

# Linnaeus: Prince of Botanists

by Harold Hopkins

If you've wondered what the L stands for after the names of many plants in various botanical listings, it refers to a person so famed for his two-name plant nomenclature system that he needed no binomial of his own.

Not that Carl Linnaeus lacked several names, or at least several versions of the same name. The Latinate forms such as Carl Linnaeus, Caroli Linnaei, and Carolo Linnaeo that appeared on the title pages of some of the most important botanical works ever published, along with the Swedish forms Carl Linné and later, when he was elevated to the Swedish nobility, Carl von Linné, were all freely used by him, and today nobody is ever quite sure just what to call him. Americans usually refer to him as Carl Linnaeus simply because the English settled on that form long ago.

When he died full of honors just two centuries ago his Latin binomial naming system for flora and fauna, and to a lesser extent his methods of classifying them into related groups, had taken precedence over the varying systems of other major scientists of his day and earlier. So ambitious, utile, and comprehensive were his *Species Plantarum* (1753) and his *Genera Plantarum* (5th ed., 1754) that they have become the accepted starting point for all legitimate botanical nomenclature. They described 5900 species and 1100 genera, and in all he named 7700 plant species. His *Systema Natura* (1758) is similarly accepted as the beginning of the modern scientific naming system for animals.

Born the son of a Lutheran curate of modest means in a village in southern Sweden, he is said to have been gifted as a child with a strong sense of order combined with a fondness for plants. He was educated at the university at Uppsala and eventually returned there as a professor of botany and dietetics, enjoying increasing fame during the last four decades of his life. While still a student at Uppsala he began to work out a plant classification system based on flower stamens and pistils. Faculty members encouraged his work and arranged jobs for him to finance his education.

In 1732 the Swedish Royal Society of Science made a money grant to him for travel through Lapland to observe and report on agriculture,

commerce and culture of these primitive people and on plant and animal life. In later years he made similar trips through several Swedish provinces.

In 1735 he traveled to Holland and stayed for three years, making visits to England, France, and Germany. He met many important botanists and other scientists and was employed by a wealthy Amsterdam merchant, George Clifford, to build and record the contents of his extensive botanical garden. While in Holland Linnaeus published ten important botanical works that gave him an international reputation.

In 1738 he returned to Sweden and, having obtained a medical doctor's degree at a diploma mill in Holland, practiced medicine in Stockholm. Here he made friends with a number of people influential in the Swedish court and politics, established a profitable practice, and was married. In 1741 he accepted the professorship at Uppsala that he would hold for the rest of his life. At the university his renown continued to increase. He sent a number of his students on plant explorations to many areas of the world, including Peter Kalm, for whom he named the genus *Kalmia*, to America.

The fields of botany and related sciences were still highly controversial, as to some extent they still are. Linnaeus did not lack for enemies among scientists in Sweden and the rest of Europe who disagreed with his theories or were envious of his success. Among criticisms were that he was jealous of other botanists, that he was highly egoistic, that he built a part of his reputation upon the work of others, that he was obstinate, stingy, and susceptible to flattery and gifts. He wrote several autobiographies, in the third person, each full of self-praise. He irked other botanists by discarding names they had given to plant genera and substituting his own, often using names honoring his friends or patrons. Most of the criticisms were not without foundation, but his self-praise has been acknowledged to be largely true, tending to offset his flaws.

Linnaeus placed plants into classes based on the numbers of stamens and styles and defined a genus as a group of species with similarly con-

