Chard Types:

Bright Lights (Rainbow) – produces plants with various rib colors

Fordhook (White) – produces plants with large white rib

Red (Rhubarb) – produces brilliant red stems; tend to bolt if exposed to freezers or high temperatures

Yellow – produces bright yellow stems and green leaves

Growing Basics:

• Soil – prefers a well-drained, rich soil, high in organic matter with a pH between 6-7. Temperatures of 50-85°F for germination

• Air Temperatures – should be around below 75°F, no lower than 25°F

• Days to Germination – 5-10 depending on variety and conditions

• Seed Longevity – if properly stored, the seeds should be viable for about 4 years

• Spacing – should be between 6” apart with 18-30” row spacing

• Companion Planting – Compatible – Cabbages, bush beans, onions, tomatoes, radish. Incompatible – corn, cucumbers, pole beans

• Water Requirements – water needs to be consistent through growing season. Use mulch to protect shallow root system from damage, to retain adequate moisture and to suppress weeds. Avoid overhead watering, best to use drip irrigation.

• Fertilization – Prior to planting, add organic matter to bed to a depth of 8”. Add a source of nitrogen for large leafy greens through the growing season.

Planting & Growing:

Sowing – Direct seed in spring (2-4 weeks before last frost date) to late summer (up to 40 days before firsts frost date), sowing 1/2-1” deep. Red varieties should be planted after frosts as they tend to bolt if exposed to freezing temps. Plants harvested over a longer season will require thinning to 24” since they will become larger than those maintained for a shorter season. Keep seed bed consistently moist. Cover seed with loose soil or compost so as not to hinder emergence.

For transplants, sow indoors 4-6 weeks prior to planting date outdoors using dampened soilless mix (Quickroot). Moisten with sprayer or mister when needed. Until emergence, ideal soil temperature should be around 75 °F. Provide light a few inches above plants to avoid leggy growth.

Transplanting – Harden off transplants before planting outdoors. Transplant out when soil temperatures are 50°F or warmer and danger of frost has past. If occasional frost is in the forecast, cover with cloches or row covers (watch for heat build up that may affect young plants). If growing in very hot summer regions, provide some afternoon shade.

Harvesting: Leaves can be cut or twisted off about 1-2” above soil line at any stage. Young leaves are more flavorful than more mature leaves and can be prepared with or without the central rib. Older leaves can become bitter during hot weather. Cut from outside of plant, allowing new leaves to form from the center (cut and come again). Avoid damaging the growing point of the plant.

Whole leaves will keep refrigerated for about 2 weeks in a sealed container.

Common Pests & Diseases:

Aphids – usually found on the underside of leaves or on flower head. Control by strong spray of water, beneficial insects, or organic insecticides labeled for aphids.

Leaf Miner – Clear winding tunnels across leaves created by the larvae. Can use floating row covers, sticky traps, beneficial insects or an organic insecticide labeled for leaf miners.

Slugs/Snails – Irregular holes on living and decaying matter; often leaving a silvery trail. Prefers young, succulent leaves. Most active at night and foggy days. Eliminate hiding places, hand pick, or use an organic insecticide labeled for slugs and snails.
Leaf Spot—appears as small reddish-ringed spots on the leaves. Avoid overhead watering. Do not plant chard in the same location for 3 years. Can also use an organic fungicide labeled for leaf spot.

Downy Mildew—caused from poor air circulation and wet leaves. Do not water from above and keep leaves as dry as possible. Use an organic fungicide labeled for Downy mildew.

**Pest Control—IPM:**

Important to practice good cultural controls for pest management of chard. Cultural controls such as removing plants after harvest (to avoid leaving food for insects to continue to multiply on), use clean transplants, practice crop rotation (i.e. do not plants in family in the same area for 3 years), use row covers such as Agribon AG15 (apply before insects have arrived).

**Common Questions:**

**What to do if plant bolts?** Cut off the flowering stalk. If weather is hot, water consistently and mulch to cool soil or provide shade. If due to a frost event, provide mulch or cover for subsequent events.

**Is chard considered a part of the spinach family?** It is closer to the beet family, but is often called "summer spinach" because it is more tolerant of warm weather than the cool spinach crop.

**How much space should I provide per plant?** If each plant does not receive sufficient space to grow, fungal and pest problems can present themselves. Maintain good air circulation around all plants. Smaller plants can be harvested as a part of thinning, allowing alternate ones to mature over the season and fill in.

**Why aren't my seeds germinating?** If temperatures are too high, seeds will fail. Check soil line carefully if direct sown to be sure they have not been eaten by slugs/snails or voles.

**Definitions:**

**Heirloom**—Heirloom seeds come from open-pollinated plants that pass on similar characteristics and traits from the parent plant to the next generation plant. Heirloom vegetables are old-time varieties generally which have been in production since before WWII, and have been saved and handed down through multiple generations.

**Hybrid**—a cross between two or more unrelated plant varieties. The two different varieties are cross bred, resulting in a seed that carries one or more favorable traits (increased yield, uniformity, color, disease resistance.) Hybrid seeds are not GMO, as they are manually cross-bred, not genetically modified in a lab. Hybrid seed is often sterile or does not reproduce true to the parent plant. Therefore, never save the seed from hybrids.

**Open Pollinated**—generally refers to seeds that will “breed true”. When the plants of an open-pollinated variety self-pollinate, or are pollinated by another representative of the same variety, the resulting seeds will produce plants roughly identical to their parents. Genetic traits may differ only slightly due to variations created by local conditions.

**GMO**—Genetically Modified Organisms were genetically modified in a laboratory where DNA genes are extracted and mixed with other unrelated plants to improve characteristics. Saved seed will not always be viable and may be trademarked to prevent unauthorized use.