

## Plate 338 *Pereskia grandifolia*

*Clusia dodecapetala*

Rose cactus.

Rio de Janeiro, Brazil, 13<sup>th</sup> November – 7<sup>th</sup> December, 1768



*Pereskia grandifolia* is a cactus by classification (Cactaceae) but takes the form of an evergreen shrub or small tree that grows 2-5 metres in height and comprises 17 species of tree, shrub and climbers native to the Caribbean and NE South America. It has a greyish-brown trunk up to 20cm in diameter and edible leaves 20cm long in clusters of up to 90 spines up to 6cm long. The flowers resemble (superficially) those of roses hence the common name and are, usually, pink in colour but can be purplish, white or tan. The natural environment is restricted to coastal forests and acidic and nutrient poor sandy soils of the Restingas of NE Brazil. It is widely cultivated in the tropical Americas as an ornamental, and, more widely, is a popular house plant due to its ease of care. However, it is regarded as an invasive species in parts of the world including South Africa and NE Australia.

Rio de Janeiro was one of the early stops on the outward journey of Cook's first voyage in 1768. A diplomatic situation at the time prevented Cook's crew and Banks' team from going ashore. Fortunately, provisions could be taken to the anchored Endeavour. This facility was used to secretly smuggle aboard specimens in the guise of provisions. Sydney Parkinson produced a detailed watercolour image which subsequently formed the basis for the copperplate engraving carried out by Gerard Sibelius for the Banks' Florilegium.

The name *Pereskia* commemorates Nicolas-Claude Fabri de Peiresc (1580-1637), a French astronomer who discovered the Orion Nebula. 'Grandifolia' refers to the large size of the leaves. Synonyms include *Cactus grandifolia* (Haw.), *Cactus rosa* (Vell.), and *Rhodocactus grandifolia* (Haw.) F.M. Knuth. The abbreviated suffixes associated with the synonyms indicate key individuals in the history of the plant. They can be persons naming the plant, providing a formal description, or making a significant contribution to the understanding of the plant.

The abbreviation Haw. relates to Adrian Hardy Haworth (1767-1833). He was an English entomologist, botanist, and carcinologist. Haworth was born and raised in Hull and after inheriting the family estate devoted his time to natural history. He became a fellow of the Linnean Society of London in 1798. His ongoing research work was greatly assisted by his use of the library and herbarium of his friend Sir Joseph Banks. In 1819, he is cited as publishing name/description relating to *Pereskia grandifolia*. In 1833 he died of

cholera leaving in his collections 40,000 insects, 1600 volumes on natural history, an herbarium of 20,000 species, and over 500 species of plant in the garden.

Frederick Marcus Knuth (1904-1970) was a Danish taxonomist specialising in the collection and classification of cacti. His involvement with *Pereskia grandifolia*, in all probability, was a review of the plant's classification in light of any further developments in botanical knowledge and to confirm the original classification of Haworth. As a botanist, Knuth collected and described many new species of plants during his professional life.

José Mariano de Conceição Vellozo (1742-1811) was a Brazilian botanist who authored 55 taxon names. The abbreviation Vell. is used to indicate Vellozo as the author of a plant name, eg. *Cactus rosa*. The story of Vellozo has some parallels with that of Joseph Banks and the development of his *Florilegium* in that Vellozo was also involved in a major project to record and publish an extensive body of his work based on descriptions of 1640 species and 1700 illustrations covering 25 years of his study of Brazilian flora. In 1792, the Portuguese Government approved the publication work and sent the illustrations to Venice for engraving. Up to 554 plates had been completed when the French invaded Portugal in 1807. The Portuguese Government relocated to its colony, Brazil. Vellozo also returned to Rio de Janeiro where he died in 1811. Eleven years later in 1822 Brazil gained independence from Portugal. Pedro 1 became head of state and ordered the work to be published.

The re-discovered plates formed the basis of a print run of 3000 copies commissioned from Alios Senefelder (1771-1834), the inventor of lithography, in Paris. However, only a small number of copies were ever distributed. The project, like Banks' *Florilegium*, had a bumpy passage including loss of original specimens and the Brazilian Government defaulting on payment for work undertaken.

Robert Parkinson

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