

Washington Tree Fruit Soil Health

# Long Term Agroecological Research and Extension Site

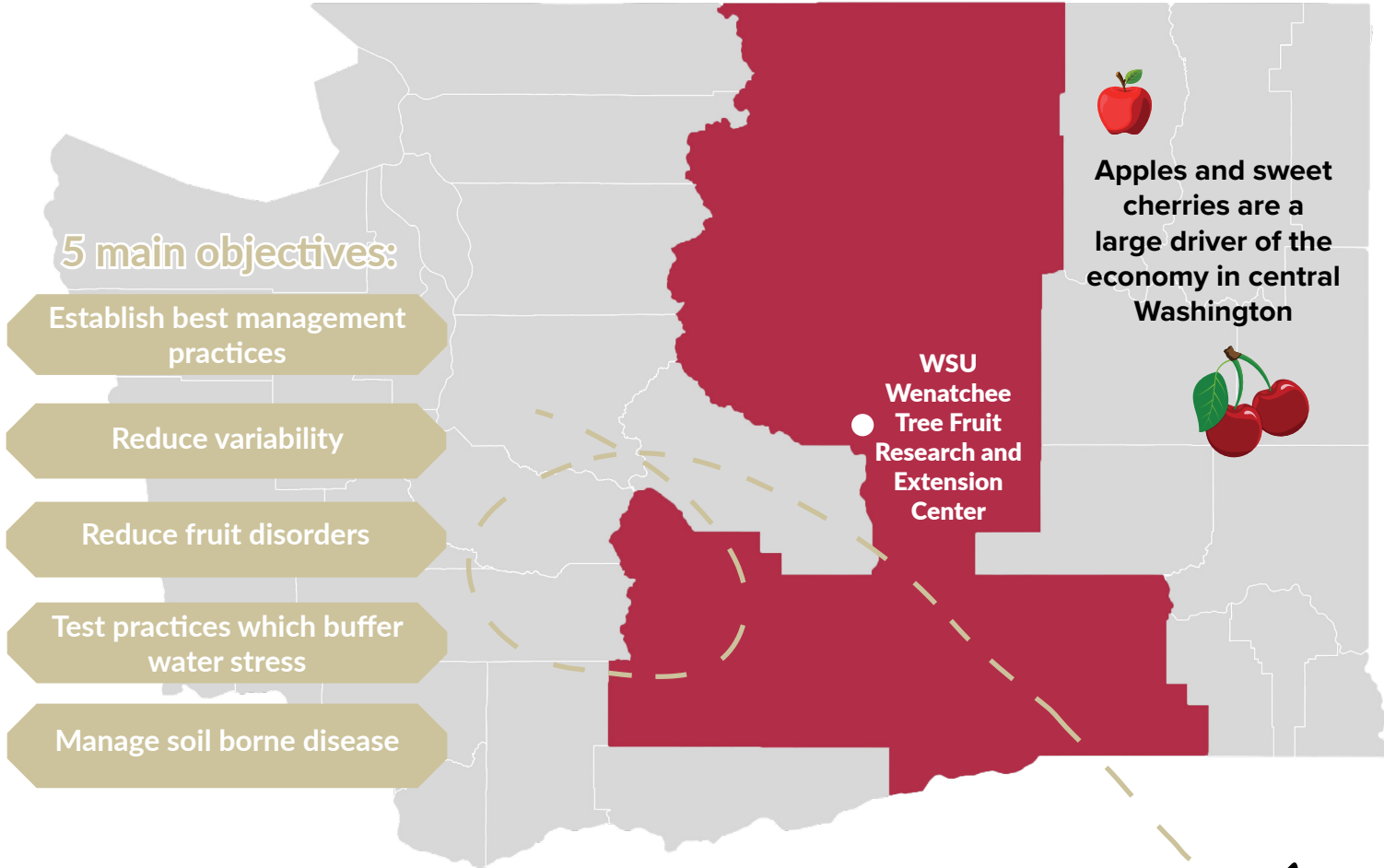
Washington state produces 1/2 of apples in the US

WSU Wenatchee Tree Fruit Research and Extension Center - Sunrise Orchard

Primary Contact: Tianna DuPont | Email: tianna.dupont@wsu.edu



The Washington State Soil Health Initiative (WaSHI) is an ambitious plan that funds research, extension, and demonstration of soil health best management practices through a network of long-term agroecological research and extension (LTARE) sites across Washington state's diverse agricultural systems.



### 5 main objectives:

- Establish best management practices
- Reduce variability
- Reduce fruit disorders
- Test practices which buffer water stress
- Manage soil borne disease

Apples and sweet cherries are a large driver of the economy in central Washington

WSU Wenatchee Tree Fruit Research and Extension Center

Core Objective:

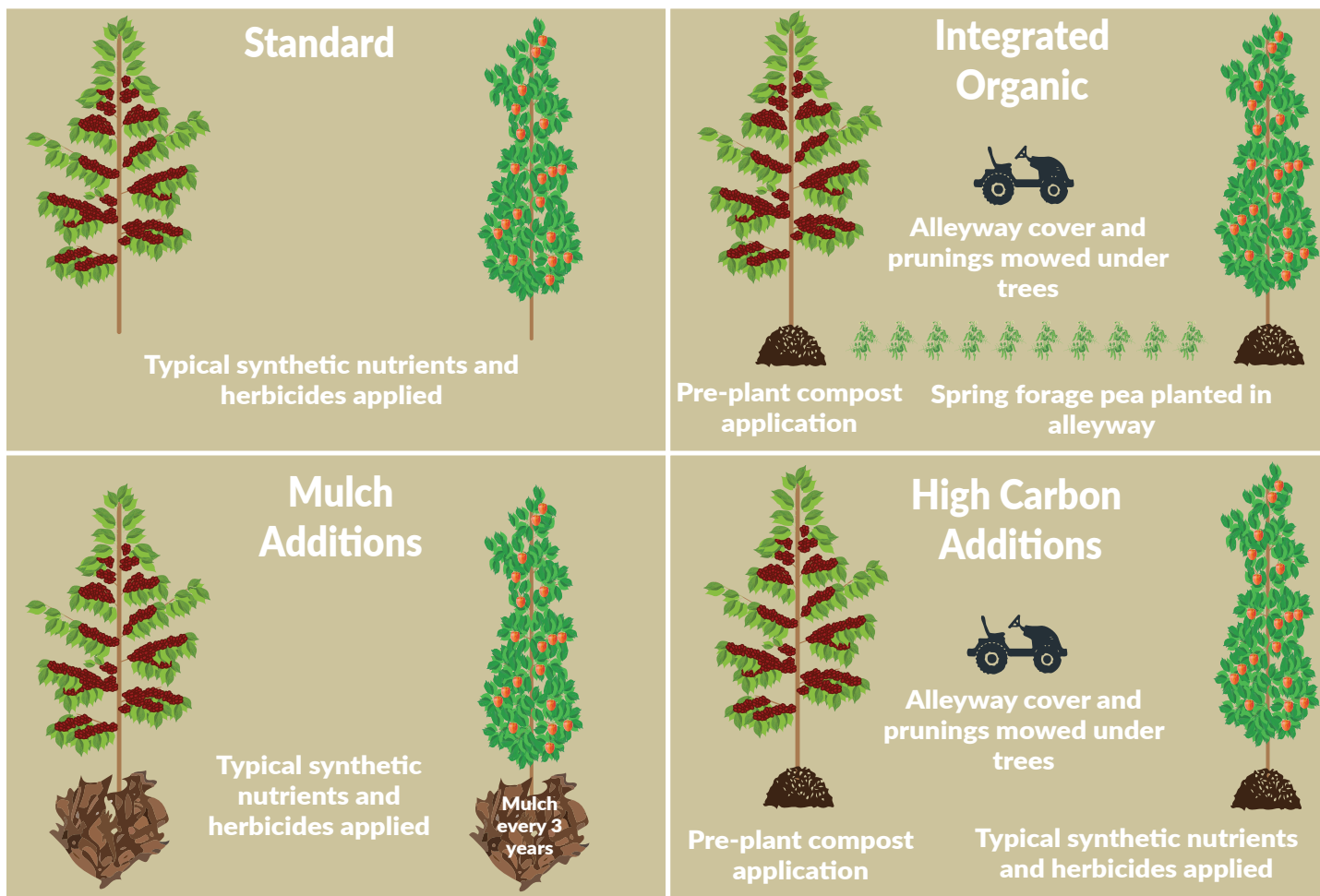
Develop and evaluate management systems which optimize fruit yield and quality through sustainable soil health management practices.



# Investigating practices to reduce variability, conserve water, and buffer environmental stress with organic matter applications

Apple Varieties: Honey Crisp & Gala

Cherry Variety: Skeena



## What is being measured at this LTARE?

### Economic Performance



### Carbon Stocks

### Soil Health (Example metrics)

- Available water holding capacity
- Soil structure
- Carbon pools
- Biological activity
- Parasitic and beneficial nematodes
- Soil food web

### Crop Performance

- Marketable Yield
- Fruit quality
- Disease incidence and severity

### Root Health



Stay updated with WaSHI



@WSU\_Soilhealth



@WSU\_Soilhealth

soilhealth.wsu.edu

Learn more about soil health across Washington state in our roadmap



WASHINGTON  
**SOIL**  
HEALTH INITIATIVE  
ROADMAP  
2021