A DISCOURAGEMENT OF NAMES

By Mark Wheeler

A field of wildflowers all beaming their colorful best on a sunny spring day can most definitely raise the tender mercies in us all and move us even further to a kind of rapture. However, when it comes to knowing those flowers by their proper names, the rapture in most people quickly melts down to an instant apathy at exactly the moment they hear something, for instance, like “Malacothrix glabrata.”

Perhaps more than anything else, the awkward and wholly unfamiliar names for plants discourages amateur interest in botany as a pleasurable pastime. We may drive quite some distance to see a spectacular bloom and even shoot miles of film to make a record of it in our photo albums. Any greater interest, though, in plants and their various means and ends, tends to end abruptly the minute someone reads or hears a proper botanical name.

Scrophulariaceae. Loeseliastrum matthewsii. Calyptridium monandrum. Indeed, these names are genuine mouthfuls, having more syllables in them than any truly practical word should have. Here’s a good one. Echinocereus triglochidiatus.

All the proper names for plants are in Latin, or they are names or words from other languages that have been Latinized. Part of the reason for this may be pinned to the fact that early botanical science was practiced by actual speakers of Latin and, later, by people who still used Latin as the language of culture and of science.

To some extent, then, the usage is inherited. However, for as counterintuitive as it may seem, the primary purpose for using Latin as the designated language for plants, and for animals as well, is expressly because no one uses it any longer for common communication. As a dead language, Latin will not evolve, will not change in any way with popular usages. This results in documentation and records that have consistency over time, and this, in turn, enables the study and classification of plants (and animals) to proceed over time with continuity.

An International Congress of professional botanists establishes and maintains the rules governing scientific names for plants, and these rules are catalogued in the International Code of Botanical Nomenclature. Using this code, botanists from all over the world and from all different language groups will, theoretically, make the same identification for any given plant so long as they observe the same characteristics in it. A Malacothrix glabrata (desert dandelion), for instance, is the same for all botanists whether they are English, Japanese or Haitian.

Whereas all of this may be well and good for the professional community, it doesn’t somehow give the novice plant enthusiast much comfort when he or she hears a botanical name that has as many syllables in it as most modern-language sentences do. What’s wrong with desert dandelion? Who needs Malaco…whatever?

Nothing is really “wrong” with common names. People have been using them forever and, for most purposes, they are perfectly adequate. Of course, common names are spoken in the local language, and considering there are 4,000-6,000 languages currently in use on the planet, that adds up to a lot of different ways to say dandelion.

For most of us, though, it doesn’t matter how speakers of other languages say the name since most of us have little opportunity or need to communicate outside our own language group. Our own common names should serve perfectly well within our own group to identify the plants we want to talk about. Yet, it is in the very interest of identification that botanical names are often necessary in order for members of even the same language group to communicate clearly with one another about plants.

Take, for example, the common name “greasewood.” Depending on what part of the desert southwest you live in, this common name is used by locals to identify three different plants, from three different families.

Sarcobatus vermiculatus

One is the *Sarcobatus vermiculatus,* a member of the goosefoot family. In terms of popular usage, more people commonly call this plant greasewood than any other. However, some folks also use greasewood as a common name for the *Purshia tridentata,* a rose family plant more regionally known as antelope bush. Finally, greasewood is used by some to identify the *Larrea tridentata*, which is a caltrop family plant and more locally known as the creosote bush.

Purshia tridentata

For as user-friendly as they are and for as suitable as they are in many or perhaps even most circumstances, common names for plants are simply too general to be relied upon for definitive identification purposes. During the Twentieth Century a Joint Committee on Horticultural Nomenclature tried to standardize common names, but the list it published, *Standardized Plant Names*, was never adopted in common use. In the meantime, the *Verbascum thapsus* enjoys the dubious distinction of going by 140 different common names for the common mullein.

Larrea tridentata

It is the standardization that makes botanical names so useful, despite how burdensome they may seem. A *Perityle emoryi* is a specific plant in the aster family, and it is only one of the many species of plants in that family that are found in the desert southwest and that are quite often lumped into a single, common name category known as “daisy.”

Botanical names are useful when we start to differentiate more and more plants. In the Mojave Desert alone, there are about 2,600 different species of plants that occur below 7,500 feet. Although some of these plants may differ from close relatives in ways only a professional botanist could detect, any plant enthusiast can learn

to tell most of them apart with enough practice. What will quickly be discovered is that many species don't even have a common name, but they do all have a botanical name.

A plant key is an indispensable tool for anyone who wants to identify plants but who doesn't have ready access to a reliable identification resource, like a botany teacher or a knowledgeable friend. The key is a field manual that guides the user through a systematic observation of characteristics on a plant until, by process of elimination, the plant can be identified to the level of classification to which the key is written.

All of the comprehensive and accurate keys use botanical names, although they will often include a common name if it is one in widespread use. Furthermore, the good keys use the words for plant characteristics from the International Code of Botanical Nomenclature, which means the user will have to become familiar with a large glossary of Latin and Latinized terms.

Photo guides to flowers, which are popular with the public, usually give both botanical and common names for every specimen included in the volume. If only one name is given, though, it will always be the botanical one, since this is the name that verifies a correct identification for the flower in the photo, and, as noted previously, there may not be a widely used common name for the species pictured. Among these types of guides also, it will be found that the most complete ones will use a generous helping of botanical nomenclature in the written descriptions.

Frankly, it's virtually impossible to completely avoid the formal nomenclature if someone wants to study native plants in the local area. Far too much of the written and photographic material on the subject includes this language. At the very least, readers will continually be exposed to the Latin and Latinized names. However, there is some advantage to be had from these names, and without the pain of having to memorize them or even learn what they mean.

Botanical names always consist in two words. The first one names the genus to which the plant under observation belongs. All the different species in a genus share something in common. It may be a physiological or physical characteristic, or it may be the name of a person for whom the genus was named.

Whereas the genus name is capitalized, the second name, the name of the individual species, is not. This is an individual name, and it identifies something particular about that species. Like the genus name, the species name might refer to a physical or physiological characteristic. Or, it might refer to the habitat the species prefers, or to a place of origin for its kind. Some species are named for the botanist who first identified and added them to the record.

Using the plant commonly called the little gold poppy as an example, the botanical name for it is *Eschscholzia minutiflora*. In this case, the genus name, *Eschscholzia*, honors Dr. J.F. Eschscholtz, a Nineteenth Century Russian adventurer and naturalist who botanized in the San Francisco area in 1815. The species name, *minutiflora*, is simply a description of the plant's minute (minuti-) flower (flora).

One more botanical name is always encountered in the guides. This is a name that almost always ends in *aceae*, and it is a name for the family to which the plant under investigation or in the picture belongs. The *Eschscholzia minutiflora* belongs to the Papaveraceae family, and in common language, this is the poppy family.

Flower enthusiasts who don't want to learn what the nomenclature means can still use the names as cues to plant relatives. When a flower like the *minutiflora* is identified from a guide, photo or otherwise, the guide user can begin to recognize that other similar plants found on the landscape, whether they are larger or perhaps of a different color or they have different markings, should belong to the same family and perhaps even to the same genus.

All the genuses — properly called "genera" in the plural form — included in a family share something in common. Likewise, all the species included in a genus also share something in common. The search for these commonalities among plants is the first step to simplifying the task of identification, and most people find that learning to recognize common characteristics at the family level is the logical place to start. It can be very helpful to at least associate whatever plant is being identified on the landscape with whatever *–aceae* word it is paired with in the guide, if one is being used.

Botanical nomenclature is demanding. Nevertheless, it can be useful for even the non-professional who has a desire to know all the many different plants that can appear on any given landscape in any location. There are simply far more plants than there are common names for them, and virtually all the guides and resources one might use to carry on independent study are full of the technical names and terms.

Of course, there is no need for nomenclature of any kind if the objective is simply to enjoy the color and unique forms of plants. Names are really only necessary if we care to identify plants according to a standardized catalogue of them, or sometimes for purposes of talking about them. Perhaps it's fair to say that knowing plants requires some use of a common language, but appreciation doesn't take a word.

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