

# Horticulture 202 Laboratory 3

## How to Write a Scientific Name

The system of nomenclature used today is based on the binomial system of nomenclature, developed by Linnaeus in the late 1700's. The binomial system of nomenclature is structured so that the scientific name of a plant consists of two names: (1) the genus or generic name, and (2) the specific epithet or species name. There are rules to follow when writing a scientific name.

- **Genus Name**

- (1). The genus name is written first.
- (2). The genus name is always underlined or *italicized*.
- (3). The first letter of the genus name is always capitalized.

**Example:** Sansevieria or *Sansevieria*

- **Specific Epithet**

- (1). The specific epithet is written second.
- (2). The specific epithet is always underlined or *italicized*.
- (3). The first letter of the specific epithet name is never capitalized.

**Example:** trifasciata or *trifasciata*

- **Scientific Name**

- (1). The scientific name of this plant would appear as follows:

Sansevieria trifasciata or *Sansevieria trifasciata*

## What About Mutations?

The evolution of plant life is based on mutations, which are constantly occurring. Very often a particular individual of a species will mutate to a different color, size, or growth habit. These characteristics are passed on to its progeny (offspring). When this happens, a population of plants exists with the same scientific name, but a sub-group exhibits different characteristics.

If the mutated group is significantly different from the parents and is stable (the traits are passed on from generation to generation), then this new group of plants is often assigned a **variety** name.

- **Variety Names**

- (1). Variety names are given when the mutation occurs in **nature**.  
Examples: a mutation occurs in a tropical rain forest
- (2). The abbreviation var. is used to signify that the mutation is a variety.  
var. is placed after the specific epithet and is not underlined or italicized.  
**Example:** Sansevieria trifasciata var.
- (3). The variety name is written after var.
- (4). Capitalize the first letter of the variety name only if it is a proper noun.
- (5). Underline or *italicize* the variety name.  
**Example:** Sansevieria trifasciata var. Laurentii or  
*Sansevieria trifasciata* var. *Laurentii*

Mutations can also occur because of human interventions such as breeding, applying mutagens, propagation, or by cultural practices. In these cases, the new group of mutated plants is called a cultivar. "Cultivar" is an abbreviated form of cultivated variety. The mutated plants are assigned a **cultivar** name.

- **Cultivar Names**

- (1). Cultivar names are given when the mutation occurs due to human influence.  
**Example:** a mutation occurs in a garden
- (2). The abbreviation cv. is used to signify that the mutation is a cultivar. cv. is placed after the specific epithet and is not underlined or italicized.  
**Example:** Sansevieria trifasciata cv.  
or single quotes are used instead of cv.  
**Example:** Sansevieria trifasciata 'Name'
- (3). The cultivar name is written after cv. or within the single quotes.
- (4). Capitalize the cultivar name.
- (5). Never underline or italicize the cultivar name.  
**Example:** Sansevieria trifasciata cv. Golden Hahnii or  
*Sansevieria trifasciata* 'Golden Hahnii'