

# CAROLUS LINNAEUS BIOGRAPHY

Chuck Staples, CSSA Historian

**Linnaeus, Dr Carolus (1707–1778)—laid the foundations for the modern biological naming of binomial nomenclature—the father of modern taxonomy—the chosen prophet of systematic botany.**



Born in the village of Råshult in Småland in southern Sweden on 23 May 1707, Dr Carolus Linnaeus became a physician, naturalist, botanist, entomologist, taxonomist, prolific author and founder of modern plant systematics and nomenclature. During his early years he was tutored by his father and others such as Johan StenSSon Rothman (1684–1763) who broadened his interest in botany's sexuality of plants and helped Linnaeus develop an interest in medicine.

It's interesting to note that Carolus' father, Nils Ingemarsson Linnaeus (1674–1748), was the first in his ancestry to adopt a permanent family surname at the time he was admitted at the University of Lund, Sweden. Nils adopted the Latin name Linnæus after a giant linden tree that grew on the family homestead. The name was spelled with the æ ligature—that Carolus used in all of his Latin publications and handwritten documents.

Carolus attended a good part of his higher education at Uppsala University in Sweden starting in 1728 at the suggestion of Rothman, where Carolus wrote a thesis, *Praeludia Sponsaliorum Plantarum*, on plant sexual reproduction in 1729 and ended up giving popular lectures on botany to other students although he was only a second-year student. He lived abroad between 1735 and 1738, where he studied and also published a first edition of his *Systema Naturae* in the Netherlands. Carolus received a medical degree from Hardarwijk University in the Netherlands in 1735. He returned to Sweden in 1738 as a professor of medicine and botany at Uppsala University for the rest of his life.

In the 1740s, 1750s and 1760s Carolus spent a good part of his time finding and classifying plants and animals throughout Sweden. He published several books and papers which included *Species Plantarum* in 1753 that laid the foundation for a consistent binomial nomenclature system of naming plants—a genus and specific epithet for each plant, together referred to as a species—which book was accepted at the International Botanical Congress of Vienna, Austria in 1905 as the beginning of modern systematic botany. The book contained 1,200 pages, published in two volumes that included over 7,300 species with their synonyms and localities. Although this new system of naming plants was not immediately accepted by other botanists, most came to learn that Carolus' method of naming plants distinguishing one species from another was much easier to remember and to use than a many-worded diagnostic phrase used by previous botanists. Carolus' intention was to have a house-cleaning of botanical nomenclature.

Carolus' major contributions to botany were (1) choosing the species as the basic unit of classification, (2) recognizing the importance of precise descriptive language for plants which could be universally understood and (3) recognizing the importance of including all plants in a unified system. He held strong views on generic names, objecting to (4) names that were too long, (5) names of neither Greek nor Latin origin, (6) names consisting of two or more separate words—which lead to discarding many names used by (7) Dr Joseph Pitton de Tournefort (1656–1708), who invented the modern concept of genus and genera as an assemblage of species and (8) John Ray (1627–1705), who divided plants into non-flowering and flowering types, realized the importance of the inner structure of seeds and was first to differentiate between flowering plant embryos with 2 leaves (dicots) and those with only 1 leaf (monocots). Carolus was primarily an organizer of data compiled and collected by others.

Of special interest to the succulent plant enthusiast is the succulent genera Dr Carolus Linnaeus listed that are still good today: *Adansonia*, *Agave*, *Aizoon*, *Albuca*, *Aloe*, *Anacampseros*, *Asclepias*, *Basella*, *Begonia*, *Bombax*, *Bulbine*, *Bursera*, *Carica*, *Ceropegia*, *Cissus*, *Columnea*, *Cotyledon*, *Crassula*, *Cucunis*, *Cucurbita*, *Cynanchum*, *Dioscorea*, *Dolichos*, *Dorstenia*, *Dracaena*, *Erythrina*, *Euphorbia*, *Fevillea*, *Ficus*, *Galenia*, *Haemanthus*, *Heliophila*, *Hyacinthus*, *Impatiens*, *Ipomoea*, *Jatropha*, *Lepidium*, *Mesembryanthemum*, *Momordica*, *Monsonia*, *Othonna*, *Ornithogalum*, *Osteospermum*, *Oxalis*, *Phyllanthus*, *Phytolacca*, *Portulaca*, *Pteronia*, *Rhodiola*, *Sedum*, *Sempervivum*, *Senecio*, *Sesuvium*, *Stapelia*, *Sterculia*, *Tetragonia*, *Tradescantia*, *Trianthema*, *Viscum*, *Yucca*, *Zygophyllum*. All succulent genera in this paragraph and the next are from the six 2001-2003 Illustrated Handbooks of Succulent Plants by editors Dr Urs Egli (1959–) and Dr Heidrun E.K Hartmann (1942–2016).

Carolus described many species of succulent plants (including 22 species under the genus Cactus) that has seen most of his named Mesembryanthemum species moved to other genera over subsequent years—as has all of his Cactus genus to other genera. All of his Crassula named species remain in effect today. All of his Geranium named species were transferred to the Pelargonium genus in 1789 by Charles Louis L'Héritier de Brutelle (1746–1800). The only succulent plant named in honor of Dr Carolus Linnaeus was the cactus *Melocactus caroli-linnaei* by Dr Nigel Paul Taylor (1956–) in 1991.

The Swedish king Adolf Frederick granted Dr Carolus Linnaeus nobility in 1757, but was not actually ennobled until 1761. He took the name **Carl von Linné**, the German title 'von' signifying his ennoblement. If you were to visit Sweden, the only name used in the country is 'Carl von Linné'. Only on his publications and personal documents is the name 'Carolus Linnaeus' still seen.

Dr Carolus Linnaeus' last years were troubled by illnesses, hay fever in 1764, sciatica in 1773, a stroke in 1774, again in 1776 and a final stroke in 1777 that led to his death in Hammarby, Sweden on 10 January 1778. His library and collections were left to his widow Sara and children. It wasn't until son Carl's death in 1783 that Sir James Edward Smith (1759–1828) was able to buy the library and collections. Smith founded the Linnean Society of London in honor of Dr Carolus Linnaeus in 1788 that was to house the library and collections of Dr Carolus Linnaeus.

The legacy of Dr Carolus Linnæus: The chosen prophet of systematic botany and zoology—the man of the day to bring order out of chaos.

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