

LSU AgCenter Online Variety Selection Tool

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LSU AgCenter Variety Testing

- **Collect and analyze data**
 - Many varieties
 - Multiple locations
 - Research Stations
 - On producer's farms
 - Several traits (Yield, abiotic and biotic stress resistance, plant characteristics)
- **Consider the variety's performance**
 - Similar environments and across environments
- **Try to predict which varieties have the highest potential for success**
- **Increase the quantity of data and ability to analyze data to
Increase successful prediction**

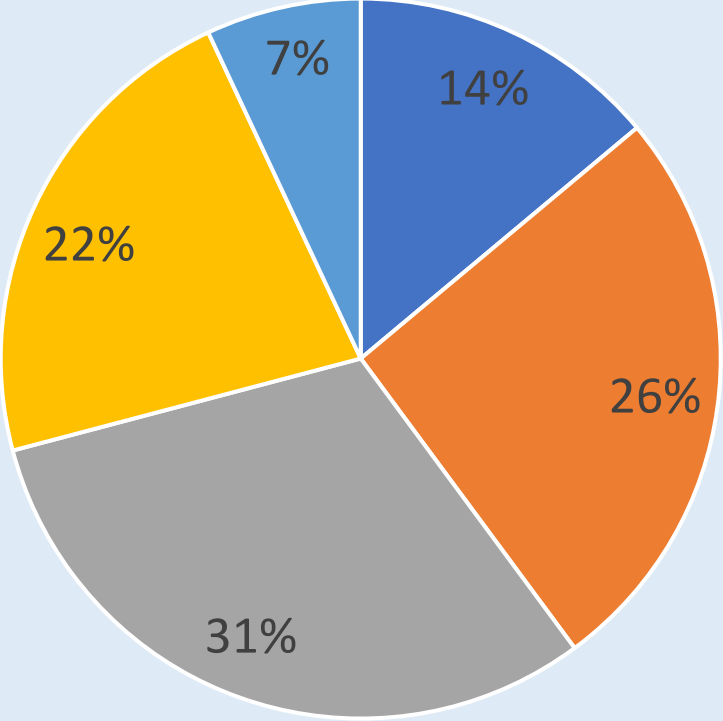
Official Variety Trail (OVT)

- 2021
 - 7 research stations
 - 5 maturity groups
 - 125 varieties
 - Yield potential
 - Disease resistance
 - Maturity, plant height, lodging

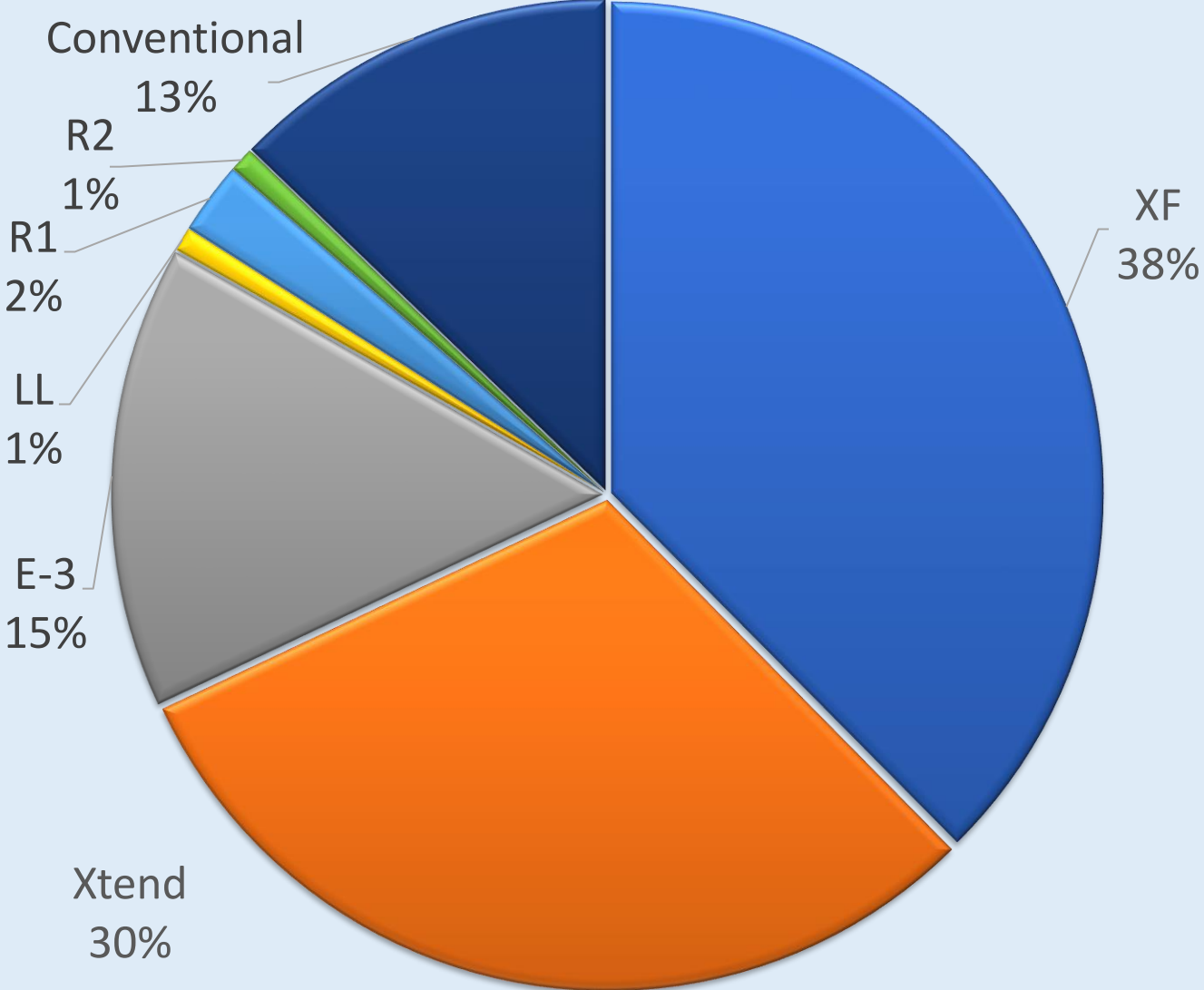


OVT Entries

Maturity Group Entries



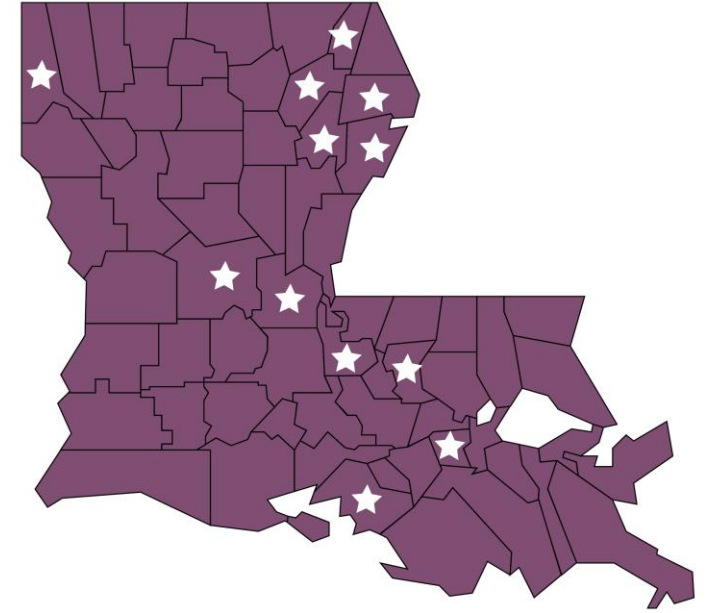
MG: 3.0-4.4 MG: 4.5-4.7 MG: 4.8-4.9
MG: 5.0-5.3 MG: 5.4-6.0



On-farm Variety Demonstrations

- **Core-block**

- 6 seed companies; 1 University
- 20 demonstrations / 12 parishes
 - MG 3.7-4.4 = 4 varieties
 - MG 4.5-4.9 = 12 varieties
 - MG 5.0-5.6 = 9 varieties
- Herbicide technologies
 - XtendFlex; Xtend; E-3; GT; STS



Genetic Resistance – 2021 on-farm variety trial



Dr. Tristan Watson - LSU AgCenter Nematologist

Nematode Resistance Screening

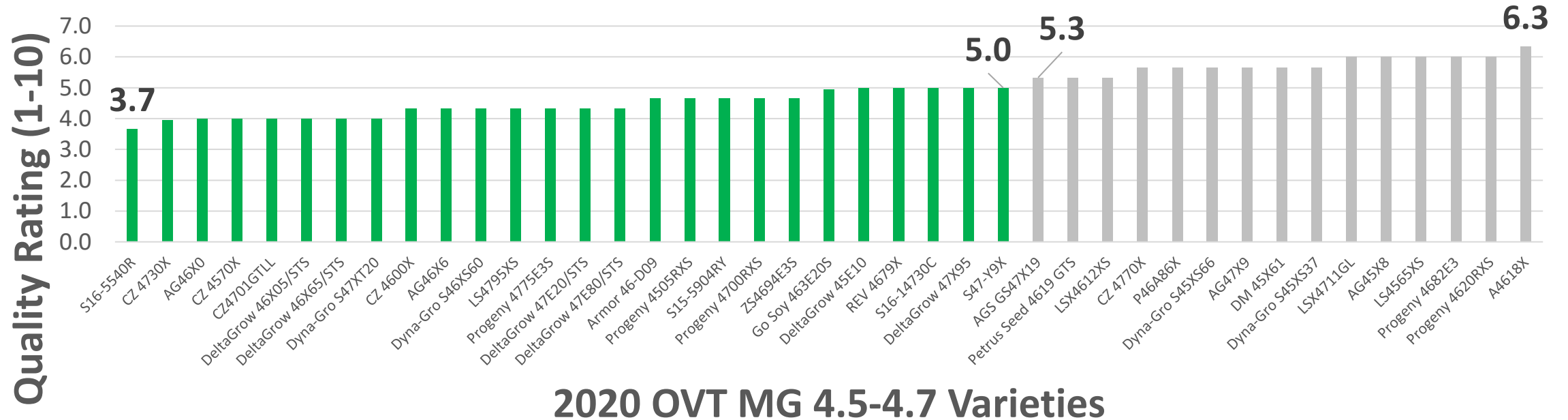
Variety	R/T or Susc.	Assay at Planting	Late Season Assay		Yield
	Root-Knot	Root-Knot (cc soil)	<u>RK juv. (cc soil)</u>	<u>RK eggs (plant)</u>	<u>Bu/A</u>
Dyna Grow 48XT-40	R/T	160	2,240	4,278	74
Syngenta S47Y9X	Susceptible	320	15,360	7,770	62
Syngenta S45J3X	R/T	3,040	19,520	3,302	79
Pionner P46A35X	R/T	0	2,880	520	76

Weathering Resistance

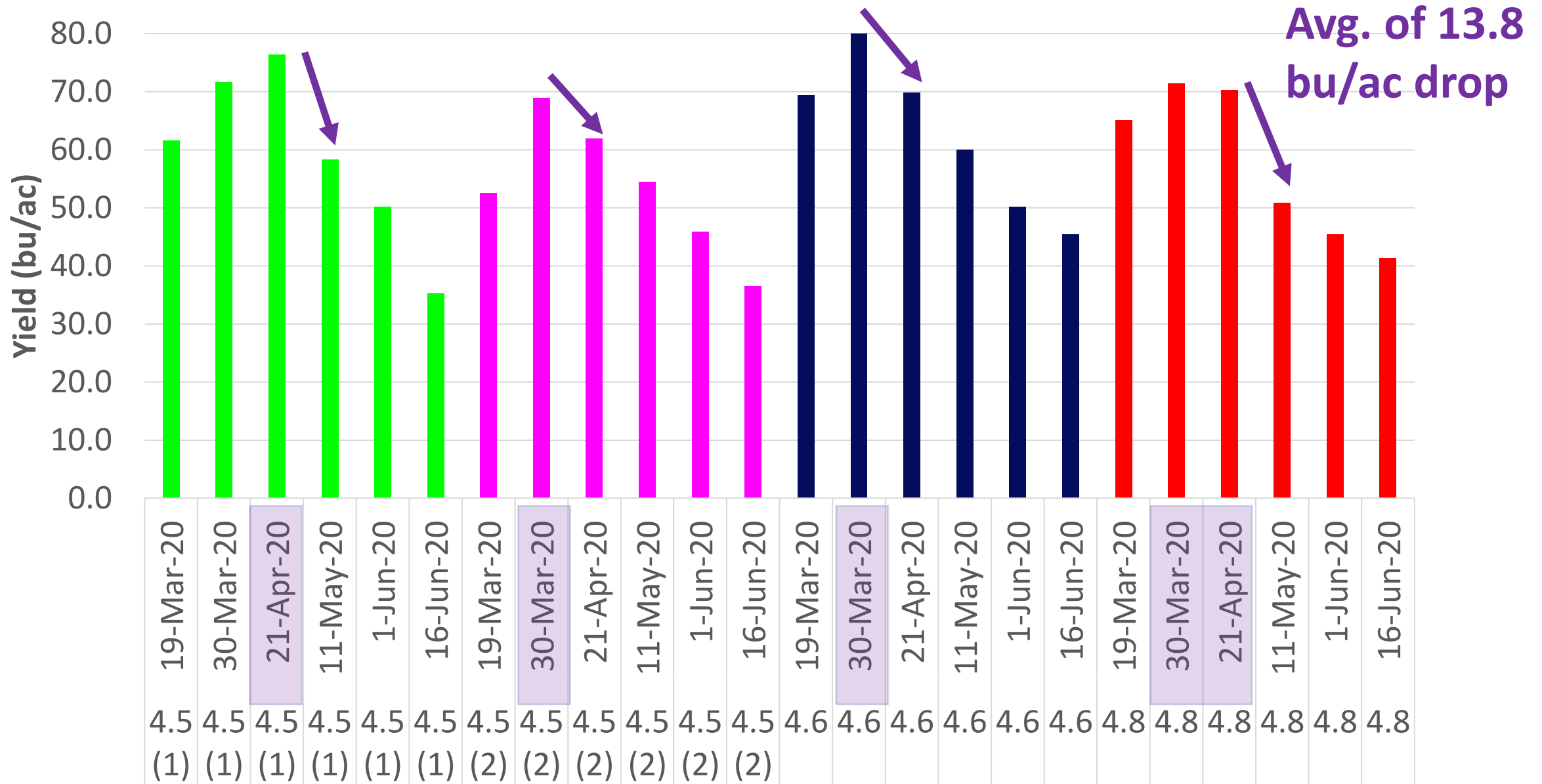


Select Varieties for Weathering Resistance

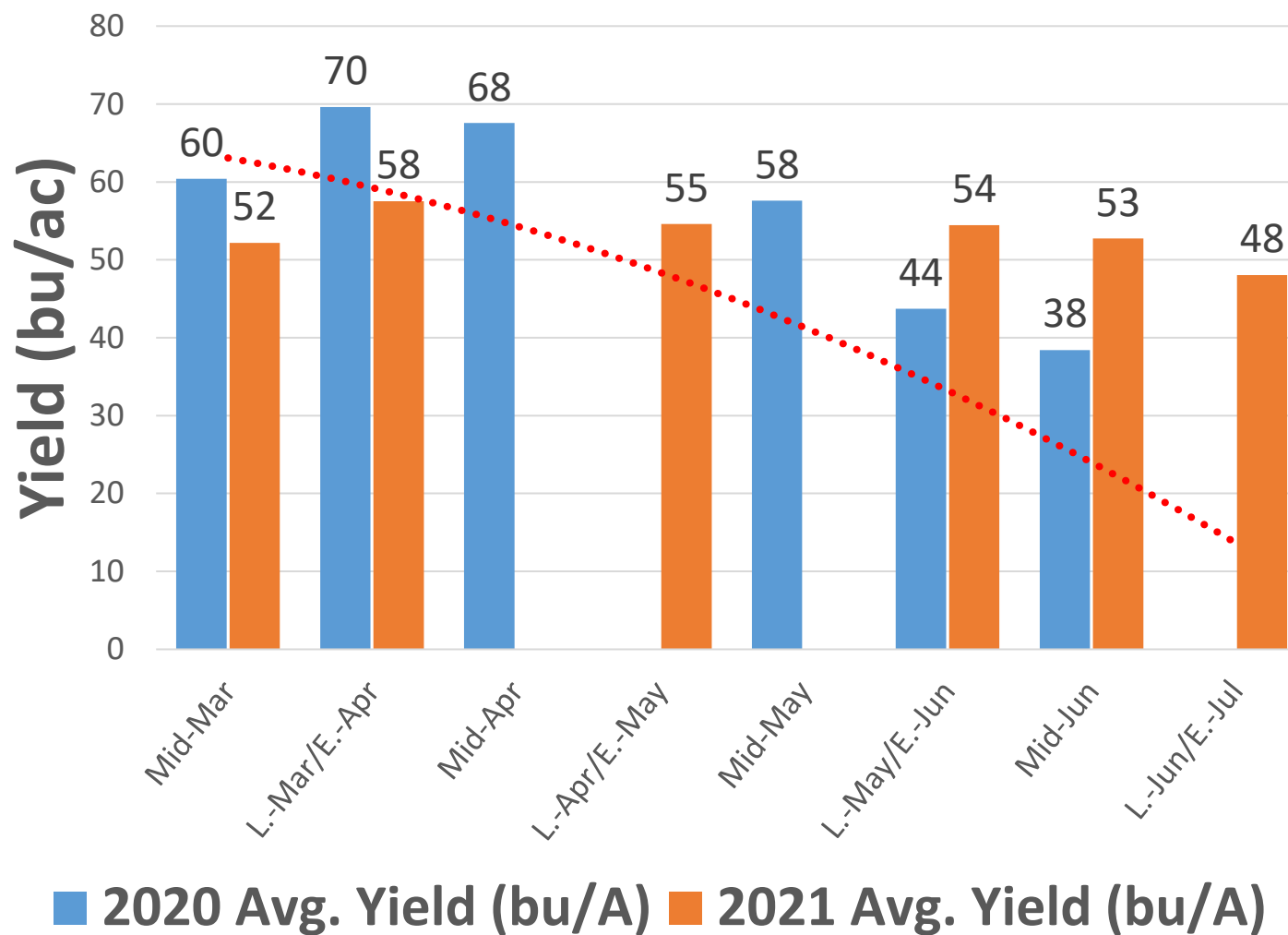
Delayed Harvest Quality Ratings



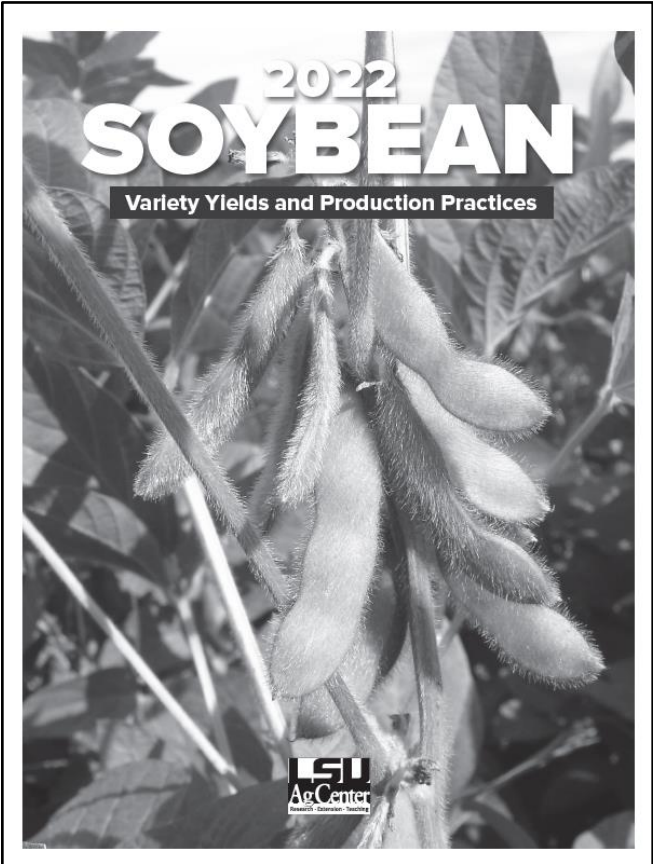
2020 Variety by Planting Date (MG 4.5-4.8)



Dean Lee Planting Date Trial (2020 - 2021)



2021 Soybean Variety Results



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Soybeans Varieties

university breeding programs. The LSU AgCenter also includes a reduced number of varieties in large-plot, on-farm demonstrations to increase the number of locations and environments in which varieties are evaluated. From these, a grower should choose several adapted to an individual farm. Information in the tables can help producers make these important decisions.

Information under the each column can be found by clicking the year in which the data was collected, i.e. the 2017 link shows data measured in 2017.

Extension Demonstration Results	Soybean Preliminary OVT Results	Soybean OVT Results
2021	2021	2021
2020		2020
2019		2019
2018		2018
2017		2017
2016		2016
2015		2015
2014		2014
2013		2013
2012		2012
2011		2011
2010		2010
2009		2009
2008		2008
2007		2007
2006		2006
2005		2005
		2004

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articles 2021 On-Farm Variety Demonstrations

2021 On-Farm Variety Demonstrations

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Group III Demonstrations	Group IV Demonstrations	Group V Demonstrations	Nematode Resistance Demonstrations
2021 MG 3-44 Soybean Core... 10/28/2021 3:13:27 PM	2021 MG 45-49 Soybean Cor... 10/28/2021 3:21:48 PM	2021 MG 5-6 Soybean Core ... 10/28/2021 3:16:03 PM	2021 Concordia Nema resi... 10/28/2021 3:35:01 PM
2021 Franklin MG 3-44 Soy ... 10/28/2021 3:13:27 PM	2021 West Carroll MG 4 Soy ... 10/28/2021 3:21:49 PM	2021 Avoyelles MG 5 Soy Co... 10/28/2021 3:16:02 PM	2021 Morehouse Nema resi... 10/28/2021 3:35:00 PM
2021 Rapides MG 3-44 Soy ... 10/28/2021 3:13:26 PM	2021 Avoyelles MG 4 Soy Co... 10/28/2021 3:21:50 PM	2021 EBR MG 5 Soy Core bl... 10/28/2021 3:16:02 PM	
	2021 EBR MG 4 Soy Core bl... 10/28/2021 3:21:48 PM	2021 Franklin MG 5 Soy Cor... 10/28/2021 3:16:01 PM	
	2021 Franklin MG 4 Soy Cor... 10/28/2021 3:21:50 PM	2021 Rapides MG 5 Soy Cor... 10/28/2021 3:16:01 PM	
	2021 Pointe Coupee MG 4 S... 10/28/2021 3:21:48 PM		
	2021 Rapides MG 4 Soy Cor... 10/28/2021 3:21:49 PM		
	2021 Richland MG 4 Soy Cor... 10/28/2021 3:21:52 PM		
	2021 Tensas MG 4 Soy Core ... 10/28/2021 3:21:49 PM		



<https://www.lsuagcenter.com/>

Soybean Variety Traits

- Yield
- Maturity
- Height
- Lodging
- Disease Tolerance
- Nematode tolerance
- Salt tolerance

- Agronomic data
 - Pubescence color
 - flower color
 - Canopy coverage at R3
 - Protein and oil content
- Increase amount of nematode tolerance data
- Weathering tolerance
- Flood tolerance
- Conventional varieties
- Planting date x MG x Variety trials
- Precision data – how a variety reacts in specific soil and weather conditions (Dr. Luciano Shiratsuchi and Dr. Tri Setiyono – Precision Agriculture and Remote Sensing)

Online Variety Selection Tool

The screenshot displays the 'The Trials at Hammond' section of the LSU AgCenter website. The header includes the AgCenter logo, a search bar, and navigation links for Topics, Services, Publications, News & Events, About, and Our Offices. A left sidebar contains a navigation menu with options like Home, Variety Trials, All Trials, Current Year Trials, Warm Season Bedding, Cool Season Bedding, Shrubs, Trees, Blue Chip Winners, Monday Marvels, Louisiana Super Plants, Virtual Activities, Virtual Tours, Virtual Field Day, Events, Louisiana Super Plants, Plants with Potential, Donate, and Terms & Definitions. The main content area is titled 'Currently Viewing All Trials' and features a sorting dropdown set to 'Title (A-Z)', a search bar, and a 'Filters' button highlighted in yellow. Below this is a pagination bar showing '1 - 20 of 981 items'. Three trial entries are listed:

- Abelia Apple Perfection 2020**: Average Rating 4, Peak Rating 4. Growing Style: Ground | Sun Conditions: Full Sun | Soil Condition: Moderate | Horticultural Use: Shrub. Tags: Pollinator.
- Abelia chinensis 2020-2021**: Average Rating 4, Peak Rating 4. Common Names: Chinese Abelia. Bloom Period: Early Summer to Early Fall. Currently Planted: Azalea Garden - A10. Growing Style: Ground | Sun Conditions: Partial Shade | Soil Condition: Moderate | Horticultural Use: Shrub. Tags: Aromatic, Monday Marvel, Pollinator.
- Abelia Funshine 2020**: Average Rating 5, Peak Rating 5. Bloom Period: Late Spring to Early Fall. Currently Planted: 03-10-2020 | Sun Garden - S41. Growing Style: Ground | Sun Conditions: Full Sun | Soil Condition: Moderate | Horticultural Use: Shrub. Tags: Deer Resistant, Pollinator.

The Filters sidebar is located on the right side of the interface. It features a 'Hide' button and a list of filter categories, each with a dropdown arrow:

- All Horticultural Use
- All Bloom Times
- All Planting Locations
- All Soil Conditions
- All Sun Conditions
- All Growing Styles
- All Trial Years
- All Tags
- All Flower Colors
- All Trialing Partners
- All Taxa
- All Series
- All Variety Names
- All Common Names
- Currently Planted Not Specified

Questions

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