

How to Grow Rye

Rye is one of a number of species that grow wild in central and eastern Turkey, and adjacent areas. Domesticated rye occurs in small quantities at a number of Neolithic sites in Turkey, such as PPNB Can Hasan III, but is otherwise virtually absent from the archaeological record until the Bronze Age of central Europe, c. 1800-1500 BC.[1] It is possible that rye traveled west from Turkey as a minor admixture in wheat, and was only later cultivated in its own right. Although archeological evidence of this grain has been found in Roman contexts along the Rhine Danube and in the British Isles, Pliny the Elder is dismissive of rye, writing that it "is a very poor food and only serves to avert starvation" and wheat is mixed into it "to mitigate its bitter taste, and even then is most unpleasant to the stomach" (N.H. 18.40).

Since the Middle Ages, rye has been widely cultivated in Central and Eastern Europe and is the main bread cereal in most areas east of the French-German border and north of Hungary.

Claims of much earlier cultivation of rye, at the Epipalaeolithic site of Tell Abu Hureyra in the Euphrates valley of northern Syria, remain controversial. Critics point to inconsistencies in the radiocarbon dates, and identifications based solely on grain, rather than on chaff.

Growing Guide

Rye is one of the easiest crops to grow. Recommended seeding rates vary from 60 to 200 pounds per acre, depending on whom you ask. In the course of my research on cover crops in North Carolina and Virginia, I drilled rye at 90 pounds of seed per acre at 1 to 1 1/2 inches deep and had excellent stands. The Virginia Extension Service recommends planting between two weeks before and four weeks after the first killing frost.

Planting of the grain can begin late August thru early March for temporary fast coverage. Cereal Rye grain produces dense fibrous roots and will readily sprout in cool temperatures. Broadcast seed on surface and lightly till or drag to provide 1/4" - 1/2" covering of soil. Roll or pack to firmly make seed to soil contact. Seed will germinate with 1" rain or supplemental irrigation.

MAINTAINING

If a wet, mild winter season occurs, cereal rye may grow rapidly on warm days. Cut excess growth no lower than 6" as required to maintain desired heights. If a harsh or dry winter occurs or on thin infertile soils, no additional management may be needed. If left un-mown, cereal rye has similar growth characteristics as whole grain winter wheat.

Preparing for Native Seeding:

In late winter / early spring scalp cereal rye cover crop as short as possible to suppress growth. Rake and remove excess thatch as required. No-till drill final native seed mix directly into remaining rye stubble. The rye grain root mass will continue providing erosion control. With the cereal rye canopy of top growth removed, final native seed sprouting can begin with the warming spring time soil temps and the beneficial spring rains. Following these steps can bring a successful establishment of native prairie plants

HARVESTING

Rye can be harvested and threshed in one operation with a combine, or swathed and later threshed. To reduce shatter loss when direct combining, begin harvest at about 22% moisture and follow by drying. Moisture content needs to be below 15% to avoid discounts at elevators. Sprout damage can occur during harvest or storage in some years. Some buyers have used the "falling number" test to check for sprouted grain and have discounted grain with a low value.

SAVING SEEDS

Grasses form their flowers in spikes called inflorescences. Seed collection is easy. Do not remove the flowering spikes, seeds will develop in the inflorescences. After a period of time you can notice a

changing of color in the seed spike, usually it will lighten in color. Mature seeds can be brown to light tan depending on species.

It is important to note for collection that seeds will not come readily off the spike if they are immature. For collection grasp your hand around the base of the mature inflorescence and in a clasp motion pull upwards and strip the seeds from the spike. Ripe seeds come off very easily.

Allow the seeds to dry in a large open bowl for several days, small seeds will need a few days to dry, larger seeds may require more time, especially in damp weather. It is important to assure that the seeds are thoroughly dry before storing them.

There will be a good amount of chaff with the seeds, it is not always easy to remove. Some seeds, such as *Pennisetum*, have narrow catching/hooks-like protrusions attached. Their purpose is part of the dispersal means of the plant. As an animal passes close by and brushes against the inflorescence the seeds are snagged onto the coat and can stay attached for some distance, the seed eventually breaks from its hooks and falls to the ground where it might germinate.

Seeds are usually traded with the chaff, for sowing rub both seeds and chaff into the surface of moist soil and press in well.