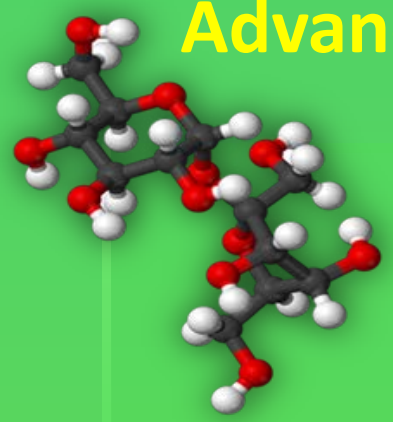
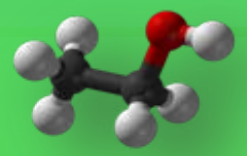
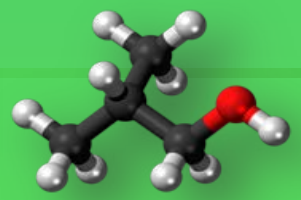
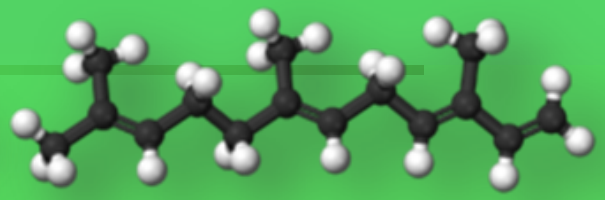
Florida Farm to Fly 2.0

Advanced BioFuel (ABF) Molecules from Sucrose









Ethanol (C2) Butenol (C4) Farnasene (C15)

ABF Root crop

Sucrose (C12)	15%
Pulp	8%
Water	77%

- Florida spends $42 billion for 290 million barrels of petroleum annually, 90% in transportation.
- Florida aviation consumes 1.5-2.5 million gallons/day.
- Commercial aviation accounts for 18% of world GHG.

Commercial Airlines currently use ABF "Drop-In" Jet Fuels

Brazil's Gol Airlines

United - Continental Airlines

Alaska Airlines

TCERDA Treasure Coast Education, Research and Development Authority

Florida Farm to Fly 2.0

Airlines for America®
We Connect the World

Florida Commercial Aviation

- ✓State GDP $61.9B (8.44%)
- ✓930,000 jobs (9.4%)
- ✓**55 gallons of ABF that replaces one barrel of fossil crude oil removes over *HALF A TON* OF GHG.**

ABF Beet

- ✓ABF crop cultivation and processing will help Florida meet Title V air standards of the U.S. Clean Air Act as amended in 1990.

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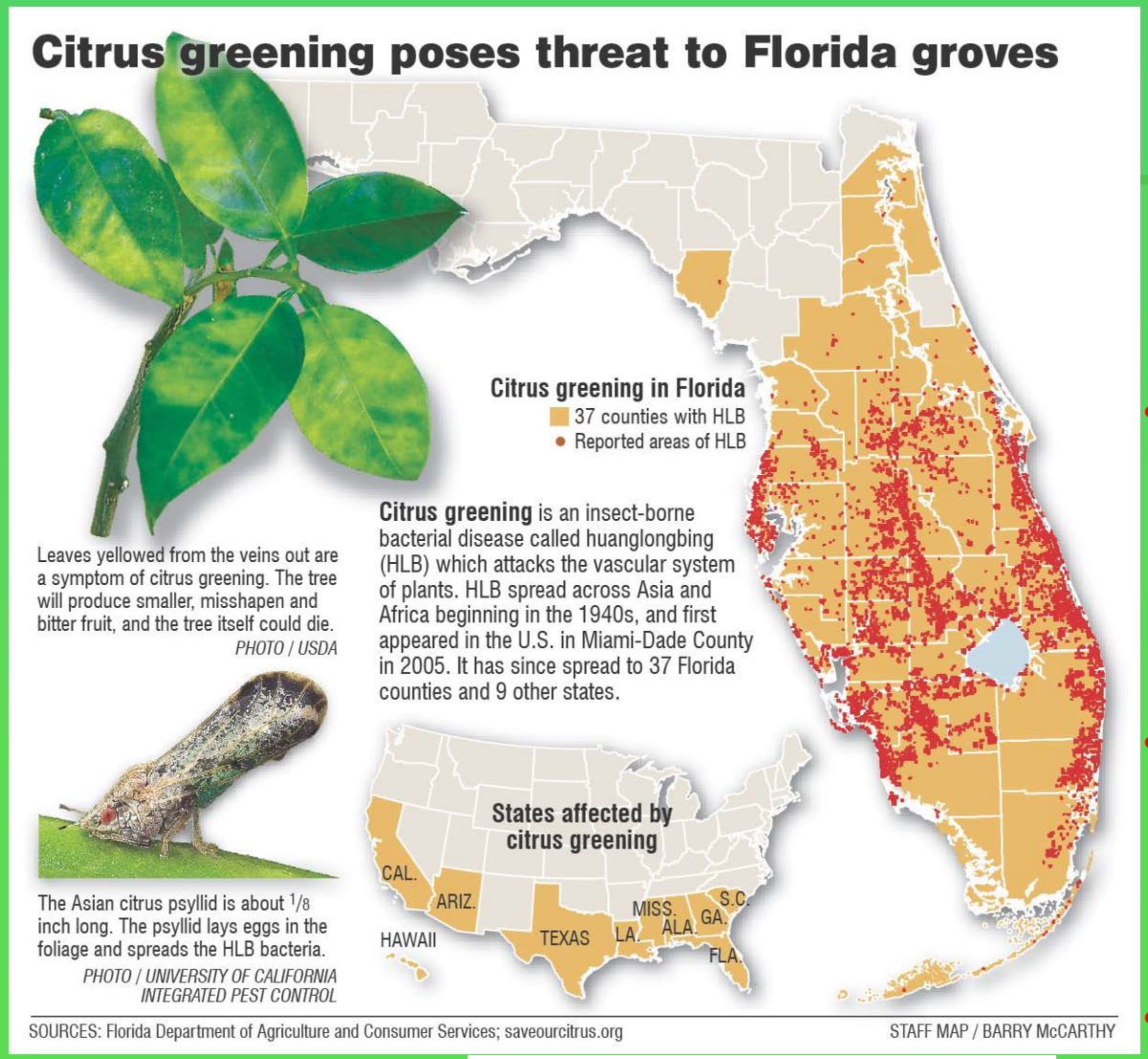

- **since 2004, Florida lost over 40 million citrus trees with annual lost sales of over $1 billion per year.**
- **HLB disease is present in every citrus growing state and country worldwide.**
- **No known feasible treatment.**

Treasure Coast Education, Research and Development Authority

Florida Farm to Fly 2.0

- ***Potential Advanced "Drop In Molecule" Market***
- **250,000 acres of Fallow Citrus Fields**
  - **4 season rotation**
- **12,500,000 tons harvest @15% yields**
  - **1,875,000 tons industrial sugar**
  - **375,000 tons feed**
- **225,000,000 gallons 105 octane Ethanol**
  - **$687.5 Million Annual Sales @$2.50/gallon**
- **12,500 direct jobs + 37,500 indirect jobs**
- **$750 Million Annual Economic Impact**

TCERDA Treasure Coast Education, Research and Development Authority

Florida Farm to Fly 2.0

Goal: Build Florida's Integrated ABF Supply Chain

Seed Producer - Grower - Processor - Carrier - Traveler

- ABF Feedstock Certification Working Group
  - Commercial Advanced Aviation Fuel Initiative (CAAFI)
  - Florida Dept of Agriculture and Consumer Services (FDACS)
    - Office of Energy; Florida Energy System Consortium (FESC)
- US Department of Agriculture (USDA)
  - Rural Development (RD); Farm Services Agency (FSA); National Resource Conservation Service (NRCS); Agriculture Research Service (ARS)
- The Treasure Coast Research Park (TCRP)
  - The University of Florida
    - Institute for Food and Agricultural Sciences (UF IFAS)
  - Treasure Coast Fallow Fields Working Group
    - Civic - Business - Academia - Government

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