# HORTICULTURE Frequently asked Questions (FAQ).

FAQ #1: PLANT TERMINOLOGY - What's in a name? (posted in July 2023; written by Jeanne Bernard)

Dorchester Garden Club members hold 'mini' flower shows monthly in order to learn more about horticulture and design and to better prepare them for entering National Garden Club (NGC) Standard Flower Shows, an activity replete with many rules and requirements. With this monthly practice of mini flower shows at meetings, our members learn a great deal and become very competitive in District and State flower shows.

Our club stresses accuracy when identifying specimens of plant material. In fact, the Handbook for Flower Show (The Handbook) by NGC states "in order to receive an NGC Top Exhibitor Award, the exhibitor must identify his/her entry by its binomial name or currently acceptable scientific designation."

To address confusion which sometimes occurs when preparing entry forms (cards that identify the entry by Division, Class and Species information—scientific (binomial botanical name) and/or common name. the following explanation should be helpful, not only for flower shows, but for anyone interested in understanding how plants are named.

There are two types of plant names gardeners may be familiar with—
common name such as waterlily tulip or orange thyme, and
botanical name--Tulipa kaufmanniana 'Scarlet Baby' or Thymus fragrantissimus
'Orangelo.'

Each plant may have multiple common names, but it should have only one botanical name which uses Latin words to describe the plant. Latin, the language of scholars, is a dead language which gives plant terminology stability and is universally-used. As such, the botanical name is one recognized anywhere in the world whereas common names are specific to a particular language or region. If you travel abroad and ask for *Echinacea* 

purpurea, your request will likely be understood. On the other hand, if you referred to a plant as a coneflower, it probably would not be recognized.

#### PLANT NAMES Part 1: Binomial or Botanical Nomenclature

This is the "botanical system of dividing plants into hierarchical groups" (Handbook) first described by Swedish Botanist Carl Linnaeus (1707-1778). The Handbook further states: "Botanical nomenclature is the scientific naming of plants, creating a unique, universal name for an individual plant. Only one (1) plant may be so designated with the **genus** and **specific epithet**, and that name is recognized throughout the world."

When we refer to a general type of plant (daisies for example....we know there are lots of different kinds of daisies), we mean to say what is the species of daisy? The species is a combination of the genus (generic name) and the specific epithet (specific name; a subgroup of genus). As already stated, each plant species has only one botanical or scientific name and the botanical name has two parts (binomial meaning two names): the genus (or generic name) and the specific epithet. The first word is the genus and is always capitalized. The second part of the name, the epithet is typically an adjective in Latin form providing further description or identification (color, shape, size, etc.). The epithet is not capitalized. Both words are italicized or, if handwritten, underlined.

#### Example of a Binomial Botanical Name

[According to the International Code of Nomenclature for Algae, Fungi and Plants]

#### Digitalis purpurea

- **Common names** of *Digitalis purpurea* include foxglove, common foxglove, purple foxglove, lady's glove
- The binomial name, *Digitalis purpurea*, is the species.
- **Digitalis** is the **genus**.
- purpurea is the specific epithet.
- **Digitalis purpurea** or **D. purpurea** (can be written this way if it was previously identified as Digitalis purpurea) is the scientific/botanical name for this particular species.
- Etymology: *purpurea* is Latin for purple. You'll see it used as the **specific epithet** for many purple plants.

#### **PLANT NAMES Part 2: Variety** and **Cultivars**

To be even more specific, the botanical name may or may not reflect the exact **variety** or **cultivar** of the plant which is defined below. Sometimes a plant does not have a **cultivar** or a **variety**.

The Handbook defines *variety* as a "distinct group of plants occurring naturally within a **species** that have unique characteristics distinct from other plants in the **species**." Varieties are found in nature, as opposed to being created by plant breeders. "The *variety* name is never capitalized, but always italicized if printed and underlined if handwritten. The *variety* name follows the specific *epithet*."

The term *cultivar* is shorthand for *cultivated varieties* and is a sport\* of a **species** which will not come true when seeds are planted. **Cultivar** refers to plants that have been developed by plant breeders or discovered growing in nature and propagated by horticulturists. The plants are often propagated vegetatively, such as by rooting cuttings.

\* In botany, a sport or bud sport, traditionally called lusus, is a part of a plant that shows morphological differences from the rest of the plant. [Wikipedia]

Many commonly available plants are **varieties** or **cultivars** with interesting features that make them more desirable than the straight **species.** A **cultivar** may have specific features such as a unique color, size or disease resistance. A **cultivar** should be uniform without variation between

individuals. Some **cultivars** are patented, making it illegal to propagate them yourself. The plant name may bear a trademark or registration symbol ( $^{\text{m}}$  or  $^{\text{@}}$ ) and you may see a warning that propagation is prohibited. The cultivar is written after the **genus** and **epithet**, capitalized in single quotations.

**'Dalmation Purple'** is a **cultivar** which distinguishes this particular plant from other digitalis **cultivars** as previously referenced.

The full name of the <u>species</u> is *Digitalis purpurea* 'Dalmation Purple' (genus, specific epithet, cultivar)

### In Flower Shows....

If you are asked to display a specific **species** in a flower show **different cultivars**, then the floral entry could be a common foxglove or *Digitalis purpurea*, but with different **cultivar** names.as 'Candy Mountain,' 'Primrose Carousel,' or 'Sutton's Apricot.' Again, these are <u>different cultivars</u> of *Digitalis purpurea*. There are a great many **cultivars** for this particular **genus/epithet**.



Entering *Digitalis lanata* or *Digitalis obscura* along with Digitalis purpurea would be incorrect as these are actually different

**species**— the genera (pl) are the same but the **specific epithets** are different.

## How does this relate to your flower show entry? (see also FAQ #2)

In the horticulture division of a flower show, a class of herbs, for example, may specify "a group of three (3) cut specimens in one container." The 'sub-class a.' may indicate the entry should be the <u>same</u> cultivar and 'sub-class b.' may indicate that the entry should be <u>different</u> cultivars.



If you are entering three stems of one species, the **same cultivar**, then the entry (e.g., variegated peppermint) should be all be *Mentha x piperita* 'Variegata.' Three stems as one entry—all the same.

If the class specifies one species of herb, different cultivars, then your entry might include one stem each of *Mentha x piperita* 'Chocolate,' *Mentha x piperita* 'Variegata' and Mentha x piperita 'Citrata.'