

LSU - SPESS 104 M.B. Sturgis Hall Baton Rouge, LA 70803-2110 (225) 578-2110

2020-2021 LAES SMALL GRAIN PERFORMANCE TRIALS Sept 2, 2020

Dear Seedsman/Breeder:

Applications are now being accepted for the LAES wheat and oat performance trials. Information on the trials is provided below. Results from 2020 trials have been posted on my Wheat Variety Testing website at: <u>http://wheat.lsu.edu/index.shtml</u> The protocol and entry forms for 2021 are also posted.

Changes for 2021: The St. Joseph location was dropped in 2020 due to a retirement. That location will be added back under the direction of Dr. Trey Price who also coordinated the Winnsboro trials. The fungicide split at Winnsboro produced excellent data last year. For 2021 the trial will be split into 3 fungicide + 3 non-fungicide reps at Alexandria, Baton Rouge, St. Joseph and Winnsboro. The HMT will likely include a fungicide application at average flag leaf and a FHB fungicide application at average heading. The HMT may also include extra nitrogen. We will also plant headrows of all entries in a misted and inoculated Fusarium Headblight nursery at Alexandria and Winnsboro. The Research Summary and forms should be posted in the very near future on the official LSUAC website at: http://www.lsuagcenter.com/en/crops_livestock/crops/varietytrial/. You can also email Steve to receive either pdf or Excel versions of these files if desired.

If you have any questions, please call, email, or write the coordinator:

Dr. Stephen A. Harrison LSU – SPESS (School of Plant, Environmental & Soil Sciences) 104 MB Sturgis Hall Baton Rouge, LA 70803-2110 sharrison@agctr.lsu.edu 225-578-1308, cell: 224-281-9446

Protocol for 2021:

- 1. Entry fees remain the same.
- 2. I require 8.5 pounds of wheat seed for experimental and I prefer 20 pounds for released varieties.
- **3.** The wheat variety trial will be divided into two maturity groups in north Louisiana: Early-heading entries (~7 days earlier than test mean) and normal to late heading entries. A set of three medium heading date entries will be grown with both groups to permit cross-comparison. This should allow better evaluation of the potential early lines and permit more timely harvest of both groups.
- 4. All new entries will be grown in the normal/late trial in north Louisiana. New entries will be grown in a maturity screening yield trial at Baton Rouge for the first year and will not be entered in the south Louisiana standard variety trial the first year unless there is previous testing in Baton Rouge (other regional trials and breeders nurseries) to indicate they are adapted to south Louisiana.
- 5. A wheat screening nursery will be established at Baton Rouge and Winnsboro to permit breeders / companies to test breeding lines for adaptation to Louisiana and determine whether to enter them in statewide trials the following year. These tests will be two rep yield trials at each location and limited to 10 entries per company, and will carry a fee of \$120 per entry.
- 6. All entries will be evaluated in misted and inoculated FHB nurseries.

Test Locations and Fees:

The North Louisiana normal/late and early wheat performance trials will be conducted at the following seven yield locations (9 trials) for a fee of \$700. 1) Dean Lee Research Station, Alexandria; 2) Red River Research Station, Bossier City (Shreveport); 3) Northeast Research Station, St. Joseph; and 4) Macon Ridge Branch of Northeast Research Station, Winnsboro. **The South Louisiana wheat performance trial** will be conducted at: 5) Rice Research Station, Crowley, LA; 6) Iberia Research Station, Jeanerette, LA; and 7) Central Stations, Baton

Rouge, LA. There will be a fungicide split of the trials at Alexandria, Baton Rouge and Winnsboro.

The wheat screening nursery will be two reps at Baton Rouge and Winnsboro with a fee of \$120. **The Oat Performance Trials** (\$200) will be conducted at four locations 1), 2), 3), and 7) with three reps at each location.

Experimental Procedures:

A randomized complete block design with four (standard wheat) or three (oat and wheat fungicide splits) replications will be used at each location of the statewide wheat performance trial. All plots will be seeded at recommended rates (by weight) and dates. Fertilizer will be applied as appropriate for the soil fertility level and type. Herbicides and pesticides will be used as necessary. Fungicides will not be used. A complete copy of the LSU AgCenter wheat performance trial protocol is posted on the wheat breeding website and available by email available upon request. Yield, test weight, lodging, heading or maturity date, disease incidence, and other pertinent data will be recorded. Fusarium head incidence and Percent Fusarium Damaged Kernels (FDK) and Dexoynivalenol toxim content (DON ppm) will be determined from headrow nurseries that are inoculated and misted.

Seed Requirements:

A minimum of 8.5 (prefer 20) pounds of high quality seed is required for each wheat performance trial entry, 1.5 pounds (600 grams) for the Wheat Screening Nursery, and 3 pounds for the oat performance trials. We package 8.15 pounds (3700 grams) if there are no replants. Twenty pounds gives me extra seed for re-packaging and additional trials such as Hessian Fly, Fusarium, and metribuzin trials we have conducted last year. It is the responsibility of the submitting agency to ensure that seed purity and quality are acceptable.

Person	Location	Notes	Phone	FAX	EMAIL- all are @agcenter.lsu.edu
Boyd Padgett	Alexandria	Plant Pathologist	(318)435-2157		Bpadgett
Steve Harrison Baton Rouge		Coordinator	(225)578-1308	(225)578-1308 225-578-1403	
Kelly Arceneaux		Research Associate			Karceneaux
Allysson Harding Katie Fontenot		Research Associate			
		Research Associate			
Blair Buckley	Bossier City		(318)741-7430	318-741-7433	Bbuckley
Bill Waltman					WWaltman
Dustin Harrell	Crowley	Agronomist	(337)788-7531	337-388-7553	DHarrell
Manoch Kongchum		Agronomist			MKongchum
Greg Williams	Jeanerette	Research Associate	(337)276-5527	337-276-9088	Gwilliams
Trey Price	St. Joseph and	Plant Pathologist	(318)435-2157		PPrice
Dustin Ezell Winnsboro Myra Purvis		Research Associate			JStapp
		Research Associate			MPurvis

Contact Information for Test Locations:

Stepten a Harrison

Stephen A. Harrison Small Grain Variety Trial Coordinator



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2020 - 2021 LSU AgCenter Small Grain Performance Trial Entry Form

The entry forms should be signed and postmarked by September 10, 2020. All seed should be received by September 20. Seed that arrive with freight due will not be accepted. Remission of Fees: Do not send a check with the seed. You will receive a bill after the trials have been planted. Payment of fees is due within two weeks of receipt of the bill, sometime in January. A check should be made to the LSU AgCenter and mailed to the coordinator. The commodity (small grain testing) should be indicated on the check.

Orga	nization:									
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Phon	e:	Signature / Date Fax:								
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Whe Oat Whe	SPESS- 104 M. B. Stur Louisiana State Univer Baton Rouge, LA 7080 Phone: (225) 578-1308 D SHOULD BE RECEIVE eat Variety Trials: variety Trials: eat Screening Nursery 0-21 LSU AgCenter Wheat a	sity 3-2110 Cell: (225) 281-9440 D BY SEPTEMBER 2 8.5 lbs; <u>20 lbs prefer</u> 3 lbs minimum; 5 lb 1.5 lbs (600 grams)	<mark>0</mark> <u>red</u> s preferred	25) 578-1403 E1 Please notify me if t			@agcent 1.	er.lsu.ed	łu	
<u>2020</u> No.	Variety / Line	Variety Designation on PVP or Patent Form if Different	Chemical Treatment on Seed		Released / Exptl	PVP Or PATENT?	Trial (WVT, WSN, OAT)	New or Previous Entrv		
1									1	
2									1	
3									1	

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