# Growing Guide Level 2 Seeds



The seeds in the Hamilton East Public Library Seed Library are divided into two levels based on difficulty and/or additional equipment or space requirements.

## Seeds labeled Level 2 are more challenging to grow.

- These seeds will require extra care, research, and investment.
- Many will need to be started indoors and cared for until the weather warms
- You'll probably need to do some additional research.

### Before you begin, think about:

- 1. There is a time and a season for your vegetables to be harvested and for your flowers to bloom in our Midwestern climate. Some plants prefer cooler weather and won't grow well in the summer heat, while others, like peppers and tomatoes, need warm temperatures and will die if there is a frost. Annual flowers will bloom a certain number of days after germination, but perennials likely won't bloom the first year. Consider timing in your gardening plan.
- 2. Before you plant, research! To be successful, you need to research the plant and its needs: amount of sunlight, water, heat tolerance, soil type, etc. Not all plants have the same needs, and not every plant with thrive everywhere in your yard.
- 3. Think about where you are going to plant the seed. Selecting the right seeds for your chosen growing area can determine its success. Not all seeds work well in all growing conditions. Most plants prefer full sun.
  - What is the soil like? Will you plant in a container, raised bed, or in the ground?
  - How much space is there versus how much space the plant needs?
  - Does the area get full sun or is it partially shaded? Is it a dry area or does water tend to gather there?
- 4. Level 2 seeds often need to be started indoors, require additional equipment (like an indoor grow light), and require more attention. Consider: does this work for your lifestyle? Do you have the time and interest to invest in this project?
- 5. If starting these plants from seed doesn't fit with your lifestyle, don't despair! Many are also available for sale from vendors as plants. If you change your mind about seed packets from the Seed Library, feel free to return them!
- 6. Many, but not all, native plants are included in the Level 2 seeds because they may require cold, moist stratification (artificial cold to simulate natural growing conditions) or scarification (abrading the hard seed coat to make germination easier). Consult HEPL's **Native Plants Growing Guide** for more information.
- 7. Gardening is an adventure and a learning experience, not a guaranteed success. Even the most experienced and attentive gardeners sometimes have failures due to factors beyond their control. Approach your garden with an open mind and think of it as an opportunity for experimentation and growth.

### Planting your seeds

Many of the seeds in the Level 2 category must be started indoors several weeks before planting outdoors. However, some of the seeds in the Level 2 category do not need to be started indoors, but they do require other special care. Be sure to consult the seed packet.

- 1. Read the seed packet carefully and research the plant before beginning.
- 2. Seeds that need to be started indoors (look at the seed packet): plan several weeks before you're ready to plant outdoors. These seeds need to get an early inside start and gradually get used to the outdoors before being outside permanently.
  - Select a warm spot with plenty of space. It is also recommended that you use a grow light for healthier plants. If needed, use a heat mat to warm the soil to the right temperature since some plants do need a specific temperature range to germinate.
  - Use a soilless mix that has been moistened. Plant seeds in cell packs or other recycled containers. Be sure there are drainage holes. You may need to transplant your seedlings into larger containers to finish their indoor growing time.
  - Mark each plant! You don't want to forget where each variety is planted!
  - Before planting outdoors, you'll need to acclimate your plants to the outdoors first (AKA harden off). When they are several weeks old, place them in a sunny spot outdoors for 15-30 minutes for the first day. Gradually increase the time outdoors over the course of 7-10 days before transplanting outside permanently.
- 3. Some seeds do have temperature requirements. Many Level 2 seeds are frost-tender, meaning they can't be outdoors permanently until the danger of frost is passed. They often need long growing seasons or need warm temperatures for germination, which is why many of these plants need the early start inside while the weather is chilly outside. Unless you see a temperature requirement, assume that you need to transplant the plant start OR plant the seed directly in the ground after the last frost date.
- 4. Water your seeds gently and keep the soil moist (not wet)! Too much water can flood the row and scatter the seeds away. Try the mister or gentle shower setting on a hose, a slow-flow watering can, or even a spray bottle.
- 5. For more information about native plants, consult HEPL's Native Plants Growing Guide.

# Examples of Level 2 seed packet labels

Aster, China: Valkyrie Mix (2024) ANNUAL

Level 2: More effort & equipment required!

Start inside 6-8 weeks before transplanting. Surface sow (barely cover seeds). 10-14 days to germination. Harden-off and transplant 6-12" apart after last frost. Pinching is not required. 110-120 days to maturity. Light: full sun.

Seed Library @ Hamilton East Public Library

Tomato: San Marzano – Heirloom (2024) Level 2: More effort & equipment required!

Start inside 5-6 weeks before transplanting. Plant at depth of 1/4", 3" apart. 7-10 days to germination. Harden off before transplanting 24-36" apart. 72 days to maturity. Indeterminate. Seed Library @ Hamilton East Public Library



