PLANT NAMES

Since ancient time, man has given names to plants that are of special interest, such as food plants, fiber-producing plants, poisonous plants, and ornamental plants. People involved in outdoor activities come into contact with wild plants, and today we encounter more plants than ever before in our homes, gardens, plant shops, and grocery stores. People want to learn the names of these plants.

There are two kinds of names given to plants, common names and scientific names. The two kinds are complementary and each has a definite use. Laymen should not look upon those using scientific names as trying to be pretentious, and botanists should not look with disdain upon those using common names.

Common Names

Common names are the names used by the general population of a given region and are nearly always in the language spoken locally, i.e., English in Illinois, French in Quebec, Spanish in Mexico. Common names are the only names by which most people know familiar plants, since they are usually composed of everyday words. They also are often easy to remember, can accurately depict outstanding characteristics of a plant, and can be precise and stable within limited geographical areas. However, the use of common names has several drawbacks. The same common name may be used for more than one kind of plant, both within one area and from place to place. For example, “mayflower” is used for a member of the lily family (the scientific name of this plant is *Maianthemum canadense*) and also for a member of the heath family (*Epigaea repens*). Nearly everyone in the United States uses the name “corn” for the plant known botanically as *Zea mays*; however, in Europe, “corn” is used for any kind of grain. Also, the same kind of plant may have more than one common name. In addition to being called “mayflower,” *Maianthemum canadense* is also called “wild lily-of-the-valley,” and *Zea mays* is called “maize,” particularly in Europe. As another example, the name “adder’s tongue” can refer either to a quaint fern, *Ophioglossum vulgatum*, or to a lovely member of the lily family, *Erythronium albidum*. The latter is also known as “trout-lily,” “fawn-lily,” or “dog-tooth-violet.” When using common names to communicate with others who are knowledgeable about plants, it is very desirable to equate common names to scientific names so that there can be no ambiguity about which particular plants are being discussed.

Scientific Names

The science of botany in Europe, particularly the aspect of identifying and naming plants, reached full development in the 18th century. At that time, educated men in all fields, from law, medicine, philosophy, and religion to science, used Latin as a universal language, which greatly facilitated communication between people of different nationalities speaking many native languages. Thus, it was only natural that Latin was used for plant names in learned circles. At first, plants were given descriptive phrase names such as *Rosa carolina fragrans, folii medio tenus serratis*. These names were long, confusing, and difficult to remember, and in 1753, the Swedish botanist Carl Linnaeus, applied a system of naming to the entire plant kingdom whereby a plant name consisted of only two words. This binomial system is still used universally by scientists, now following the strict rules of the International Code of Botanical Nomenclature.

The first word of the scientific name is the name of the genus to which the plant is assigned, and the second word is the specific epithet. Thus, from the examples above, *Maianthemum* is the name of the genus and *canadense* is the specific epithet, and together, *Maianthemum canadense*, they make the scientific name. These names are always in Latin or, if derived from other languages, treated as if they were Latin. Scientific names are italicized in print and underlined when typed or handwritten. The first letter of the generic name is always capitalized; that of the specific epithet may always be left uncapitalized, although it can be capitalized if the name commemorates a person or an old generic name.

The generic name refers to a general kind of plant while the specific epithet indicates a particular kind of plant. Thus, the genus *Rosa* is used for all kinds of roses, while *Rosa setigera* is the prairie rose. When the generic name is frequently repeated, it is customary to abbreviate it by the first letter. Accordingly, *Rosa carolina* is the pasture rose, *R. centifolia* is the cabbage rose, and *R. canina* is the dog rose. These examples show that the use of two words for the name of a particular kind of plant is not restricted to scientific names, but that we frequently do this in English with one word modifying the other.

Following the name of the species is the name of the person who gave the plant that name. This is a bibliographic aid to help locate additional information about the name. Many plants in the eastern United States were first named by Linnaeus, for instance, *Rosa carolina* Linnaeus, the pasture rose. Certain people described so many plants that their name is abbreviated, such as *Rosa carolina L.*., *R. canina L.*, and *R. setigera Michx.* (for Michaux). Some floras give lists of author abbreviations; see Fernald (under “Floras and Manuals” in references for Plant Identification) for a particularly useful list.

Sometimes a species may have two or more recognizable variants. As previously mentioned, if these are discovered in wild plants, they are called subspecies, varieties, or forms, depending on the magnitude of the variations, and are given an additional Latin name. For example, the pasture rose *R. carolina*, has two variants, one with the leaves smooth and the other with the leaves quite hairy beneath. The first one is called *R. carolina var. carolina* and the second, *R. carolina var. villosa*. Author citations are used with these names when the name of the variant is different from that of the species, as in *R. carolina L. var. villosa* (Best) Rehder. When variants occur only in cultivated plants, they are given “cultivar” names, which may be in languages other than Latin, and they do not carry an author citation with them. The cultivar name is placed in single quotation marks after the specific name, or, in some cases, after the generic name. For example, the name of the Bradford pear is *Pyrus calleryana ‘Bradford.’* It is never correct to use so-called trinomial names, such as *Rosa carolina villosa*, that do not indicate the classification rank of the third name.

The names of plant families are based on the name of a genus with the ending changed to “-aceae.” Thus, Rosaceae is the name of the rose family and Liliaceae of the lily family. A few very common families may be called either by their traditional name or by the name that is based
on the name of an included genus. Thus, the grass family is Gramineae or Poaceae; the legume or bean family is Leguminosae or Fabaceae; the mustard family is Cruciferae or Brassicaceae; the mint family is Labiatae or Labiaceae; the carrot family is Umbelliferae or Apiaceae; and the sunflower family is Compositae or Asteraceae.

The application of scientific names to plants is governed today by the International Code of Botanical Nomenclature, the purpose of which is to establish one set of rules by which plants are named. According to these rules, no two kinds of plants can have the same name, and under a given genus, a species can have only one correct name. This correct name is the combination of the earliest correct generic name with the earliest specific epithet.

Some people wonder why one book will use one scientific name for a plant while another will use a different name for the same plant. There are basically two reasons for this. The first is that there has been a name change made necessary by the rules of the Code of Botanical Nomenclature. For example, there are two members of the rose family in the eastern United States known as bowman's root and American ipecac. Most florals place these plants in the genus Gillenia, which was first described in 1802. However, this name had been used previously for another plant and cannot be used again. The correct generic name for these plants is Portieranthus. The second reason is that some groups of plants are more difficult to classify than others, and different authors may classify them differently. For instance, the ninebarks (Physocarpus) in the eastern United States are extremely variable and some people have distinguished several different species, others only one species with several varieties, and others recognize only one variable species with no varieties.

**Pronunciation of Scientific Names**

Many people who would use scientific names are afraid to do so because the words seem difficult to pronounce. A number of generic names have become adopted as common names and are familiar to most people—Chrysanthemum, Geranium, Rhododendron, Magnolia, Aster, Catalpa, Phlox, Iris, Trillium, Delphinium, Sasafras, and Hydrangea. There are many common names that are very similar to the scientific names: as lily, Lilium; rose, Rosa; alder, Alnus; spirea, Spiraea; violet, Viola; gentian, Gentiana; elm, Ulmus; pine, Pinus; poplar, Populus; larch, Larix; and juniper, Juniperus. All of these words are easy for most people to pronounce because they are familiar with them. With a little practice, other scientific names become easy to pronounce. Actually, most Latin or Latinized words are easier to pronounce than different English words. Finally, there is no need for someone to be afraid of “mis-pronouncing” scientific names because there are several different systems for pronouncing Latin—“traditional English” pronunciation as used by most botanists and horticulturalists in English-speaking countries, “re-formed academic” attempts to approximate the pronunciation of educated Romans, and “Church” Latin as used by the Catholic Church.

In this country most letters of the alphabet are pronounced the same in Latin as in English, including the consonants b, c (hard and soft), d, f, g (hard and soft), h, k, l, m, n, p, q, r, s (always as in so, not like z), t, v, and z. The letters j, u, and w were not in the classical Latin alphabet; when they appear in Latinized words, they are usually pronounced as in English except that j sometimes has the sound of y in yellow. The letter x at the beginning of a word has the sound of z, for example, Xanthium is zän’thē-üm and Xyris is zë-rūs. Elsewhere, x is pronounced as in English, such as Larix is lār-iks and Oxalis is ōks-āl-īs. All vowels may be either long or short, as in English.

A Latin word has as many syllables as it has vowels or diphthongs (two vowels pronounced as one sound). The diphthongs commonly used in botanical names, and their pronunciations, are: ae (ē as ea in meat), au (aw as in awful), and eu (in neutral and as oo in tool). Some examples are: Actaea (āk-te-ā’), laevis (lē-veis), Aureolaria (āw-re-o-lār-ē-ā’), caudatus (kāw-dā-tūs), Eleusine (ēl-o-sē-nē), and Deutzia (dōt-zē-ā’).

Every vowel or diphthong is pronounced, and there are no silent letters at the end of a word. Thus, Ribes is ri-bēz, not rib or ribs; Androsoace is an-drō-so-sē; Leucothoe is lē-kō-thō-e; gerardii is jēr-ār-de-ē; illinoense is īl-ī-no-nē-ē; Rosaceae is ro-sē-ā-ē; Liatris is li-ātris; Iliamia is ī-lē-ē-mē; and Aloe is ā-lē-ē, not āl-ō.

When a word begins with any of the following combinations of two consonants, the first letter is silent: cn, gn, mn, ps, and pt. Thus, Cnicus is nē-kūs; Graphium is gā-fē-ē-ūm; Mnium is mē-ūm; Psoralea is sō-rā-lē-ē; and Pteridium is tē-rē-ē-ūm.

Those who wish to learn more about the pronunciation of scientific names are urged to read: A. W. Smith, J. E. Smith, Jr., and Radford et al. (the latter two listed in the references for Plant Classification).

**REFERENCES:**

Also see references under Plant Classification.


CLUTE, WILLARD N. 1942. The common names of plants and their meanings. Second edition. Willard N. Clute & Company, Indianapolis. 164 p. [Not in print, but in many libraries; also see other books on plant names by same author.]


