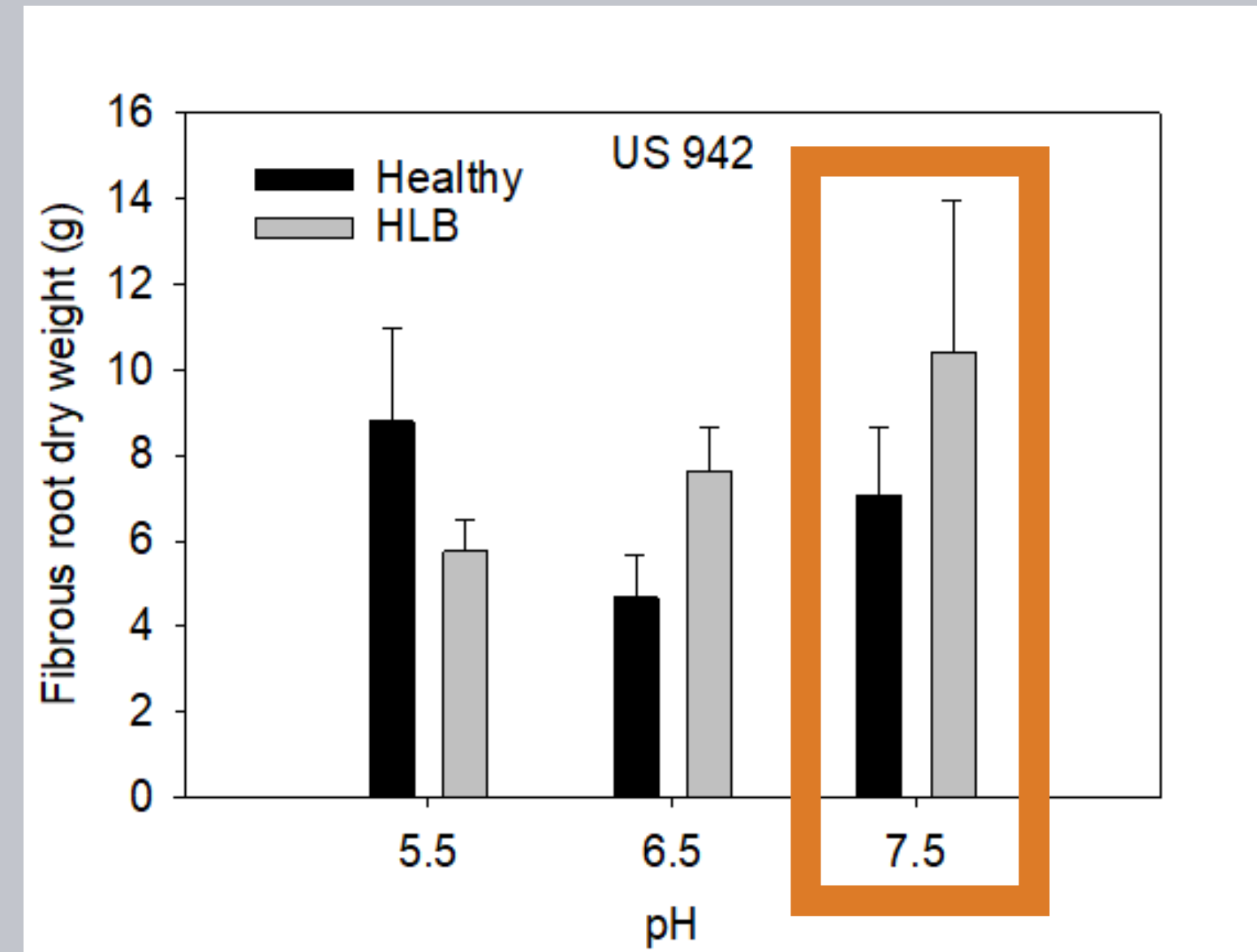


pH
7.5

Root Health

Under HLB, US 942 prefers a higher pH value

- US 942- Preliminary greenhouse results
- Trees treated with high bicarbonate well water acidified with sulfuric acid



Root Health

Rootstocks and pH



- HLB causes a shift in pH tolerance – NOT always to lower pH
- Each rootstock needs data from field trees for final recommendations
- Be careful modifying pH in rootstocks lacking solid data