Roy’s Calais Flint Corn  
*Zea mays*

**Germination:** Minimum soil temperature 50°, optimal temperature range 60–95°, optimal temperature 80°. Emergence takes 22 days at 50°, 12 days at 59°, 7 days at 68°, only 4 days at 77°. 98% normal seedlings at 77°, only 91% at 86°

**Planting:**  
According to a report from Cornell, the seed does not germinate as well in cold spring soil as well as some other older varieties so direct seed only after the soil temperature is above 65, and the danger of frost has passed. Sow at a depth of 1 to 2 inches. Corn may also be transplanted, starting 3 to 4 weeks before planting date. Space plants at 10-12” and rows 30-36”. Plant in blocks of at least 4 rows for adequate pollination.

Corn is a warm season tender annual and it will thrive in brilliant sunlight and moist, loamy soil. Corn is one of the heaviest users of nitrogen and additional fertilization is required throughout its growing.

Corn is shallow rooted and requires more watering. Critical watering periods include silking, tasseling, and ear development. Inconsistent watering may stress the shallow roots and this may be reflected in the flavor.

The red gene is recessive, and a higher percentage of red kernels must be planted to maintain the color variation.

**Description:**  
Roy’s Calais Flint Corn is an open-pollinated flint corn originally grown by the Abenaki peoples of Vermont. This variety is a reliable short-season flint corn of great flavor and nutrition. It is said that it is the only corn that produced a crop in 1816, the year without a summer. Its brief time to harvest (90-95 days to dry field corn) makes Roy’s Calais a reliable cultivar for short-season growing areas. It should be left in the field to dry before harvesting.

The strain is somewhat variable, but plants typically grow 6 to 7 feet tall and bear 8- to 12-inch-long ears with eight rows of kernels that vary in color from golden yellow to dark maroon red that are excellent for cornmeal, flour and hominy. In taste evaluations of different corns conducted by Fedco Seeds, the cornmeal ground from Roy’s Calais flint corn has proven superior in terms of taste and nutritional quality. A little sticky it can be eaten as a sweet corn, but is mostly used for posole or hominy. Its protein content is significantly higher than most
flint corns (11% to 12% instead of 9%). It is rendered more nutritious through the process of nixtamalization, which involves soaking the seeds overnight in water and a small amount of fine wood ashes or hydrated lime, then slow-cooking in the same way as soaked dried beans. The resulting hominy (posole) is rich in niacin and complex protein, and it can be used in many dishes (soups and stews, polenta) and as masa flour for tortillas or tamales. The corn has a buttery aroma and a rich, creamy flavor.

History:
The history and cultural significance of this corn is great. Bands of the western Abenaki (Sokoki) people grew corn and other crops (including beans and squash) for centuries, and it is estimated that some 250 acres of land east of Lake Champlain was under cultivation at one time.

The heritage of Roy’s Calais Flint corn probably hales from similar corn varieties historically grown by the Abenaki Tribe of the Northeast region of the United States and areas of Quebec, Canada. Over the course of time, seed exchanges between hands led the corn to be sown in the fields of pioneer farmers Roy and Ruth Fair of North Calais, Vermont in the 1930s. Subsequent generations of community farmers kept the strain in production. In 1996, Tom Stearns, founder of High Mowing Organic Seeds, obtained the corn from a collection of local growers. Inbred genes were removed from the corn through a series of seed selections and it was produced under organic certification. High Mowing Organic Seeds reintroduced the heirloom seed as Roy’s Calais Flint corn in honor of its history.

These seed information sheets are part of a Master Gardener project in partnership with Strawbery Banke Museum. The information provided here was assembled by Master Gardener volunteers from a variety of sources including seed catalogs and seed company websites. This information does not necessarily reflect research-based information and is not endorsed by UNH Extension.