

Phylogeny of *Parodia*, group *Wigginsia* (Cactaceae)

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Wigginsia is a section of the *Parodia* genus, with eight species, two subspecies, two varieties and two forms. It has a wide, disjunct distribution in South America: seven species are located in the south of Brazil, Uruguay, central and eastern Argentina, and one species in Colombia. Morphologically, they are distinguished as plants with solitary, depressed or globular stems, and with the flowers being borne from a mass of hairs located in the apex of the stems, called a pseudocephalium. The flowers are approximately 3 cm diameter, shining yellow with redpurple style; very similar to the flowers of *Notocactus*, partially overlapping its area, except for Colombia. On account of the similarity of its flowers and their stems, *Wigginsia* has been included in *Notocactus*, and the latter has been merged with *Parodia*. In the old sense, *Parodia* only included Andean species. Nevertheless, taxa of the *Wigginsia* section are distinguished by the presence of the pseudocephalium and the fruits. As well as the morphology, the phenology of the fruits differs remarkably from *Notocactus* (or *Parodia*); as the fruit remains within the pseudocephalium throughout the maturation period, which can take months, whereas those of *Parodia* sensu lato remain exposed and mature in few weeks. When the fruits of *Wigginsia* are maturing in favourable climatic conditions (temperature and humidity), intercalary growth of the walls occurs very rapidly; consequently the fruits emerge from the pseudocephalium. As a result of the intercalary growth, the hairs and bristles of that were present on the receptacle appear to be lost and the fruit seems nearly naked. In fact the areoles of the receptacle become widely separated and concentrated at the apex and base, with only a few in the middle part. A DNA analysis is being conducted with the aim of determining the phylogeny of the group and to elucidate whether or not it is part of the genus *Parodia* sensu lato.