

Scientific classification in natural history

The science of classification is known as taxonomy. There are scientific names, which include Latin and Greek words, for all species. This includes animals, plants, fungi etc.

It began with names for plants and as knowledge of these increased, accurate naming became more widespread. This eventually became so complicated with some species having up to seven Latin names, for example tomatoes! This was becoming increasingly difficult to write and remember.

Most of the early doctors were also very good botanists, as many of their medicines were collected from plants and it was really important to know what they were prescribing as many plants are poisonous.

In the mid-1700s a Swedish doctor named Carl Linné, who later called himself Carolus Linnaeus (obviously trying to classify himself), decided that the whole system of classification needed simplifying. He collected many plants and animals and studied them very closely to see if he could spot any similarities between them. He discovered through the study of parts of flowers that indeed some did. Ones that all of us can see easily are the flowers of tomatoes and potatoes which are related and in the Solanaceae family. Incidentally many of the Solanaceae family are very poisonous, hence the need to know ones plants very well, but don't worry tomatoes and potatoes are quite safe, providing you do not eat the leaves or stems.

Linnaeus gave each species a 'trivial name' with only two parts, first the **genus** which is the name in common for closely related species, followed by the **species**, which gives the unique identification. So a cowslip from the Primulaceae family is *Primula veris* and the similar primrose is *Primula vulgaris*. Only rarely do plants have three parts in their descriptions when they have very close relatives. These names are often based on the characteristics and origins of the plant. Some examples are:

- The names of discoverers of foreign plants were sometimes honoured by including their name: Fuchsia from Fuchs, Buddleja from Buddle and Deutzia from Deutz
- Or the country of origin can be included in a scientific name: *Wisteria sinensis* is from China, *Camellia japonica* is from Japan and *Prunus lusitanica* is from Portugal.
- Others include the habitat where they are most commonly found:
Stachys sylvatica – hedge woundwort where *sylvatica* is of woods
Stachys palustris – marsh woundwort where *palustris* is of wet places.