

SEED CODING GLOSSARY: (Provided by Johnny's Seeds) These codes are found on seed packets.

- F1 (first filial) – These are the hybrids. The result of a cross between two genetically distinct parent plant lines. Plants grown from this seed will usually show more vigor than either of the two parent plants. (According to Mike at Gardens Alive, some hybrids are certified organic as well.)
- F2 (second filial) – The second generation resulting from seed saved from the F1 plants. Plants from this seed will not be uniform, and will be numerous different types as a result of genetic segregation.
- OG (organic) – Seed designated by the OG symbol is harvested from plants grown under the strict guidelines required by the USDA's **National Organic Program, NOP**. Certified organic seed cannot contain genetically engineered traits; must be grown under certified organic conditions using only those inputs allowable in organic agriculture (fertilizer, weed, and pest controls).
(Organic seed expert Phil Winteregg has this to say about organic seeds: Certified Organic seed is produced by a certified organic grower, so it has not been exposed to any chemicals throughout its growth in the field, its harvesting and its processing. Just like with any other organic product, organic seed reduces our direct exposure to chemicals, however the greater impact is the reduction of use of chemicals in our fields. It is also likely to be grown using sustainable agriculture methods, which is very beneficial.)
- OP (open pollinated) - Plants that reproduce themselves through either cross-pollination (wind, insects, water) or self-pollination. As long as they are grown properly, isolated from other plants of different varieties, plants grown from their seed demonstrate relatively stable traits from one generation to the next.
- Heirloom – Older OP strains; seed lines that have been maintained and passed down over generations.
- T (conventional coatings) – Seed that has been coated with a chemical-based fungicidal and/or insecticidal treatment that protects the seed from soil-borne pest or pathogens during the seeding and germination phases. These seeds are denoted by a "T" in the part number.
- V (biological treated seed) – Normally a coating comprised of beneficial bacteria and fungi to prevent seed decay. This coating is made with NOP-compliant materials and approved for use in certified-organic operations. This seed is designated by a "V" in the part number.
- FC (film coating) – A seed enhancement that facilitates ease of sowing. Seed products are designated by an "FC" in the part number. If seed is offered with a NOP-compliant film coating, it will not be noted in the part number.
- Pelleting – An enhancement that coats the seed with inert substances that render it uniform in size and shape. The pellet coating serves to improve seed visibility, handling, and sowing accuracy at uniform distances. The pellet coating is sometimes additionally useful as a vehicle for delivering seed treatments.
- P - Conventional seed with conventional pelleting.
- JP – Conventional seed with NOP-compliant pelleting.
- GP – Certified organic seed with NOP-compliant pelleting.
- Priming – A seed enhancement that improves germination speed and uniformity or breaks the dormancy of the seed. Priming can be offered alone, or in combination with pelleting.

Buying Starts

Anne Gibson, The Micro Gardener-Here are some things to look for when purchasing starts.

- **Avoid the biggest and tallest:** While it's tempting to choose the tallest seedling on display, it's not always the best choice. These may have been competing for light in the growing conditions and are more likely to be spindly or container bound. Smaller seedlings are more likely to grow faster and suffer less transplant shock.
- **Look at the roots:** A poor root system will produce a weak plant so checking the condition of the roots pre-purchase is an insurance policy. Carefully lift the seedling from the pot and check that it has healthy roots. You should be able to remove them easily in one piece without potting soil falling away and the roots should almost fill the pot or container with loose, white, fibrous growth.
- **Brown roots** (they're dead!): This is often due to lack of oxygen which could result from over watering; or over-fertilizing and can reduce the chances of the plant's survival.
- **Potting mix** falling away from small, under-developed roots (the root ball should hold the potting mix in a solid mass – if not, the plant is too immature);
- **Solid mass of tangled roots** (a sure indication the plant is 'pot bound' and has been in the container too long! Especially avoid pots that are cracking or splitting as the roots try to escape out the sides);
- **Roots protruding** out the bottom of the drainage holes (also indicate they are 'pot bound' especially if they have started to grow into the soil underneath).
- **Check the foliage:** Leaves should be a consistent strong solid colour (usually green but not always!)
- **Strong leaf growth:** Look for strong leaf growth, new shoots and flower buds.
- If the color is pale or has mottled patterns in it, the plant is likely to be nutrient deficient and has not been well cared for.
- **Disease:** Check that there is no evidence of disease. If you see anything unusual, it's best to choose another plant!
- **Read the label:** This will tell you about the plant qualities and characteristics.
- **Is it disease resistant?** A hybrid or heirloom variety? What are the ideal growing conditions? What is the best season for planting?
- **Choose open-pollinated, heirloom or heritage varieties** of edibles where possible as these have greater vigor and disease resistance.
- **Soil moisture:** If the potting mix is too wet or too dry, the seedlings may be stressed. Just moist is ideal.
- **Clean potting mix:** Avoid pots or cells with moss or algae growing on the surface – this is a sure clue they are old stock!
- **Ask questions:** e.g. 'Are the seedlings sun-hardened?' (If they've been grown in a shade house they will need to be acclimated gradually before moving to full sun). 'Have they been chemically treated?'
- **Visit a nursery mid-week** instead of on busy weekends – staff will have more time to answer your queries and provide you with growing information about the plants.
- **Fresh is best:** Check out local nurseries, community gardens, garden clubs, garden centers and growers that sell higher volumes and .You can also get fresh stock at regular plant markets.
- **Buy from wholesale nurseries:** Wholesalers often offer good value as many grow direct for bigger retailers or clients and have a wider range of quality stock with cheaper prices due to bulk volume.
- **Buds not flowers:** Select flower seedlings or small potted plants in bud rather than already flowering – you'll get to enjoy them for longer!
- **Check for hitchhikers:** Look carefully on the underside of leaves – a favorite hiding place for common garden pests like scale, white fly, aphids and mealy bug.

GARDEN DESIGN

Start with a vision: Whether you are creating an entire garden or a single garden bed, spend some time imagining what the end product will look like, then, begin a sketch of your vision. Include the dimensions each of the beds and the garden perimeter in your sketch. This gives you some perspective and will help you to decide how many plants to sow in each bed or where to position your beds.

If you are creating an entire garden, design your beds using dimensions that will give you convenient access, depending on your arms length, from the exterior to the middle of each bed. Don't feel pressured to do it all at once. Make one bed at a time, allowing your garden to grow as a plant would grow...slowly. Avoid the stress. Let your creativity go wild. Make some round beds, perhaps one shaped like a half moon. Do some stonework, use some logs, some lumber, some brick. Include a birdbath, envision some flowers, perhaps some hanging flowers. Grow some tomatoes from a hanger, build a bean arbor, grow cucumbers from a trellis. Place some decorations around. Create a little deck or sitting area for reading or relaxing. Experiment.

Placement and orientation of garden beds: Your ongoing sketch will be useful here. Identify, and include in your sketch, areas where shade will be created from sources such as trees, buildings, solid fences, etc. This type of planning works even if you have only one garden bed. Remember to allow enough space between your beds to accommodate a wide wheelbarrow and enough additional space for you to step around it. Indicate N, S, E, and W on your sketch and position some of your beds so that they will take full advantage of the sun. Normally, but not always, garden beds run north to south as do the rows of plants. Place other beds where they could be shaded in the hot afternoons as the sun goes down. You could also create synthetic shade. The planting organization of each individual bed will come later when seeds are being selected.

Compost area: Don't forget to provide a spot for your composting area including room for a sifter nearby and an access gate if you are going to import large quantities of material. If you are going to collect mulching leaves in the fall for use in the summer, you'll need somewhere to store them as well.

Fencing: Consider fencing if you have animal problems. Make sure it is high enough to keep deer out and that it has small enough openings to keep small animals out. You might want to bury the lower portion to discourage animals from digging under it.

Chicken Wire: Consider laying half-inch chicken wire under your beds for gopher problems.

Water Source: Consider the placement of your water source. Create a system that can be disconnected in the winter. You might want to run a main line from your house out to your garden. Consider installing a four-way manifold in the garden (or several manifolds). Consider designing a drip system to conserve water. What about a bird bath?

Raised Beds: Research and decide whether you want raised beds or ground level beds. You might have chosen garden land that is on a slope. Consider the fact that you may be faced with digging into the slope to make your beds level.

Keep it practical: Consider installing a garden tool shed or tool hanging board and a working bench or area for potting plants and cleaning vegetables. Concocting a sink makes it easy to cut and clean plants before bringing them into your house. Keep it simple, a used deep sink on a stand, a bucket under the drain, and a hose for rinsing veggies.

