Jonathan Gonzales wins 2021 Arkansas Soybean Science Challenge Award at the Northwest Arkansas Regional Science and Engineering Fair

Jonathan Gonzales, age 17, a junior at Fayetteville Christian School in Fayetteville, won the Soybean Science Challenge at the 2021 Northwest Arkansas Regional Science and Engineering Fair held virtually at the University of Arkansas-Fayetteville on March 6.

Gonzales received a $300 cash award provided by the Arkansas Soybean Promotion Board. His science project titled “Comparing crop species response to heat” also won Honorable Mention in Plant Science. Gonzales received an Honorable Mention in Plant Science at the virtual Arkansas State Science and Engineering Fair April 1.

Alicia Deavens, Gonzales’ teacher, won the $200 Soybean Science Challenge Teacher-Mentor Award. Deavens stated that the Soybean Science Challenge is a great way to learn about soybean research. “By participating in the Soybean Science Challenge, Jonathan was encouraged and really got more confident in the protocols and procedures of what it takes to do research from start to finish. I believe that participating in The Challenge will help give him great training for future science classes if he goes to college and help him solve problems in everyday life. He is more confident in himself and his ability to gather information and draw conclusions based on his research,” she replied.

Gonzales was thrilled to win the 2021 Soybean Science Challenge. “It is truly a blessing for me to represent FCS through my science fair project this year. And when I first heard the news, I was completely speechless. I just wanted to represent well and to present even better,” he stated.

Amanda Gonzales, Jonathan’s mother, was very happy to see him receive the award. “I am extremely proud of his commitment to seeing his project through on his own,” she stated. “I knew he was serious about research when he took his science project on Christmas vacation with us last year!”

Deavens feels that the Soybean Science Challenge is a great program for students. “I believe that participation in the Soybean Science Challenge helps Jon and other students learn to complete tasks from start to finish in an organized and timely manner. This in turn helps give them the confidence needed for their future - in education and in life in general,” she explained.

"The Soybean Science Challenge provides an opportunity for Arkansas Junior High and High School students to participate in scientific research that can impact the State of Arkansas as well as the world. Soybean Science Challenge student researchers learn about this important commodity crop and its many uses including feeding the world, development of biofuels and sustainable products. The Soybean Science Challenge helps students develop an understanding of the challenges and complexities of modern farming," said Dr. Julie Robinson, Associate Professor and director of the program.

"The goal of the Arkansas Soybean Science Challenge is to engage students in "real-world" education to support soybean production and agricultural sustainability," said Gary Sitzer, a former member of the Arkansas Soybean Promotion Board. "The program also rewards scientific inquiry and discovery that supports the Arkansas Soybean Industry."

The Arkansas Soybean Science Challenge was launched in January 2014 to 9-12th grade science students. Students who successfully completed the online course were eligible to have their original soybean-related research projects judged at the 2021 ISEF-affiliated Arkansas Science and Engineering Fairs.

Information on the 2021-2022 Arkansas Soybean Science Challenge will be available in summer 2021. For more information, contact Dr. Julie Robinson at jrobinson@uada.edu or Diedre Young at dyoung@uada.edu.

The Cooperative Extension Service is part of the University of Arkansas System Division of Agriculture.

Jonathan Gonzales, Fayetteville Christian School, Fayetteville, Arkansas; Teacher, Alicia Deavens

Category: Plant Science

Title: Comparing Crop Species Response to Heat

Abstract: In this project we will discover which of these popular crop species create the most efficient heat pack for First Aid purposes. I chose this project because I am curious which will make a better heat pack. I have grown to like the many uses of soybeans, so maybe they will excel and generate a better heat pack. I chose rice because it is a very popular 'homemade' heat pack. I chose soybeans because they are one of Arkansas' largest agricultural exports and I am very familiar with them. Finally, I chose chickpeas really, just for a third option, but frozen peas are a highly recommended item for ice packs too, so why not compare them to rice and soybeans to see if they are just as effective as a heat pack as they are an ice pack. In conclusion, the soybeans did the best, even though it was close. They were able to heat up the quickest and even maintain heat for a longer time. So, when it comes to homemade heat packs, then soybeans should be the best option. However, in second place was the chickpeas. Not only do they make for a great ice pack, but they can also do great things as a heat pack. In my opinion, the rice did not do as great as I assumed it was going to do, however, they still make a good heat pack, but it will not last as long.