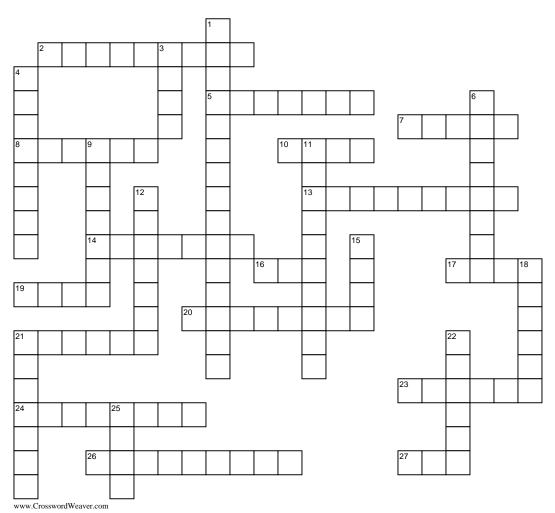
Plants 4.2

Radicle Roots



ACROSS

- The cellular layer of an organism; the outer skin.
- 5 root system A root system that is comprised of profusely branched roots with many lateral rootlets.
- 7 The "plumbing" system that conducts water and dissolved mineral up the stems from the roots.
- 8 The outer layer or region of any organ.
- 10 A growth on an epidermal cell of the root. It absorbs water and mineral nutrients for the plant.
- **13** A lateral branch of a primary or main root.
- 14 The flow of a fluid through a semi permeable membrane separating two solutions, which permits the passage of the solvent but not the dissolved substance.
- 16 The extreme tip of the root
- 17 A flattened outgrowth from a plant stem, varying in size and shape, usually green, which is concerned primarily with the manufacture of carbohydrates by photosynthesis.

- 19 The temporary loss of turgidity in a plant, caused by a rate of transpiration in excess of the rate of absorption of water.
- 20 A plant that lives for two years and then dies.
- 21 Inner bark; the principle tissue concerned with the translocation of food produced in the leaves, or other areas, downward in the branches, stems, and roots.
- **23** The distension of the cell wall and protoplasmic layer of plants by fluids. It is essential to growth.
- 24 Plant tissue capable of cell division and therefore responsible for growth.
- **26** A plant that lives for more than two years.
- 27 A protuberance containing miniature leaves or flowers, located terminally or laterally on a stem.

DOWN

- The development or growth of a cell, organ, or immature organism into a mature organism.
- 3 Any of a number of field and garden

crops whose underground roots are used as food for people and animals, as turnips, beets, carrots, and sweet potatoes.

- 4 The fluid-conducting tissues of a plant including both xylem and phloem tissues.
- 6 A thin, flexible sheet of vegetable or animal tissue
- 9 The primary descending root, usually conical, of a plant from which lateral branching roots may develop;
- 11 The intake of water, gases, nutrients, or other substances by plants.
- 12 The actively growing cells between the bark and the wood in a tree or shrub.
- **15** The ultimate functional unit of an organic structure, plant, or animal.
- 18 The reproductive structure of a seedbearing plant
- 21 root The main descending axis of a plant; the pole of the embryo opposite the shoot.
- 22 Swollen, or tightly drawn, said of a membrane or covering expanded by pressure from within
- 25 Stalk, trunk, branch of a plant. Can be vertical or horizontal.