

# Soybean growing contest provides learning opportunity for Kansas students

**MANHATTAN, Kan. - April 29, 2013 -** This spring, Kansas students took on the challenge of growing the largest potted soybean plant. Their motivation was to win the "Willie and the Beanstalk" contest, a project organized by Kansas State University's Department of Agronomy.

The contest, sponsored by the Kansas Soybean Commission, was created as a way to encourage plant and soil science in the school curriculum, to increase student interest in agronomy, and to attract students to K-State's annual Open House festivities, where they can interact with agronomy faculty and students.

Nathan Nelson, associate professor of soil fertility, is the contest's coordinator. Nelson shared that since the contest began, participation has grown. In 2008, the contest's inagural year, 126 students entered the contest. This year, 298 students registered. There have been 1,933 total students who have entered the contest since its start.

The contest begins on a common seeding day, usually in March, and ends on the day of K-State Open House. Students bring their soybean plants to the Manhattan campus to be judged. The plants are evaluated using the following criteria: cultural practices documentation, plant height, plant mass, leaf area and leaf greenness. Winners within each criterion and overall winners in each age division - 9-12th grades (Division 1) and K-8th grades (Division 2) - are selected.

The winners for the 2013 Willie and the Beanstalk competition are as follows:

#### **Best Documentation**

Manhattan Division 1: Agriscience III (Blue Valley FFA); Ellinwood #9 (Ellinwood FFA) Manhattan Division 2: Soy Bean Team (Minneapolis Grade School); Green Warriors (Minneapolis Grade School); Soybean Studs Pot 2 (Minneapolis Grade School)

Olathe Division 2: Little Wildcats (K-State Olathe)

#### **Most Biomass**

Manhattan Division 1: Agriscience II (Blue Valley FFA) Manhattan Division 2: Moundridge #4 MFL (Moundridge FFA) Olathe Division 2: Stone Rabbitry (4H Dutch Bunny Breeders)

#### **Tallest Plant**

Manhattan Division 1: Ellinwood #2 (Ellinwood FFA) Manhattan Division 2: Seedies (Minneapolis Grade School) Olathe Division 2: Hanson 5 (Meadow Lane Elementary)

#### **Largest Leaf**

Manhattan Division 1: Moundridge #1 Lady Lavender Legumers (Moundridge FFA)
Manhattan Division 2: The Expendables (Moundridge FFA)

Olathe Division 2: Stone Rabbitry (4H Dutch Bunny Breeders)

#### **Greenest Leaf**

Manhattan Division 1: Ellinwood #6 (Ellinwood FFA)

Manhattan Division 2: The Big Beans (Minneapolis Grade School)

Olathe Division 2: Hanson 4 (Meadow Lane Elementary)

### **Grand Champion**

Manhattan Division 1: Agriscience II (Blue Valley FFA)

1. Chase Carey

2. Haydn Budenbender Adviser: Tim Kilgore

Manhattan Division 2: Tofu Fighters (Blue Valley FFA)

1. Brad Young

2. Seth Carlson

Adviser: Tim Kilgore

Olathe Division 2: Stone Rabbitry (4H Dutch Bunny Breeders)

1. Katherine Stone

2. Kimberly Stone

3. Christine Stone

Adviser: Chris Stone

Because the contest is large effort, Nelson is dependent on the help of agronomy faculty, staff and students for its success. Faculty score documentation sheets and provide equipment necessary for plant evaluation. Staff assist with website development and promotional efforts. Undergraduate and graduate students help with set up, man a soybean growing display at the contest, and score documentation sheets and plants upon arrival.

Due to the hands-on nature of the contest, it can easily be incorporated in the classroom as a strong experiential learning activity. "The contest exposes students to the many factors that influence plant growth and gives them a way to evaluate the effects of each factor," Nelson said. "They can easily explore the importance of soil fertility, water and light, and genetics." Lesson plans that focus on soybean and plant growth and development are available from Kansas Foundation for Agriculture in the Classroom, an agricultural education non-profit organization, at www.ksagclassroom.org.

Nelson anticipates that registration information and rules for the 2014 contest will be available in October. It is his hope that more students from urban school districts participate, so they may be exposed to agricultural applications of science that may be unfamiliar to them. A list of this year's winners as well as contest forms and rules are available on the Willie and the Beanstalk website.

In thinking about next year's contest, Nelson encourages students to plan ahead and grow many soybean plants. He challenges them to consider conducting experiments of their own so that they can evaluate what combination of factors produces the largest soybean plant. "By experimenting with multiple factors, students will learn about the science, challenges and opportunities present in producing sustainable food supply. They will experience the excitement of discovery and the contest will be a success." Nelson said.

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Additional Information:

Nathan Nelson, 785-532-5115 or nonelson@k-state.edu

Resources:

Willie and the Beanstalk: http://beanstalk.agronomy.ksu.edu Kansas Soybean Commission: http://www.kansassoybeans.com

Kansas Foundation for Agriculture in the Classroom: www.ksagclassroom.org

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## About KFAC

The Kansas Foundation for Agriculture in the Classroom is a 501(c)(3) non-profit foundation that provides educational resources for Kansas teachers to help students connect Kansas agriculture to their own lives while meeting curriculum goals.

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# Kansas Foundation for Agriculture in The Classroom

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