



MSSB Proposal Application and Budget Form

Please answer fully and limit answers to a single page in the space provided:

Project Title	Enhancing Stink Bug Resistance in Midsouth Soybean			
PI Name	Jeffrey A. Davis	E-mail	jeffdavis@agcenter.lsu.edu	
PI Title & Institution	Professor, LSU AgCenter			
Mailing Address	404 Life Sciences Building			
City/State/Zip	Baton Rouge, LA 70803			
Phone number	225-578-5618			
Additional PIs	Pengyin Chen, University of Missouri			
Research Locations (and states involved)	Ben Hur Research Center, Baton Rouge, LA Fisher Delta Research Center, Portageville, MO			
Timeline:		Multi-Year Project Information (if applicable)		
Current Year - FY22		Year 1	Year 2	Year 3
Start Date	03/01/2022	03/01/2022	10/01/2022	10/01/2023
End Date	09/30/2024	09/30/2022	09/30/2023	09/30/2024
Funds Requested	\$259800	\$86,600	\$86,600	\$86,600
Program Area (e.g. breeding, mngt): Quality of harvested seed, Insect management/Control				
Objective	Public researchers will investigate and incorporate resistance to stink bugs to protect quality and increase yield			
Justification	Soybean farmers lack resistant varieties for stink bugs that yearly reduce yield and quality. The purpose of this project is to identify and develop sources of resistance for the stink bug complex.			
Exp Setup	Soybean lines from Dr. Chen will be sent to Dr. Davis for infield evaluations of stink bug resistance. We will assay quality and yield and determine specific mechanisms of resistance.			
Summary	Breeding selections (from Dr. Chen) will be evaluated for stink bug resistance (by Dr. Davis). Resistance will then be incorporated into varieties that are adapted to the Mid-South.			
Key Metrics	High yielding, locally adapted soybean cultivars that are resistant to stink bugs. identify and map markers contributing to stink bug resistance to use in marker assisted selection (MAS).			
Expected Deliverables	Improved high-yielding varieties with resistance to stink bugs that reduce insecticide inputs while maintaining quality.			
Benefit to midsouth farmers	Reduced insecticide costs, increased yields, and protected seed quality.			
Signature of Principle Investigator			Date:	
<i>Jeffrey A. Davis</i>			Feb. 18, 2022	

**Email proposal as electronic copy in Microsoft Word or PDF format to
midsouthsoybean@gmail.com.**