A Review of the Origin and Development of the Florists’ Cineraria, *Senecio cruentus*

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In the latter part of the 18th Century, Francis Masson was sent out from Kew Gardens as a plant collector. While in the Canary Islands, he collected several endemic species of *Senecio*, some of which were introduced into cultivation at Kew in 1777, and others in 1780. It is from these plants that the complex assemblage of cultivars known as the “florists’ cineraria” has been derived (Aiton 1789, L’Héritier 1789, Gilmour, King and Williams 1963).

At the present time, the florists’ cineraria (hereafter referred to simply as cineraria) enters the florists’ trade as a pot-plant in late winter and spring. A potted cineraria retails usually for between $2 and $4, and, if reasonably well cared for, will persist for at least three weeks. Conversations with florists and nurserymen indicate that cinerarias are currently not so popular in America as they were in the past. There seems to be no particular or overriding reason for this, other than a change in the public’s tastes. A related factor may be that the plants are quite sensitive to temperature and will survive best if the temperature does not exceed 65°F, which is somewhat cooler than most Americans prefer to keep their homes. Most growers raise cinerarias in conjunction with other florist crops, with very few, if any, making cinerarias their prime concern.

It is the purpose of this paper to review the history of the origin and development of the cineraria. The attraction for studying the group is twofold; first, its developmental history has not previously been compiled; second, the group is nearly unique among well-developed cultivated complexes in that it is derived from a quite restricted group of insular endemics, all of which can be explored and studied experimentally. An investigation of the wild progenitors and the cultivated derivatives is currently in progress, and hopefully it will yield a more complete understanding of how a restricted gene pool can give rise to such a vast array of variation in cultivation.

This paper is based essentially on the literature and a review of pertinent herbarium specimens (in hbs NY, MO, US, Goucher College). It also incorporates the numerous subjective impressions gained while dealing with living materials of both the wild progenitors and the cultivated cinerarias in connection with an experimental breeding program. The findings of the experimental studies are to be reported in a later publication.

### The Progenitors

The ancestors of our present-day cineraria are members of the section *Pericallis* of the genus *Senecio* (*Compositae*) (Hoffman 1889, Muschler 1909). All members of this section are insular endemics, restricted to the Canary Islands (11 species), Madeira (1 species) and the Azores (1 species). The members of section *Pericallis* are distinguished from other Senecios by possessing palmately veined basal leaves, by the absence or near-absence of calyculate bracts, by having usually violet-purple to pink or white, or even ochroleucus, but never distinctly yellow flowers, and by their restricted distribution. Most members of the section are rather coarse, tough-based erect herbs, with more or less persistent basal parts which annually send up flowering stalks with one or more open racemose to paniculate inflorescences. One species, *Senecio heritieri*, is exceptional in that it is a subshrub and produces flowering heads individually on separate peduncles. Furthermore, all members of the section except *S. heritieri* have the entire corolla of each ray floret colored uniformly or nearly so throughout. In *S.*
heritieri, the outer portion of the ray corolla is colored, while the inner portion is white, giving the head a distinctive appearance. This condition is termed “eyed” in the horticultural literature. None of the pericallloid Senecios are particularly attractive plants when grown in pots. The cineraria complex of today is a tribute to some forgotten gardener’s insight into the ornamental potentialities of these wild plants.

Nomenclaturally, the pericallloid Senecios have had their woes. The earliest botanical treatment of members of the group was done by Charles-Louis L’Heritier, who in 1786-1787 studied living materials at Kew Gardens and dried materials in the herbarium of Sir Joseph Banks. L’Heritier described eight species that are currently regarded as pericallloid Senecios under the generic name Cineraria in his remarkable and fascinating book, Sertum Anglicum (1788). In 1837, DeCandolle transferred the group to Senecio, making a few nomenclatural changes at the specific level and adding one species.

The occurrence of the taxa under the generic names Doronicum and Pericallis is a little more involved. Apparently, in the preparation of the manuscript for Webb and Berthelot, Phytographie Canariensis, Webb transferred some species of Cineraria (i.e., Senecio) into Pericallis; however, he did not publish these transfers. Eventually, the final treatment of the Compositae for Webb and Berthelot was written by Schultz-Bipontinus, and he transferred some species from Cineraria into Doronicum, while leaving some in Senecio in accord with DeCandolle. However, in synonymy Schultz-Bipontinus published Webb’s Pericallis combinations. Regardless of the nomenclatural validity of these names, they have been widely used and indexed.

The question of generic disposition for the pericallloid Senecios must await a taxonomic revision of the group. Until such a time, it is doing the least violence both to the understanding of the biology of the group and to history to maintain De Candolle’s interpretation and to treat them as members of Senecio.

The pericallloid Senecios have been treated floristically by numerous writers, especially in the middle and late 19th Century. Ecological and distributional data are summarized in the works of Webb and Berthelot (1836-1850), Lowe (1858), Masferrer (1881), Christ (1883, 1888), Bornemueller (1904), Pitard and Proust (1908), and most recently, Lems (1956, 1960). It is from these publications, as well as from herbarium specimens, that the accompanying table has been compiled.

The Modern Cineraria

The cineraria, which is a horticultural derivative of the pericallloid Senecios, has the morphological marks of its ancestry and quite properly belongs to the section Pericallis. It encompasses much more variation than is shown by the totality of wild pericallloid Senecios. In stature and gross appearance, cinerarias vary from dwarf (3 dm high), compact, pincushion-like plants with the flowers arranged in a dome-shaped “truss” immediately above the leaves, to rather tall (1 m or more high) open plants with loose, pyramid-shaped inflorescences. The herbage tends to be glabrous or glabrate at maturity; however, the undersides of the leaves are pubescent when the plants are young. The flower heads are typical for Senecio, and except for teratologies, vary mainly in size and corolla color. There is some variation in type and abundance of glandular hairs on the involucral bracts, but this remains to be investigated. Size of the heads of most cultivars are 3 to 5 cm across. The corolla color intergrades completely from white to red to magenta-blue and deep purple. Occasional ochreoleous corollas are seen, but no truly yellow cinerarias are known. The disk corollas and the rays may be the same color, or the disks may be white or ochreoleous while the rays are colored, in which case the head is said to be “gold centered.” With ray corollas, the tips may be colored and the inner portion white; such heads are reminiscent of S. heritieri and are said to be “eyed.” The converse, i.e., white tips and colored inner portion of the ray, is unknown. Abnormalities which have been maintained in cultivation include double forms with more than one row of ray florets to “double” forms where the entire head consists of ray or abnormal ray-like corollas.

Whether or not the cineraria should be