



955 Benton Ave., Winslow, ME 04901 • Phone: 1-877-564-6697 • Fax: 1-800-738-6314
Email: service@johnnyseeds.com • Web Site: Johnnyseeds.com

RADICCHIO and SUGARLOAF (*Cichorium intybus*)

Radicchio and sugarloaf are two types of chicory, both of Italian origin, that form dense heads. There are two main types of radicchio: Chioggia, which produces round heads, and Treviso, which produces upright, elongated heads. Both have attractive, bright burgundy leaves with white veins, which are popular in salads and as garnishes. Sugarloaf chicory produces an upright, elongated head similar to Treviso. The heads, commonly used in salads and a variety of dishes, have white veins and are light green in color. While the flavor of chicory can be mildly bitter, cooking — usually by grilling or sautéing — will reduce the bitterness.

Part of chicory's appeal and high retail value is due to its semiwild nature. It lacks uniformity, both in plant type and maturity, so not every plant heads up well or at the same time. Until the recent introduction of more uniform hybrids, production was a gamble, requiring a precise but unpredictable combination of strain, climate, and date. Previously, the most reliable crops were produced by overwintering in mild climates and harvesting heads from new growth in the spring. The newer hybrid varieties do not require these special growing practices, but we do recommend you trial more than one variety to determine the best for your conditions.

GENERAL CULTURAL INFORMATION:

Both chicories are grown like lettuce, although they will take 2–4 weeks longer to form heads. Long days, summer heat, or cold conditions when plants are young can cause bolting. Tip burn can be a problem in late spring and summer. In general, fall crops are more problem free and produce larger heads. Small dense heads with intense color are somewhat stronger in flavor than larger, less brilliantly-colored heads. Fluctuations between daytime high and nighttime low temperatures during the last 4 weeks of growth are thought to result in good solid heads and a bright color.

Both types of chicory can tolerate fall frosts very well, although growth in very cold weather is slow. Leafier plants and varieties are hardier, and may be cut even when completely frozen. After thawing slowly, the damaged outer leaves can be peeled away leaving the head itself in usable condition, although not necessarily marketable.

THERMAL DORMANCY:

Seeds can enter thermal dormancy when exposed to high temperatures — they will not germinate until temperatures are more moderate. Ideal germination temperatures are 75°F/24°C during the day and 68°F/20°C at night.

Irrigation can also assist in overcoming thermal dormancy by reducing the temperature of the soil and through evapotranspiration, when heat is drawn from the soil when the moisture in it evaporates.

SOIL PREPARATION AND CARE:

Soil must be well drained and fertile with irrigation available. Recommended pH is 5.5–6.5. Add organic matter to the soil with compost. Typically the crop is not mulched, and weeds are controlled with mechanical cultivation and hand weeding. Row covers are not advised, except in late fall to protect the crop from heavy frost, because they moderate the needed day to night temperature fluctuations. Chicory is generally drought tolerant, but regular watering is preferred. Uninterrupted growth will produce the best heads. Too much water and dampness encourages the same bottom rot problem found in lettuce, although radicchio is less susceptible.

TRANSPLANTING:

Transplanting is recommended over direct seeding. Sow seed 3-4 weeks before transplanting in plug flats with ¾-inch tapered cells and a fine-texture peat starting mix. Cover the seeds lightly with fine vermiculite. Shade the flats on sunny, warm days, if necessary, to keep the temperatures below 75°F/24°C. After seedlings emerge (in 4 days under ideal conditions, but up to 14 days), feed with a soluble fertilizer such as liquid seaweed or liquid fish fertilizer. 1,000 seeds will result in 500 seedlings if 2 seeds are sown per cell and thinned to 1 plant.

Harden seedlings off prior to transplanting. A typical planting scheme is to place seedlings in rows 18 inches apart and spaced 8 inches apart in the row, resulting in 43,560 plants per acre.

DIRECT SEEDING:

Direct seeding is not recommended in early spring, due to low soil temperature and risk of cold-induced bolting, but is possible for a fall crop as long as the soil does not dry out during the seedling stage. Sow seeds at a rate of 3 seeds every 8 inches in rows 18 inches apart. To determine how many seeds you will need to plant to achieve a certain number of bed feet: 1M sows 220 feet, 5M sows 1,000 feet, 10M sows 2,200 feet, and 131M sows an acre. .

HARVEST:

Expect harvest to begin 6–10 weeks after setting seedlings out. When the heads are somewhat firm, between a butterhead and iceberg lettuce, they are considered mature. After the heads firm they will not gain in size and will either bolt or become too dense, depending on the season. In the cool weather of fall, heads tend to hold better in the field.

For the Chioggia-type radicchio, heads with a diameter less than 3½ inches may not be marketable. A head size of 5 inches is ideal. Harvest the Trevisio types when 7–8½ inches tall and Sugarloaf chicory at 10 inches tall. A point raising in the center of the head and a tightening or pulling away of the wrapped leaves indicate the beginning of over-maturity and bolting. Ideally, heads are harvested before this stage.

To harvest, use a sharp knife to cut the base of the head, paying close attention not to cut into the head itself. Heads should be harvested during the morning while they are still cool. If harvesting is done during warmer conditions the heads should be chilled immediately.

Both radicchio and sugarloaf chicories are typically marketed trimmed to a neat head, but since the outside leaves are attractive, it may be possible to market the heads with a few attached. Restaurants often prefer loose rather than tight heads for ease in separation of whole leaves for garnishing. Refrigerated in a perforated plastic bag, heads will keep for 3–4 weeks.