

The Florida Experience:

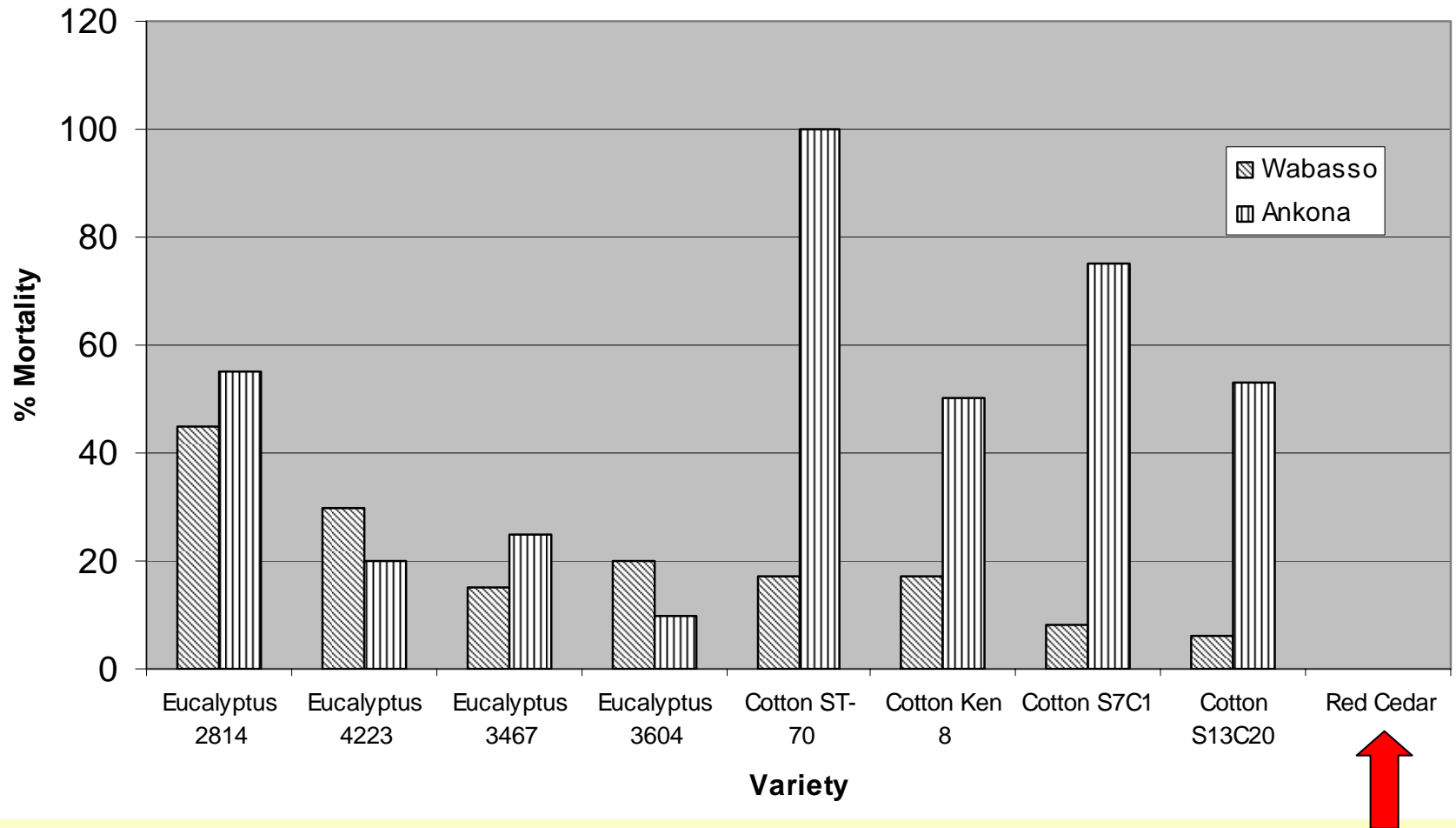
Windbreak types

- Natural – native plants left intact after agricultural development and/or recolonization by native plants.
- Living – native and exotic plants used intentionally for this particular purpose.
- Artificial – man-made.
- Shelter belts – A living windbreak with depth.
- Conservation buffer - Land areas designed to lessen or absorb impacts between areas of disturbance and natural resources including streams, wetlands, and forests.

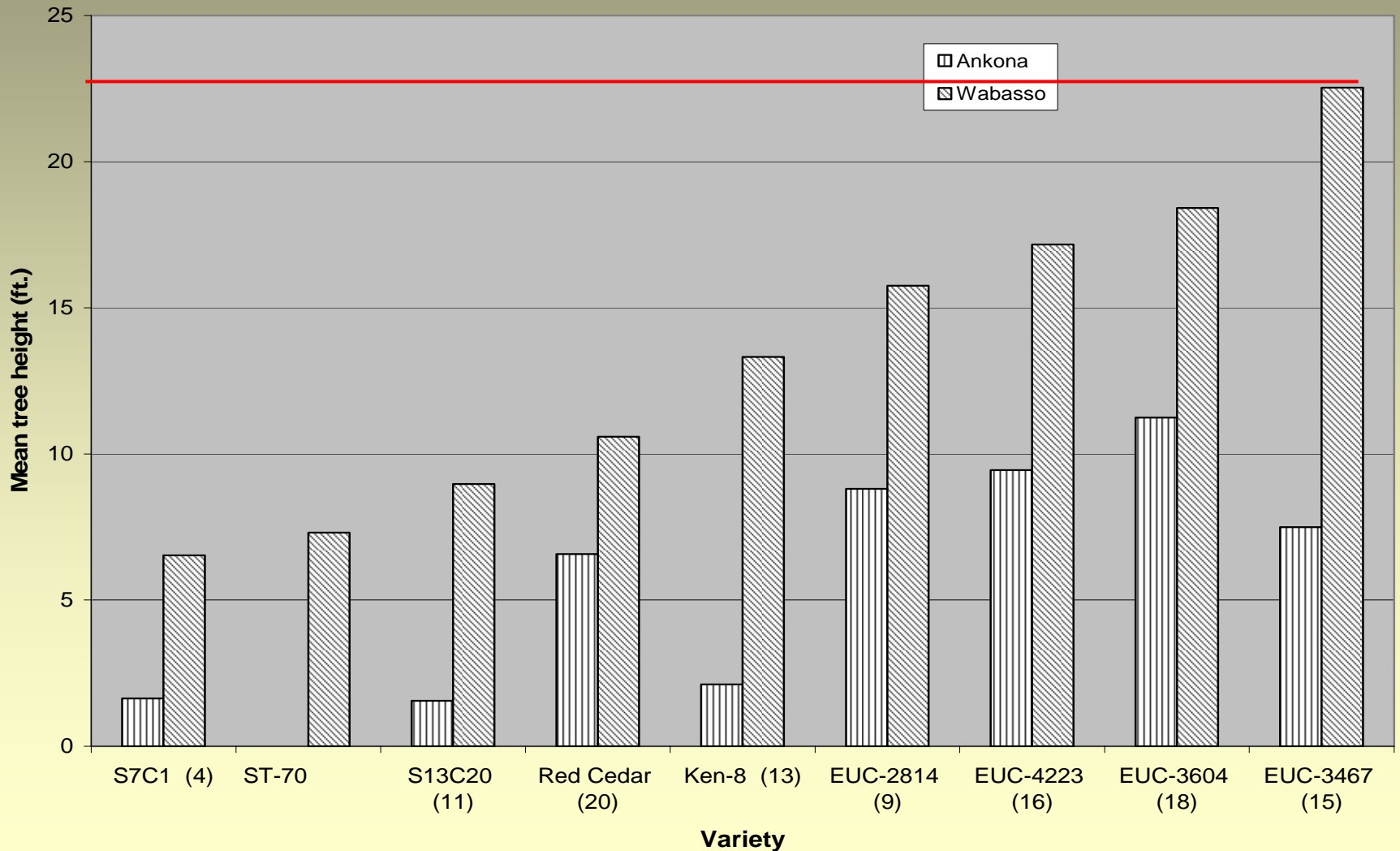
A Recent Florida Experience

- 4-year study by Stover, Salvatore, and Rockwood at the IRREC.
- Cottonwood, and red cedar, selections of *E. grandis*.
- 2 Spodosol sites
- 20 trees/species or selection in each soil.
- Planted in double off-set rows 3 ft apart.
- No fertilizer, but irrigated first two years on nearby grove schedule.

A Recent Florida Experience



A Recent Florida Experience



A Recent Florida Experience

Conclusions:

- Careful selection of *Eucalyptus* clones.
 - fastest growth
 - widely adapted
 - easy to establish
 - can be topped
 - cheap
- Red cedar performed well.
 - slower growing
 - no problems
 - widely adapted



The *Past* Florida Experience



Australian pine



Root suckers

Seedlings

Casuarina spp.

The *Present* Florida Experience



Oat windbreak for cantaloupes



*Slash pines and napier grass
protecting strawberries*

The *Present* Florida Experience



*Three rows of slash pine in
the flatwoods*



Sand pine on the Ridge

The *Present* Florida Experience



*Two rows of slash
pines planted 8 x 8 ft.
North side.*



*Four rows of slash
pines planted 8 x 8 ft.
West side.*

Windbreak around citrus research unit, UF campus, Gainesville

The *Present* Florida Experience



Double offset rows of red cedar planted 5 x 5 ft.



Cedars are complemented with a single row of slash pine 15 ft. from the cedars and 10 ft apart.

Windbreak between Southern Citrus nursery and Budwood Foundation Grove, Dundee

The *Present* Florida Experience: a case study from Avon Park



25 ft from citrus row to windbreak row

- 60-acre Sunburst/Murcott grove.
- Planted in 1985 north of Avon Park.
- Single-row Pine – Red cedar windbreak planted w/ citrus.
- Irrigated windbreak.
- Pine needle mulch eventually controlled weeds.
- 30 ft. from trunk of citrus end-tree to windbreak trunks.
- Pines topped at 21 ft every ~3 years.

The *Present* Florida Experience: a case study from Avon Park



The *Present* Florida Experience: a case study from Zephyrhills



The *Present* Florida Experience: a case study from Zephyrhills



- Planted slash pine-red cedar 1991.
- Planted fresh-fruit grove in 1992.
- Windbreak every 4 rows.
- Pines grew 10 ft. in ~ 3 years.
- Pines planted 4 ft. apart in two rows 8 ft. apart.
- Cedars planted between pine rows.
- 25 to 30 ft from WB to citrus.
- No irrigation on WBs or citrus.

The *Future* Florida Experience



New red cedars along
Highway 29, LaBelle



Slash pine + wax myrtle



The *Future* Florida Experience



Simpson's Stopper

- Full sun or shade
- Loves high pH
- Tolerates wetness
- Tolerates dryness
- High salt tolerance
- Shears well

The *Future* Florida Experience



Walter's Viburnum

- Full sun or shade
- Loves high pH
- Tolerates wetness
- Tolerates dryness
- High salt tolerance

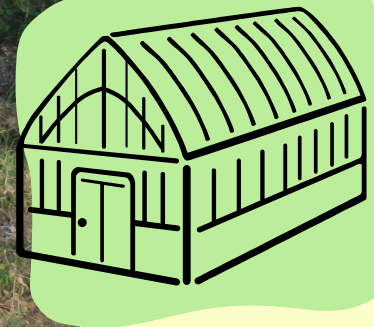
The *Future* Florida Experience



Eucalyptus



The ~~Future~~ Florida Experience



The Florida Experience

For more plant information,
see the *tables* included in
the short course *notebook*.