



Small grains are a category of crop typically referring to as cereal (such as wheat, oats, barley, rye, rice) with relatively small kernels or a relatively small plant, as distinguished from corn or soy, with large kernels, or a large plant with small kernels, such as sorghum.



Exploring 4-H Small Grains

Spark Activity: Making a Sprouted Grain Salad



What role did small grains play in the history of humanity's relationship with agriculture? Why were small grains so important to our human ancestors? How are the ways that we use small grains different today? Here is one way to enjoy your small grain harvest.

Sprouted Grain Salad

- 1 ½ cups whole grain berries (spelt, rye, wheat, barley) - sprouted
- 1 fresh carrot, sliced
- 2 stalks fresh celery, finely chopped
- 2 small onions, green or white, finely chopped
- 1 clove garlic, finely chopped
- 1 lemon for fresh lemon juice
- 1 Tbsp olive oil
- ¼ cup parsley, finely chopped
- Salt and pepper to taste

Instructions:

1. Find whole grain berries of your choice, available at most grocery stores or from a local producer.
2. Rinse whole grains and place in bowl or glass jar.
3. Cover whole grain berries with water and let sit at room temperature for 24 hours. Drain the water from the grain.
4. Rinse and drain twice daily for two more days, letting berries sit at room temperature covered with a clean towel or cloth. Repeat this process of rinsing until you see small tails emerging from the head of the whole grain berries.
5. Combine ingredients with the sprouted whole grain berries and let chill in refrigerator for two hours before serving.

4-H Project Levels and Goals

Beginner

- Learn how to sprout a whole grain
- Learn about different types of small grains and their growing conditions
- Be able to communicate why small grains are important for humanity

Intermediate

- Understand the process of sprouting and nutritional impact of whole grains
- Communicate how small grains have changed throughout history
- Experiment with growing different small grains

Advanced

- Compare and contrast different small grain varieties and sources
- Cultivate and harvest your own small grains
- Compare two or more varieties of small grains in a growing trial
- Experiment with harvesting techniques for small grains

Put Your Project Into Action

Show Your Skills

- Multimedia display detailing the process of producing and preparing small grains
- Presentation on the biological processes involved with the sprouting and germination of seeds
- Create a short video presentation on the history of small grain and the impact they have had on human society

Service and Leadership

- Volunteer or raise funds for your local food pantry
- Deliver care packages to local farmers during planting/harvest season
- Teach others how to sprout grains
- Promote the needs of your local food bank / pantry on your social media page
- Apply to join the Illinois 4-H Food Advocacy Team

Entrepreneurship

- Grow small grains for sale to local/regional grain elevators or distributors
- Directly contact regional companies seeking their need for small grain growers
- Sell sprouted grains/salads at your local farmers market - follow IL Public Health requirements

Technology Connection

- Drones monitor water distribution on fields
- Utilize social media to promote small grains
- Robots monitor fields and germination rates

Connecting with a Mentor

- Illinois Wheat Association
- Illinois Stewardship Alliance
- North Central SARE – Sustainable Agriculture Research & Education Program
- U of I Crop Science Faculty & Staff
- The U of I Center for Digital Agriculture
- EarthSense – U of I Autonomous Crop Drone

Events

- County and state fair exhibits
- National 4-H Youth Agri-Science Summit
- Local or regional field days
- 4-H Food Advocacy Summit
- Small Grains Conference
- Small grains production workshops
- Farm Progress Show



Careers for People Interested in Small Grains

Farmer	State Government
Chef	- Ag Policy
Food Access Advocate	Crop Insurance Agent
High School Ag Teacher	or Adjuster
Extension Educator	

Start a Conversation

In what parts of the world are small grains cultivated?
How are small grains utilized in the diets of different cultures?

How does a seed become a plant?

How have small grain practices evolved and changed over the past 100 years?

What does the future of small grain production look like in the context of a changing climate?

Want to learn more?

go.illinois.edu/4Hsmallgrain

Explore more at Illinois 4-H!

4-H.extension.illinois.edu



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