

When you spend four years learning about something, you get used to hearing the vocabulary to describe it. But while this is happening, your brain assumes that everyone else is learning the same thing and using the same words. You hear these words and phrases often enough that they become part of your vocabulary and can be used without thinking, but it makes it a little difficult when you are trying to explain a concept to someone who doesn't hear those words all the time. So, this week I thought I would take some time to explain some common horticulture words and phrases.

The first word that I'm going to explain is horticulture itself. It is kind of an odd word, and doesn't really lend itself to any contextual clues. While I was majoring in horticulture in college, the question of majors always came up when meeting somebody new. The number of times that I got blank looks whenever I said horticulture was astounding. Horticulture is from the Latin *hortus*, meaning garden, and *cultus*, meaning to cultivate. Essentially, it is the science and study of gardens. This can include just about everything under the sun. Grapes, orchids, mushrooms, trees, these all fall under the umbrella term of horticulture, but each has their own specialized branch under that umbrella.

If you've been reading my column, you know that propagation is one of my favorite branches of horticulture, if not my absolute favorite. To propagate a plant is simply to create new plants from old. Whether it is through seeds or selective breeding, or cuttings, it is all propagation. Cuttings are pieces of plants that have been cut off of the mother plant for the purpose of creating a new plant. They usually have a few leaves and a couple of nodes. Nodes are the parts of the stem from which leaves and branches emerge. On some plants there is a noticeable bulge equally spaced up the stem, these are nodes. The space from one node to the next on the stem is called the internode. Nodes are origins of growth because they contain meristems. Meristems are the point at which cell division happens in plants. There are apical meristems, axillary meristems, and root meristems. Root meristems are pretty self-explanatory, they are at the tip of the root and cause the root to expand. Apical meristems are at the very tip of branches and tops of plants. Axillary meristems are those that are not at the tips of branches or roots. The inside of the plant is also very important because it contains what are essentially the blood vessels. They are called xylem and phloem. The xylem moves water and nutrients from the roots to the rest of the plant, while the phloem moves sugars and other products of photosynthesis down the plant.

Floriculture is the science behind growing flowers. There are perfect and imperfect flowers. Perfect flowers have male and female reproductive structures, while imperfect flowers have either male or female. The "male" reproductive structure is called the stamen. The stamen is the name for both parts of the reproductive structure. The anther, which produces the pollen, and the filament, which holds up the anther. The female reproductive structure is called the pistil, which is the collective name for the stigma, style, and ovary. The stigma is the sticky part at the very top of the pistil, which collects the pollen from the anther. The style is the tube that helps the pollen get from the stigma to the ovary. And the ovary is where fertilization occurs and seeds form. Seeds are a combination of a seed coat, and embryo, and the endosperm. The seed coat is the outer layer that protects the seed. The embryo is the baby plant, and the endosperm is the food source that is used to kickstart the plant's growth when it germinates.

If you'd like to practice identifying these parts of a plant, any plant and any seed would work, but for flowers I would recommend lilies. They are rather large and are perfect flowers. I hope you learned something from my column today, and if you have any questions, feel free to contact me at the Buffalo County Extension Office, at 308-236-1235, or mearnest2@unl.edu.