

Glossary of Key Terms

- **Average** expresses the central or most typical value by dividing the sum of all of the values in the set by the number of values.
- **Beneficial bacteria** are microorganisms that live in our digestive system to help break down food and protect us from harmful bacteria.
- **Cotyledons** are the first leaves that emerge from a seed.
- **Denominator** is the number below the line in a fraction showing the total number of parts.
- **Dietary fiber** is an indigestible carbohydrate found in plants and is necessary in the human diet.
- **Flowers** are the reproductive organs (**stamens** and **pistils**) that are typically surrounded by brightly colored **petals** (collectively called **corolla**) and a green **sepals** (collectively called **calyx**), and their seeds mature into an enclosed **ovary**.
- **Furrow** means a long narrow trench made in the ground for planting seeds.
- **Germination** is the first stage in the process by which a plant grows from a seed.
- **Germination Rate** is the percent of seeds that germinate.
- **Hypocotyl** is the stem of a germinating seed.
- **Inference** is a conclusion based on evidence.
- **Leaves** attach to the stem or directly to a stalk of plant and are the main plant organs of photosynthesis and transpiration.
- **Legumes** are plants in the *Fabaceae* family that grow fresh or dry seeds in pods, and form a symbiotic relationship with nitrogen-fixing bacteria on root nodules.
- **Nitrogen** is a component of proteins and is involved in the metabolic processes required for plant growth. It is also a component of chlorophyll and thus plays a role in photosynthesis. An adequate supply of nitrogen is associated with vigorous vegetative growth and the dark green color in plants.
- **Nitrogen fixation** is a symbiotic process between soil bacteria and legume plants, by which gaseous nitrogen in the atmosphere is converted into a form that plants can use.
- **Numerator** is the number above a line in a fraction showing how many of the parts indicated by the denominator are taken.
- **Ovary** is a part of the female reproductive organ of a flower and is the part of the pistil that holds the ovule.
- **Percentage** is calculated by dividing the numerator by the denominator and then multiplying that answer by 100.
- **Petals** (collectively called **corolla**) are modified leaves that surround and protect the reproductive organs of a plant.



Glossary of Key Terms Continued

- **Photosynthesis** is a process used by plants to convert light energy into chemical energy for plant growth, root development, flowering, and seed production.
- **Pistil** is the female reproductive part of a flower and consists of an ovary, which contains the potential seeds, or ovules.
- **Pods** provide protection for developing seeds of leguminous plants (e.g., dry bean, dry pea, lentil, garbanzo, etc.), which splits open on both sides when ripe.
- **Prebiotics** are foods that serve as fuel for beneficial bacteria in our digestive system (e.g., dietary fiber, inulin, etc.)
- **Predict** is an estimation or statement about the ways things will happen in the future, often based on knowledge or experience.
- **Pulses** are crops in the legume family, *Fabaceae*, and consist of plants that fix (absorb) atmospheric nitrogen through roots in the soil, are high in protein, and bear seeds in pods. Pulses include dry beans, dry peas, garbanzos (chickpeas), and lentils. The name pulse comes from the Latin word, *puls*, meaning a thick soup.
- **Radicle** is the first part of a seedling to emerge and is the young root of the plant.
- **Roots** are the part of a plant that attaches to the ground for support, water, nutrients, and are the location where nodules form to fix nitrogen.
- **Root nodules** house nitrogen-fixing bacteria on roots of legume plants.
- **Seeds** are a flowering plant's method of reproduction; capable of developing into another such plant.
- **Sepals** (collectively called the **calyx**) are the outer most part of a flower to protect the flower when in bud and to support the petals when in bloom.
- **Stamens** are the pollen-producing reproductive organ of a flower.
- **Stems** allow for movement of water and nutrients, and provide structural support.
- **Symbiotic** relationships form between two organisms that mutually benefit from the association.
- **Threshing** is the process of separating dry seeds from the plant.
- **Transpiration** is a process by which moisture is carried through a plant, from the roots to small pores on the underside of leaves, where it is converted to vapor and is released to the atmosphere.
- **Vigor** describes the healthy, well-balanced growth of a plant.

