

## **Making Sense of Scientific Names**

When Dr. Rebman points at a shrub you have always known as "California Buckwheat" and he calls it *Eriogonum fasciculatum var. fasciculatum*, he is making use of the science



of plant taxonomy, an international system of identifying, naming and classifying plants. Modern biological classification began with the eighteenth-century Swedish naturalist Carolus Linnaeus (Latinized from Carl von Linné). Improving on the systems of his predecessors, Linnaeus simplified plant taxonomy through the "binomial" (two-name) system. Linnaeus' system uses two Latin (or Latinized) words to comprise a **species**. The first name indicates the **genus** (plural=genera), and the other indicates the **specific epithet**. In the above example, *Eriogonum fasciculatum* is the species name, in which *Eriogonum* is the genus and *fasciculatum* is the specific epithet.

The rules and regulations for **binomial nomenclature** in higher plants are set by the *International Code of Botanical Nomenclature*. According to their standards, both the **genus** and **specific epithet** are always italicized or underlined when written or typed. The **genus** is the generic name (often a noun) and always begins with a capital letter. The **specific epithet**, which by recent consensus always begins with lower-case, is often an adjective that helps do the following: distinguish the plant from other similar species\_by referring to the plant's notable characteristic (*vulgare* = common, *maculata* = spotted); identify the region where the plant originated (*australiensis* = Australia, *californica* = California); or, commemorate someone associated with the plant (*clevelandii* named after renowned botanist Daniel Cleveland); however, many names are oblique references to an obscure namesake or a fanciful metaphor, so don't be disappointed it if you can't decipher a name without help from a botanical dictionary!

Sometimes you'll see other names called **infraname**(s). In such cases, taxonomists are simply getting more specific by accounting for variation within a species that has developed naturally in the wild (called a subspecies or variety). The name of the infraspecific taxon can be added to the binomial with one of the following abbreviations: var., ssp., or subsp..

In scientific literature, other words are added after the Latin names. This is the **authorship** i.e., the name of the person(s) who first described the plant or combined it to its current status. These names are sometimes abbreviated but not italicized. When the name is abbreviated as "L." it stands for "Linnaeus", the man known as the "father of taxonomy."

authorship *Eriogonum fasciculatum* Benth. var. *fasciculatum* genus specific epithet infraname

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