

Classes of Wheat



There are five classes of wheat planted in the United States.

Hard Red Winter wheat is used to make bread flour and located in the Great Plains.

Hard Red Spring wheat is used for high-protein blending and located in the Northern Plains.

Soft Red Winter wheat is used to make cakes, cookies and crackers and is located in the Eastern States.

White wheat is used for the flour to make noodles, crackers and cereals. It is located in Washington, Oregon, Idaho, Michigan and New York.

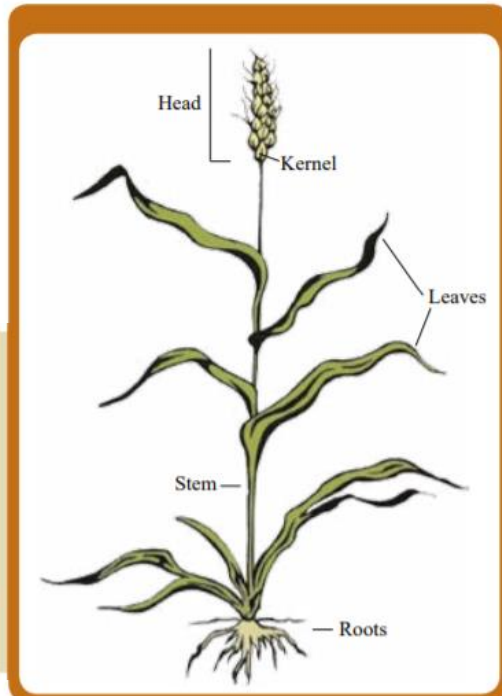
Durum wheat is used to make pastas and located in North Dakota and Montana.

What Is Wheat?

Wheat is a grain (a plant that produces a dry edible seed called a kernel) used mostly for human consumption. Wheat is an annual grass plant that will grow 2 to 3 feet tall. It starts as a seed and begins to grow when there is enough moisture in the soil. The first signs of growth are tiny root hairs that stretch down into the soil while a small shoot pushes upward through the soil. Tissue within the wheat seed provides the plant with its first nourishment. As the plant grows, it uses the sun to make food in its leaves. The roots get food from the soil. Wheat grows many leaves and sends up 3-12 stems called tillers. A group of flowers, called a spike, develops at the top of each tiller and matures into the wheat head. Kernels within the head grow and turn golden brown before harvest.



Wheat Plant



There are four basic parts of a wheat plant:

Head: Contains the kernels

Stem: Supports the head and is known as straw after harvest

Leaves: Conduct photosynthesis

Roots: Hold the plant in the soil

*Don't forget the beard! The beard is the bristle-like part of the wheat plant that covers and protect the kernels.

Wheat FACTS



• A kernel is a wheat seed. There are about 50 kernels in a head of wheat and 12,000 to 14,000 kernels in a pound.



• Did you know that straw comes from wheat? Straw is baled and used as bedding for animals.



• Wheat is grown in nearly every state. Because it is such a versatile crop, it is being harvested somewhere in the world every month of the year.



• A bushel of wheat weighs about 60 pounds and yields about 42 pounds of white flour or 60 pounds of whole wheat flour.



Wheat Production

Wheat is planted by a drill that digs tiny furrows just deep enough to plant the wheat seed. The drill drops the seed into the furrows and covers them with soil. After planting, a wheat kernel begins to absorb moisture and swell. The stem starts growing towards the surface of the soil and the primary roots begin growing. A few weeks later, the plant starts growing above the ground. In the spring, the stems will elongate and heads will appear. When the wheat flower is pollinated, it will develop into wheat kernels. About 30 to 60 days after flowering, the wheat kernel becomes ripe. The kernels will increase in size and gradually harden. The entire plant becomes dry and turns golden brown. Depending on the variety of wheat, ripe kernels can be white, yellow, red, or purple.

Farmers will harvest the wheat after it ripens and when the moisture level makes up no more than 14% of the kernel's weight. This is because the wheat has to be dry enough to be stored without spoiling. The farmers can take samples of their crop to a grain elevator to test them for moisture. Some rub the wheat head in their hands, blow away the chaff (straw-like outer covering of the kernel), and chew some of the grain. If the wheat is hard and makes a gummy substance when chewed, it is ready to harvest.



Nutrition

Wheat products provide us with complex carbohydrates, which are the most efficient source of energy and aid in brain functions. Complex carbohydrates are slowly released in the bloodstream. Wheat foods also provide protein, thiamin, riboflavin, niacin, iron, and zinc. Foods made with wheat are in the Grains Food Group on MyPlate.



Cover Crops

Wheat is a good cover crop that can also double as a cash crop. Like other cereals, it has excellent erosion control, nutrient uptake, and residue production for surface cover.

Benefits?

- Reduce erosion – water & wind
- Improved soil quality/health (tilth & biology)
- Improved organic matter
- Improved soil hydrology
- Improved water quality
- Reduced weed, pest & disease pressure
- Reduced production costs (fertilizer & pesticides)
- Minimize nutrient loss – improved fertility
- Excellent forage/feed source
- Improved profitability & sustainability



From *Illinois Ag in the Classroom* [Wheat Ag Mag](#)