

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.