JOSEPH PITTON de TOURNEFORT BIOGRAPHY

Chuck Staples, CSSA Historian

Tournefort, Dr Joseph Pitton de (1656–1708)—a pre-Linnaean systematist he was the first to make a clear definition of our modern concept of the word 'genus' and 'genera' for plants.

Born at Aix in the region of Prevence-Alpes-Côte d'Azur, France on 5 June 1656, Joseph Pitton de Tournefort became a botanist, physician and naturalist. During his early years he studied in the convent of the Jesuits at Aix and was destined to become a priest; however, at age 22 and upon the death of his father, he turned his interest back to botany, left the convent, and started collection plants and built a herbarium. After a couple of years, he studied medicine at Montpellier University which was almost compulsory if he wished to continue work in botany during the 17th century.

Dr Tournefort became professor of botany in 1683 at the Jardin du Roi (later Jardin des Plantes) gardens in Paris, France due to the influence of Guy-Crescent Fagon (1638–1718) who was physician to Louis XIV. Between 1683 and 1686 Tournefort traveled and collected in Spain, Portugal, England and the Netherlands. By 1698 Tournefort received a MD of the Faculty of Paris—award to him by Fagon. In 1700 Dr Tournefort traveled and collected in the Greek Islands, Armenia, Georgia and mount Ararat accompanied by a German botanist, Andreas von Gundesheimer (1668–1715) and the Artist Claude Aubriet (1651–1742)—possibly the first time an artist accompanied a botanist on a botanizing trip.

In Dr Tournefort's 1694 book "Elémens de Botanique" (=Elements of Botany) plants were arranged by class and genus, carefully defined, many accepted 60 years later by Dr Carolus Linnaeus (1707–1778) in his 1753 "Species Plantarum", the starting point by the International Botanical Congress of Vienna, Austria in 1905 as the beginning of modern systematic botany. Illustrations for Dr Tournefort's book was drawn by Claude Aubriet. The book was thought to be the most botanical work of that time, treating all plants then known within his influence. He recognized two grades of genera—the first based on fruit and flower—the second based on vegetative or growth pattern differences.

His most important contribution to botany was a clear distinction between genus and species—with his concept of genus, he was able to put some 7,000 plant species he described into over 700 genera, making classification easier which later prepared the way for Linnaeus. However, what we think of as species names were little more than adjectival differentiations and frequently were extended to form a considerable sequence of words, amounting virtually to a definition of the species. The words "genus" "genera" and "herbarium" appears to have been invented by Dr Tournefort.

For the benefit of Succulentists, Dr Tournefort was given credit for the following generic names:
(a) *Opuntia* published in 1700 and technically described later by Philip Miller (1691–1771) in 1754.
(b) *Melocactus* published after his death in 1719 and technically described later by Dr Johann Heinrich Friedrich Link (1767–1851) and Christoph Friedrich Otto (1783–1856) in 1827.
(c) *Plumeria* published in 1700 and technically described later by Carolus Linnaeus in 1753. Dr Tournefort named this plant in honor of Charles Plumier (1646–1704) who was both student and friend.

After having been struck in the chest by a carriage in September in rue Coupeau near the garden Jardin du Roi in Paris, Dr Joseph Pitton de Tournefort died on 28 December 1708.

References:
White AC & Sloane BL. 1937. *The Stapelieae.* 77.
Isely D. 1994. *One Hundred and One Botanists*. 71 –73.
Staples CJ. 2012. Little Bits of History. *Cact Succ J (US)* 84: 25.
Staples CJ. 2013. *A Historical Record of Authors of C&S Plant Names & Books for the Amateur Hobbyist.* Vol 2: 259.