Edamame Production Practices: What We Know Now

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Edamame

• Edamame – “beans on a branch”
• Native of Japan
• Same species (Glycine max) as commercial soybean
• Specifically bred for large seeds, sweeter flavor, and creamier texture
Edamame in Arkansas

• Specialty crop
  – Arkansas River Valley, North Central Arkansas
• American Vegetable Soybean and Edamame, Inc.
  – Mulberry, AR
• UA Soybean Breeding Program
Objectives

- Establish Extension Research/Demonstrations
- Organize and conduct field days
- Develop educational materials
Insect Research

- Seed Treatment Study
- Comparing conventional vs. edamame insect pressure
- Stink bug threshold study
Labeled Insecticides

- Acramite
- Admire 2 Flowable
- Brigadier
- Capture
- Cruiser
- CruiserMaxx
- Hero
- Intrepid
- Mustang
- Proaxis
- Provado
- Warrior
Disease Research

• Fungicide Studies
• Nematode screening
• Variety screening
Labeled Fungicides

• Apron XL
• Endura
• Headline
• Maxim XL
• Quadris
• Serenade
Weed Science Research

• Herbicide sensitivity trials
• Post herbicides
Labeled Herbicides

- AIM
- Dual Magnum
- Intensity One
- Select Max
- Treflan HFP
- Roundup (Burndown)
- Lorox
Edamame Seeding Rate Study

- Variety 8080
- Variety 4002

- 50,000 seed/ac
- 75,000 seed/ac
- 100,000 seed /ac
- 125,000 seed/ac
### Edamame Seeding Rate Study

<table>
<thead>
<tr>
<th>Variety</th>
<th>Seeding Rate</th>
<th>3 Bean Wt (lb)</th>
<th>2 Bean (lb)</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>8080</td>
<td>50,000</td>
<td>0.202 c</td>
<td>0.674 a</td>
<td>0.436 ab</td>
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<tr>
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<td>0.509 b</td>
<td>0.528 a</td>
<td>0.235 c</td>
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</tbody>
</table>
Edamame N
Rate/Timing/Product

• Variety 8080
• Variety 4002
• Urea + Agrotain
• Amm. Sulfate

• Preplant
• V6
• R1
• R3
Edamame N
Rate/Timing/Product

• Significantly different yield between varieties
• No significance with rate, timing, or product
Edamame K Rate/Product Study

• Variety 8080
• Variety 4002

• K₂O
• K₂SO₄

• 0 lb/ac
• 60 lb/ac
• 120 lb/ac
Edamame K Rate/Product Study

• Significantly different yield between varieties
• No significant difference in rate or product
Edamame P Rate Study

- Variety 8080
- Variety 4002
- 0 lb/ac
- 40 lb/ac
- 80 lb/ac
- 120 lb/ac
- 160 lb/ac
Edamame P Rate Study

• Significantly different yields between varieties
• No significant difference between rates
• Questions?