

Don't worry if you find all of this a bit daunting! It gets easier and you'll revisit it as part of your study pages

## 1. RULES FOR LABELLING PLANTS

### Binomial classification

The internationally recognised system for identifying plants is the binomial classification system, which is regulated by the International Code of Botanical Nomenclature (ICBN). This is a two name system more commonly referred to as the scientific, Latin or botanical name for a plant. The names are generally derived from Latin and Greek.

The binomial system comprises the genus and the specific epithet ( or species )

1. **Genus** – the name for a group of plants that share certain similarities, when written this name comes first and always starts with a **capital letter**. It is **italicised** e.g. *Ranunculus*
2. **Specific epithet or species**– the individual species is below the level of genus, and comes after the genus name. It is written in **lower case** and in italics e.g. *repens*

Together the two names give us the binomial name *Ranunculus repens*

To be correct you should also add the designated name ( either shortened or an initial) of the person who first described the plant. This comes after after the specific epithet, in this case *Ranunculus repens* L. Where the L stands for Linnaeus, who first described the plant.

- Note: If the binomial name is hand-written it should be underlined for clarity
- The Latin name can tell you a lot about a plant for example *repens* means 'creeping' - therefore if you come across this word as a specific epithet you will know that it is a creeping plant. *Ranunculus* means 'little frog' and probably refers to the fact that most of the genus are found near water.

### Lower levels of classification, varieties, subspecies and forms

Below the species level there are several more levels of classifications which are used to identify plants. Where a species has infraspecific (below species level) categories this is referred to as the trinomial name. Most commonly used additions to the binomial name is a connecting word indicating **subspecies, variety or form**. These levels denote a slight variation in the species described by botanists.

Used as follows:

- **Sub species** - written **subsp.**
- **varietas** – written **var.**
- **forma** – written **f.**

The subspecies or variety name is **written in italics** and the person that first described the infraspecific character of the plant should be included. *Ranunculus repens* L. has several different varieties which have been described by botanists

#### For example:

*Ranunculus repens* L. var. *glabratus* DC.

*Ranunculus repens* L. var. *degeneratus* Schur

### Cultivars

The name cultivar distinguishes wild plants from those that have arisen from cultivation. Cultivars also referred to as cultivar varieties are **selected forms** of plants with **desirable characteristics** which are **bred for these characteristics** and **maintained by propagation**. They are grown for commercial purposes in **horticulture**. Today fruit and vegetables are predominantly cultivars, bred for characteristics such as disease resistance, flavour and yield. Cultivars **do not generally occur in the wild**, however a few exceptions have resulted from natural selection in the wild.

The naming of Cultivars is regulated by the **International Code for Nomenclature for Cultivated Plants (ICNCP)**.

A **cultivar name** consists of a **botanical name followed by a cultivar name** it may have been registered with the International Cultivar Registration Authority (ICRA) .

The cultivar name must be written in **single inverted commas** and **not italicised** , **names should always begin with capital letters**.

#### Example:

*Solanum tuberosum* 'King Edward'

**Note 1: Modern cultivar names are not in Latin.** However old cultivar names invented before these rules can be Latin. Old common Latin cultivar names such as ‘alba’ for white-flowered varieties.

**Note 2:** If the species is uncertain, it may be omitted, hence this is still correct:

## Hybrids

Hybrids are the result of crossing two or more species and a ‘x’ is used in the name to indicate the cross breeding.

Hybrid names can be written in two ways, for example:

*Meconopsis baileyi* x *M. grandis* s a hybrid of the two Himalayan blue poppy species. It has also been named as if it were a species in its own right as *Meconopsis* x *sheldonii*. Both names are correct.

Hybrids can also have cultivars like true species.

For example, *Populus* x *canadensis* has several cultivars including:

*Populus* x *canadensis* ‘**Eugenei**’

## Hybrids between Genera

To be added later

## Common or vernacular names

Common names should also be added to your labelling. They are **not in italics** and should be entirely in **lower case unless the common name includes a place name.**

**There are no specific rules but these are the accepted conventions.**