www.uaex.uada.edu/soywhatsup

Hadleigh and Hannah Baker win 2021 Arkansas Soybean Science Challenge Junior Level FFA Agriscience Award at the FFA State Convention Agriscience Fair

Hadleigh and Hannah Baker, age 13, eighth graders at Mountain Home Junior High School in Mountain Home, won the 2021 Soybean Science Challenge FFA Junior Level Agriscience Award at the State FFA Convention Agriscience Fair April 26.

The Bakers received a $300 cash award for their Junior FFA team win. Funds were provided by the Arkansas Soybean Promotion Board. Their science project was titled "Comparing flavor preferences of White-Tailed Deer to understand their feeding tendencies in order to improve deer numbers at feeding sites."

Josh Baker, Hadleigh and Hannah's parent and advisor, won the $200 Regional FFA Advisor Award. Baker stated the Soybean Science Challenge allows his students to broaden their horizons in agriculture. "Any chance we can give our students the ability to diversify and learn new aspects about agriculture is a plus, and the Soybean Science Challenge does just that," he replied.

Hadleigh and Hannah were thrilled to win the 2021 FFA Agriscience Soybean Science Challenge. "We were beyond excited when we received the news that we had won the Soybean Science Challenge. We are grateful to be given the opportunity to share our research project and given the experience of completing the Soybean Science Challenge Online Course, "they stated.

Josh Baker, Hadleigh and Hannah's father as well as their teacher-mentor, was elated to see them receive the award. "I am very proud of my girls for working so hard on their project and for winning this award. It is a great accomplishment and something they worked very hard for," he said.

Hadleigh and Hannah also expounded on what they learned from the Soybean Science Challenge Online Course. "We learned so much about Arkansas soybeans that we will put in future research projects. The online course structure was amazing. We enjoyed how the videos corresponded with the applied knowledge quizzes and test. The videos were packed with information that, when watched, made the assessments easy to complete," they explained.

Hadleigh and Hannah had different levels of knowledge when it came to soybeans. "Hadleigh had no knowledge about soybeans, but Hannah had basic knowledge regarding nitrogen fixation with legumes. This course has allowed us to expand our knowledge on soybeans to fully comprehend the importance soybeans have on the agricultural industry," they replied.

"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, and in 2021, a Junior level award was added for grades 6-8. 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.

Hadleigh and Hannah Baker Mountain Home Junior High School, Mountain Home, Arkansas; FFA Advisor, Josh Baker

Category: Environmental Services/Natural Resource Systems

Title: Comparing flavor preferences of White-Tailed Deer to understand their feeding tendencies to improve deer numbers at feeding sites.

Abstract: Wildlife populations are an extremely vital part of the agricultural industry. For white-tailed deer, specifically, numerous humane measures are being taken to control the white-tailed deer population. While hunters may envision giant racks on their wall, farmers see reduced crop yields instead. Deer eat millions of pounds of forage each day. This causes a substantial amount of damage to crops. However, to control the population of deer in a given area, hunting is the most effective way to reduce deer inhabitants. To attract deer to a specific hunting site, feeding areas are often applied to allure deer. To entice the white-tailed deer with

food, we must find out which type of corn these deer prefer. Our topic of deer corn experimentation is important to the agricultural industry because it will provide farmers with precise data that clearly represents which type of deer corn, they prefer.

In our experiment we provided different types of corn to the white-tailed deer on our farm. As we placed the different types of corn out, we aimed to identify which type of corn the deer preferred. The data that we collected would provide agriculturalists with precise information to discern which type of deer corn white-tailed deer favor. Therefore, when corn is produced and distributed the people who purchase corn for their deer will be aware of what type of corn to obtain. This information reduces the inconvenience of farmers purchasing non effective deer corn. Finally, farmers will be able to effectively entice white-tailed deer with the corn that they prefer to consume.

Prior to creating our deer corn experiment, we were obligated to research the current data on white-tailed deer corn preferences. The current data is exponentially contrasting to the results that we collected. The existing data states that white-tailed deer prefer persimmon deer corn over everything. Much like our experiment, they set the control as plain deer corn and two other variables as apple and persimmon. This result was considerably unalike our experiment. The data that is currently available for this typical experiment was conducted through wide open spaces, a hunting informational site out of Texas. The existing data states that Persimmon is the most favored flavored corn by white-tailed deer. In our study Persimmon was the least favored corn out of the entire experiment. As far as the methods they used compared to ours, they were extremely similar. We both created a normal feeding site and recorded the data over time. In the end, our results varied significantly. However, not only does the flavor of the corn plays a part in the corn preferences, but also the location is a crucial factor. This might have been due to the location of the favored corn type. In conclusion, location and flavor are a key component to deer preferences and can alter the type of corn they choose to consume.