



# Agricenter Farm and Research

*Where Knowledge is Grown*

*Bruce Kirksey*

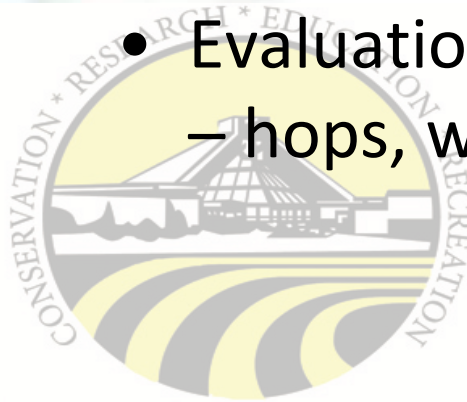
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# Mission Statement

- To advance knowledge and understanding of agriculture
- Evaluation of new crops and production practices
  - hops, winter malting barley, oilseeds



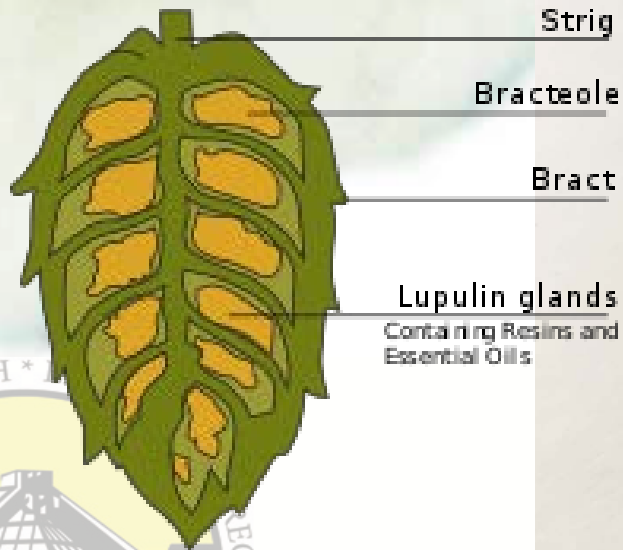
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# Hops

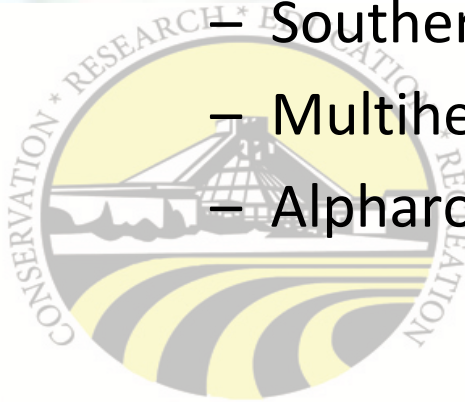
- *Humulus lupulus*
- They are used primarily as a flavoring and stability agent in beer, to which they impart bitter, zesty, or citric flavors
- Vigorous, climbing, herbaceous perennial, usually trained to grow up strings in a field called a hopfield, hop garden, or hop yard when grown commercially.

# Cross Section of Flower



# Background

- 2016 evaluating new crops for TN producers
- 2017 – initialize demo site hop varieties
  - Cascade
  - Nugget
  - Southern Brewer
  - Multihead neomexicana
  - Alpharoma



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# Experiment Design

- 5 plants of each variety
- 1 m spacing
- Temporary poles 16' tall with heavy cable
- Concentrated on root growth, pruning
- Some bines on each variety
- Used baling twine instead of true coir
- Yield about 1 lb per plant (certain varieties)
  - Cascade and Nugget

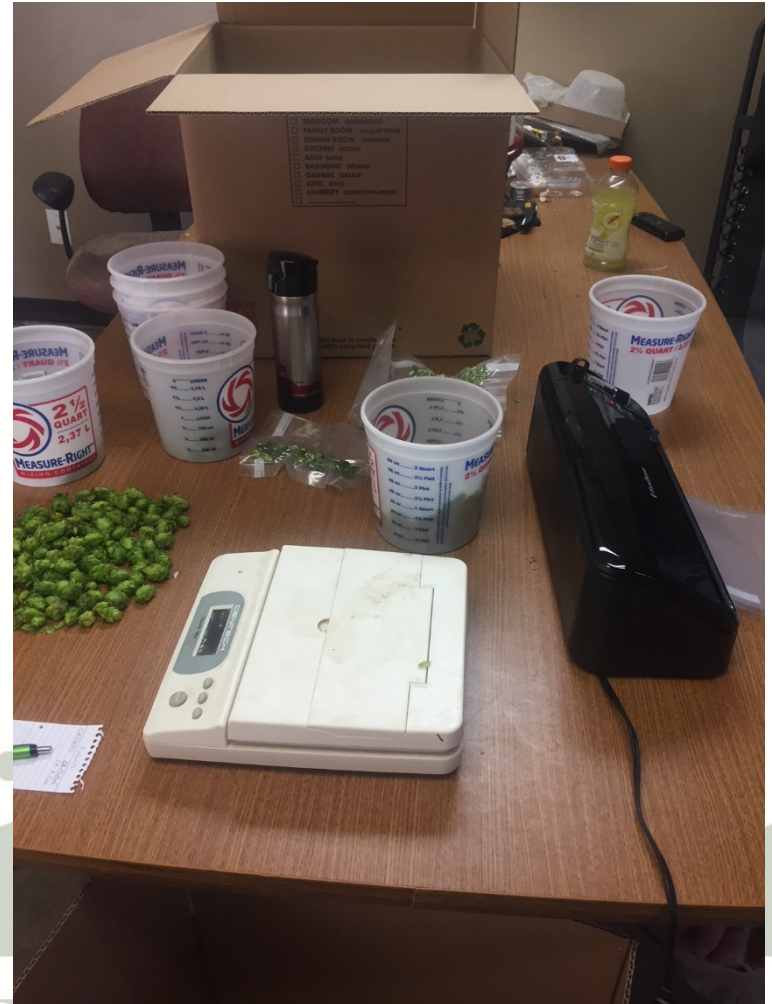
## 2<sup>nd</sup> Year

- Cascade and Nugget survived our “Normal” winter in 2018. Southern Brewer 50% kill
- Replaced others with Cascade and Nugget
- Yield about 2 lb per hill/plant



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# Processing



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# 3 A Hopyard Research Area

Item Description	Per-Unit Cost	Funds Requested
Poles	\$32	\$4,196.00
Turn buckles/anchors	\$28.73	\$2,298
Clamps	\$1.31	\$394
Plants - hops	\$6.95	\$13,900
		\$20,788.00



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# Design

- 889 plants per acre
- 3 total acres
  - 1 A for variety testing
  - 1 A for pest evaluation
  - 1 A for agronomic evaluation
- Drip irrigation



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# Hops



# Questions



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