

*Pierre-Joseph Redouté*

*“ Raphael of the Succulents ”*

# PIERRE-JOSEPH REDOUTÉ— “ RAPHAEL OF THE SUCCULENTS ”

With bibliographical and botanical details of over two hundred published plates.

By GORDON D. ROWLEY

No one, to my knowledge, has attempted a survey of famous illustrators of succulent plants, or laid down rules for our guidance on what constitutes a good picture of one. It seems to have been taken for granted that succulents differ in no wise from other garden plants in the demands they make on the botanical artist : if he excels at the one it is assumed that he will naturally excel at the other, too. This is but one of the many interesting points that arise in considering the work of one of the most gifted, fortunate, prolific and certainly the most popular of all botanical painters : Pierre-Joseph Redouté (1759-1840).

Since the invention of printing the scope of botanical illustration has ranged from woodcuts to lithographed plates ; from hand-coloured drawings to habitat photographs ; from the crudest inaccuracies and “ arty ” bouquets to volumes of plates so superbly drawn and reproduced that each one can be framed as a work of art and sold at a high price to collectors. A good published illustration of a plant is something to be marvelled at. It proclaims a concerted effort from a team of experts : a painter who is both artist and botanist, skilled engravers, block-makers and other technicians to reproduce his work with minimum distortion, and, most important of all, a sponsor willing to risk money on the whole costly proceeding. The fame of Redouté today—and to judge from current prices none of his rivals is more sought after—rests on just this rare coincidence of events. As Blunt has pointed out<sup>20</sup> Redouté is by no means the only claimant to the title of “ The Raphael of the Flowers, ” but his equals lacked the means to publish and popularise their work, or had to be content with inferior reproductions of it.

Pierre-Joseph Redouté was born in St. Hubert, Luxembourg, but spent much of his life in and around Paris. Historians describe him as short, thick-set, ugly and stumpy-fingered, betraying in his appearance little of the geniality, diligence, delicacy of touch and exquisite artistic sensibility that brought him renown, and had every aspiring artist in Paris longing to be his pupil. He studied botanical draughtsmanship in Paris under G. van Spaendonck, founder of the French school of flower painting which was to achieve unrivalled heights in the half-century preceding the death of Redouté and Turpin in 1840. His botanical training came mainly from C. L. L'Héritier, for many of whose books he did the illustrations. During the short period that Redouté held office as draughtsman to the cabinet of Queen Marie Antoinette an incident occurred that is our first record of his encounter with succulents, and may well have initiated the great work he was later to do on these plants. During her long imprisonment in the Temple, Marie Antoinette kept up her spirits by watching the daily growth of buds on a favourite night-blooming *Cereus*.<sup>22</sup> When the great day arrived for the first flower to open, Redouté was summoned and painted the flower at midnight before the assembled court and royal family. Doubtless the plant was *Selenicereus grandiflorus* : it would be interesting to know if the painting survives among the large collection of vellums in Paris. At all events, we can be sure that when L'Héritier later suggested to Redouté the idea of a book devoted to succulents, the artist responded eagerly. L'Héritier, for his part, felt the need of good pictures of succulents, as they were impossible to preserve adequately in herbaria and often flowered for brief periods only. Redouté had been experimenting on an improved method of colour-printing, and was glad of a chance to put it into practice. He combined stipple engraving, which allows the finest gradations of shading, with colour printing from a single plate which was re-inked after each impression. The result was then touched up by hand so that finally it had the appearance and merits of an original watercolour.

By the time the “ Plantes Grasses ” was contemplated, Redouté had gained the blessing of the Empress Josephine, who not only assembled a great collection of rare plants in her garden at Malmaison, but subsidised the publication of Redouté's paintings of them in books such as this and “ Les Liliacées ” (1802-16), “ Jardin de la Malmaison ” (1803-5), “ Descriptions des Plantes Rares Cultivées à Malmaison . . . ” (1812-7) and “ Les Roses ” (1817-24). All that was needed to complete the “ Plantes Grasses, ” the first of this noble series, was a botanist to write the text for each picture. L'Héritier, apparently, did not wish to do this himself. Here again fate played into their hands by conjuring up a keen, twenty-year-old Swiss student : Augustin Pyramus de Candolle, destined to become one of the great names in systematic botany.

Redouté enjoyed much popularity during his lifetime, and was little affected by the French Revolution and other political upheavals around him. By his own endeavours he earned fame and fortune, but he was not thrifty, and in later years was reduced to producing “ pot-boilers ” or selections of his earlier plates, and even to selling furniture and valuables to make ends meet. He died in poverty in his eighty-first year while sketching a vast flower painting that would have brought him fresh laurels and a temporary release from financial worries.

## PUBLISHED PLATES OF SUCCULENTS. I THE “ PLANTES GRASSES ”

Redouté's great work on succulents is the “ Plantes Grasses ” or “ Plantarum Succulentarum Historia ” authored by A. P. De Candolle, although at least four other works contain his illustrations of succulents and, ironically, by far the best of them. Publication of the “ Plantes Grasses ” began serially in 1799 (or perhaps December, 1798) in fascicles of six plates at a time with one page of text (rarely more) per plate. Both in pagination and collation the book has been a bibliographic nightmare. Up to 1805 things went fairly smoothly and 28 fascicles of the projected 50 appeared. Then a quarrel took place between De Candolle and the publisher Garnery over quite another matter, with the result that no further text was forthcoming and publication ceased. For a whole 24 years the two were estranged, but ultimately Garnery approached De Candolle again in 1829 and suggested a continuation of the work. The latter, having no wish to go on with the text, passed the task over to a younger botanist, Guillemin, so that on resumption three of the descriptions were by De Candolle and the rest bore Guillemin's initials. However, the continuation was brief and soon stopped altogether. Just how long it lasted, or what constitutes a complete copy of the “ Plantes Grasses, ” has been debated ever since. What seems to have happened is that a tailing off took place and in 1837 the firm of Garnery realised the end had come and decided to clear their stock of existing plates. To make up saleable copies fresh title pages (dated 1837) were printed, an index to fascicles 1-30, and probably a number of odd plates to complete sets. This last is clear from the very different quality of paper for certain plates in copies I have examined. In a very few cases they bound in extra plates which had been printed but never actually circulated. As found today the work is almost always incomplete, at least beyond fascicle 28 (page 159). The last published fascicle (No. 31) is excessively rare, but since at least four copies are known complete with pp. 172-7 of text, it must be assumed to have been published. The largest number of plates in any copy that I can find recorded is 92, and outside France there is such a set in the Library of the Royal Botanic Gardens at Kew. These four extra plates (a fifth is merely a duplicate of p. 88) beyond the published 187 are reproduced here for the first time (figs. 1-4) : I have seen no text for them or any indication that it was written.

PIERRE - JOSEPH REDOUTÉ—Four unpublished plates for “ Plantes Grasses ” (? Fascicle 32).



Fig. 1. *Piaranthus decorus* (Mass.) N.E.Br.



Fig. 2. *Sesuvium portulacastrum* L.



Fig. 3. Unidentifiable, perhaps fictitious  
(See footnote Page 12).



Fig. 4. *Crassula scabra* L.. minor Schönl.

The "Plantes Grasses" was issued in two sizes. The "large paper" issue has a sheet size of  $21\frac{1}{2} \times 14$  in. and came out in a limited edition of 100 copies. While it makes a magnificent collectors piece, the "small paper" issue is easier to handle and more convenient to botanists, as well as costing less. The text has been reduced in size, but the plates are exactly the same, and with narrower page margins ( $14 \times 10$  in.) present a more dramatic appearance to the eye, especially for tiny plants like *Tillaea* which are lost in a sea of white in the full folio page. The resetting of the text for the small paper edition has led to a few discrepancies of spelling between the two versions (as p. 83) and in critical cases both should be consulted. The wrappers for each fascicle give us the information that parts were sold at 50 francs, large paper, and 12 francs, small paper, but these covers were apparently printed in bulk each year as needed and the part number added by hand. Thus the dates they bear according to the old French calendar ("An. VIII", "An. X", "An. XI", "An. XII—1804" and "An. XIII—1804") seem to bear no relation to actual dates of issue, and the bland statement that "Il en paraîtra une chaque mois" ("It will appear one per month") was later dropped as extravagantly optimistic.

Further problems arise from the idiotic practice of not numbering the plates.<sup>21</sup> The only way in which plates can be referred to is via the number of the adjacent text, and by no means all copies are bound up in identical fashion. There are sometimes two or more text pages devoted to a single plant, in which case successive leaves repeat the page number with one or more asterisks. Sometimes, however, the asterisk has been forgotten on either the folio or quarto edition. In the following table numbers enclosed in square brackets are missing from one or both editions and are supplied here for convenience of future reference. Fortunately the indices give both fascicle and plate numbers.

In addition to text and plates, a "complete" copy of the book has a title page, half title, preface and index. At least two title pages (dated 1799 or 1837) exist and three indices (to fascicles 1-20, 1-24 and 1-30). From the different types it appears that a former owner sometimes printed his own index. Copies are often bound as two volumes, but "Vol. I" and "Vol. II" has no bibliographic significance, as the break varies and depends on the completeness of the whole set.

Since many species are described and illustrated for the first time, it is important to know the exact date of publication of each plate. This is now possible for most plates, thanks to Mr. W. T. Stearns' valuable collation<sup>18</sup> which is here slightly modified as a result of examining the unbound fascicles. For the issues after 1805 there is still some doubt: Steam gives the date as 1829, Nissen as 1828-31 and Lasègue as 1832. 1828 is certainly incorrect as De Candolle in his memoirs states that he did not hear from Garnery until 1829 regarding its continuation.<sup>23</sup>



A. P. DE CANDOLLE & P. -J. REDOUTE

Plantarum Succulentarum Historia  
ou  
Histoire Naturelle des Plantes Grasses

Collation of Plates

L = Large and S = Small paper editions

Fascicle and presumed date	Page	De Candolles name	Modern name	Authority
1	1	Crassula coccinea	<b>Rochea coccinea</b> (L.) D.C.	Harv. in Fl. Cap. II
Dec. 1798	2	Crassula acutifolia	<b>Crassula acutifolia</b> Lam.	Schonl.
or	3	Talinum anacampseros	<b>Anacampseros telephiastrum</b>	Berg.
Jan. 1799		(Portulaca anacampseros)	D. C,	
	4	Sedum aizoides	<b>Aichryson x domesticum</b> Praeg. <b>aizoides</b> (Lam.) Praeg.	Praeg
	5	Mesembryanthemuni calamiforme	<b>Cylindrophyllum calamiforme</b> (L) Schwant.	Berg. (as Mesem. calamiforme L.)
	6	Mesembryanthemum dolabriforme	<b>Rhombophyllum dolabriforme</b> (L.) Schwant.	Berg. (as Mesem. dolabriforme L.)
2	7	Crassula ciliata	<b>Crassula ciliata</b> L.	Schonl.
1799	8	Anthericum annuum	<b>Bulbine annua</b> (L.) Willd.	Bak. in Fl. Cap. VI
	9	Sesuvium portulacastrum	<b>Sesuvium portulacastrum</b> L. <b>sessile</b> G. Don	Don III
	10	Mesembryanthemum noctiflorum	<b>Aridaria noctiflora</b> (L.) N. E. Br.	N. E. Br. in J. Bot. 1928
	11	Mesembrianthemum aureum (Mesembryanthemum in S)	<b>Lampranthus aureus</b> (L.) N. E. Br.	Berg. as Mesem. aureum L.
	12	Cacalia kleinia	<b>Senecio kleinia</b> (L.) Less.	Berg. as Kleinia neriifolia Haw.
3	13	Crassula perfoliata	<b>Crassula perfoliata</b> L.	Schonl
1799	14	Anthericum frutescens (Bulbine caulescens) Fig. 5	<b>Bulbine caulescens</b> L.	Bak. in Fl. Cap. VI
	15	Aloe rubescens	<b>Aloe vera</b> L. <b>officinalis</b> (Forsk.) Bak.	Berg.
	16	Aloe viscosa	<b>Haworthia viscosa</b> (L.) Haw.	Berg.
	17	Mesembryanthemum geniculiflorum	<b>Aridaria geniculiflora</b> (L.) N. E. Br.	N. E. Br. in J. Bot. 1928
	18	Cacalia laciniata	<b>Senecio articulatus</b> (L.f.) Sch. Bip.	Berg as Kleinia artirulata (L.f.) Haw.
4	19	Crassula tetragona	<b>Crassula tetragona</b> L.	Schonl.
1799	20	Yucca aloifolia	<b>Yucca aloifolia</b> L.	Trelease in 13th Ann. Rep. Miss. Bot Gdn. 1902, 88.
	21	Aloe variegata	<b>Aloe variegata</b> L.	Reyn.
	22	Sedum album	<b>Sedum album</b> L.	Praeg.
	23	Tetragonia decumbens	<b>Tetragonia decumbens</b> Mill. ovalifolia Sond.	Sond. in Fl. Cap. II
	24	Mesembryanthemum echinatum (M. ech. luteum on S plate)	<b>Delosperma echinatum</b> (Ait.) Schwant.	Berg. as Mesem. echinatum Ait.
5	25	Crassula perfossa	<b>Crassula perfossa</b> Lam.	Higgins in Nat. Cact. & Suct J. X. 1955. 29.
1800				

Fascicle and presumed date	Page	De Candolles name	Modern name	Authority
	26	Anthericum alooides	<b>Bulbine alooides</b> (L.) Willd.	
	27	Aloe vulgaris	<b>Aloe abyssinica</b> Lam.	Berg
	27*			
	27**			
	28	Mesembryanthemum barbatum	<b>Trichodiadema barbatum</b> (L.) Schwant.	Berg. as Mesem. barbatum L
	29	Mesembryanthemum stellatum	<b>Trichodiadema hirsutum</b> (Haw.) Stearn	Stearn N. E. Br. MSS as M hirsutum Haw.
	30	Aizoon hispanicum (Airoon h. on plate)	<b>Aizoon hispanicum</b> L.	Don III
6 1800	31	Aloe marginalis	<b>Lomatophyllum purpureum</b> (Lam.) Dur.	Berg.
	32	Aloe ferox	<b>Aloe ferox</b> Mill.	Reyn
	33	Sedum anacampseros	<b>Sedum anacampseros</b> L.	Praeg
	34	Tetragonia crystallina	<b>Tetragonia crystallina</b> L'Her.	Don III
	35	Mesembryanthemum splendens	<b>Andana plenifolia</b> (N. E. Br.) Stearn	N. E. Br. in J. Bat 1928 as A. fastigiata (Haw.) N. E. Br.
	36	Mesembryanthemum veruculatum	<b>Ruschia verruculata</b> (L.) Rowl.	See †
7 1800	37	Crassula lactea	<b>Crassula lactea</b> Alt.	Schonl.
	38	Aloe arborescens	<b>Aloe arborescens</b> Mill.	Reyn.
	39	Aloe humilis	<b>Aloe humilis</b> (L.) Mill.	Reyn.
	40	Sedum altissimum (Sempervivum sediforme)	<b>Sedum sediforme</b> (Jacq.) Pau	Praeg. (as Sedum altissimum Poir.)
	41	Mesembryanthemum bellidiflorum	<b>Acrodon subulatus</b> (Mill.) N. E. Br.	N. E. Br. in J. Bot. 1928
	42	Cacalia repens	<b>Senecio serpens</b> Rowl.	Berg. as Kleinia repens (L.) Haw.
8 1800	43	Crassula orbicularis	<b>Crassula orbicularis</b> L.	Schonl.
	44	Aloe rhodacantha	<b>Aloe glauca</b> Mill.	Reyn.
	45	Aloe retusa	<b>Haworthia retusa</b> (L.) Haw.	Berg.
	46	Euphorbia neriifolia	<b>Euphorbia neriifolia</b> L.	Berg.
	47	Mesembryanthemum expansum	<b>Prenia pallens</b> (Ait.) N. E. Br.	N. E. Br. in G.C 1928; see also Bothalia I, 1922. 157
9 1800	48	Cacalia cylindrica	<b>Othonna cylindrica</b> (Lam.) D.C.	Berg.
	49	Crassula spatulata	<b>Crassula spatulata</b> Thunb.	Schonl.
	50	Aloe arachnoides	<b>Haworthia arachnoides</b> (Ait.) Haw.	Berg.
	51	Aloe atrovirens	<b>Haworthia herbacea</b> (Mill.) Stearn	Stearn
	52	Cactus grandiflorus	<b>Selenicereus grandiflorus</b> (L.) Br. & R.	Br. & R.
	53	Mesembryanthemum deltoides	<b>Oscularia majus</b> (West.) Schwant.	N. E. Br in J.L.S. 1920, 118 as Mesem. del- toides L. majus Weston
	54	Mesembryanthemum uncinatum	<b>Ruschia uncinata</b> (Mill.) Schwant.	Sond. in Fl. Cap. II as Mesem. uncinatum Mill.

†*Ruschia verruculata* (L.) Rowl. n. comb.

= *Mesembryanthemum verruculatum* L. in Sp. Plant. Edn. I, 1753, 486 ; Haw. in Misc. Nat. 1803. 81 ; Syn. Plant. Succ. 1812, 238-8 ; Revis. Plant. Succ. 1821, 155 (incl.  $\alpha$  *dillenii* and  $\beta$  *candollii*) ; Sond. in Fl. Cap. II, 1862, 428 ; Berg. in Mesem. & Port. 1908, 126-7 ; L. Bolus in Notes on Mesem. I, 1928, 57

Fascicle and presumed date	Page	De Candolles name	Modern name	Authority
10	55	<i>Crassula rubens</i>	<b><i>Sedum rubens</i></b> L.	Praeg.
Dec. 1800	56	<i>Aloe spiralis</i>	<b><i>Astroloba spiralis</i></b> (L.) Uitew.	Berg. as <i>Apicra spiralis</i> (L.) Balk.
or				
Jan. 1801	57	<i>Aloe margaritifera</i>	<b><i>Haworthia margaritifera</i></b> (L.) Haw. minima (Ait.) Uitew.	Berg. as <i>Haworthia margaritifera</i> (L.) Haw.
	58	<i>Cactus peruvianus</i>	<b><i>Cereus peruvianus</i></b> (L.) Mill.	Salm-Dyck in <i>Cact</i> in Hort. Dyck 1849. 46 as <i>Cereus peruvianus</i> Tabern.
	59	<i>Cactus parasiticus</i>	<b><i>Rhipsalis fasciculata</i></b> (Willd.) Haw.	Br. & R.
	60	<i>Mesembryanthemum filamentosum</i>	<b><i>Erepisia mutabilis</i></b> (Haw.) Schwant.	Berg. & N. E. Br. MSS. as <i>Mesem. mutabile</i> Haw.
11	61	<i>Crassula obvallata</i>	<b><i>Crassula obvallata</i></b> L.	Schonl.
1801	62	<i>Aloe rigida</i>	<b><i>Haworthia rigida</i></b> (D.C.) Haw.	Berg
	63	<i>Aloe carinata</i>	<b><i>Gasteria verrucosa</i></b> (Mill.) Haw.	Berg.
	64	<i>Kalanchoe aegyptiaca</i>	<b><i>Kalanchoe aegyptiaca</i></b> † D.C.	Berg
	65	<i>Kalanchoe spathulata</i>	<b><i>Kalanchoe spathulata</i></b> † D.C.	Berg.
	66	<i>Mesembryanthemum hispidum</i>	<b><i>Drosanthemum hispidum</i></b> (L.) Schwant.	Berg. as <i>Mesem. hispidum</i> L.
12	67	<i>Crassula glomerata</i>	<b><i>Crassula glomerata</i></b> L.	Schonl. (as " t.57 ")
1801	68	<i>Aloe linguiformis</i>	<b><i>Gasteria sulcata</i></b> (S.D.) Haw.†† ?	
	[68*]	<i>Aloe linguiformis verrucosa</i>	<b><i>Gasteria angustifolia</i></b> (Ait.) Haw.	N. E. Br. MSS.
	69	<i>Cotyledon hispida</i> (C. mucizorria)	<b><i>Mucizonia hispida</i></b> (Lam.) Berg.	
	70	<i>Sedum villosum</i>	<b><i>Sedum villosum</i></b> L.	Praeg.
	71	<i>Mesembryanthemum linguiforme</i>	<b><i>Glottiphyllum longum</i></b> (Haw.) N. E. Br.	N. E. Br. in J.L.S 1920
	72	<i>Mesembryanthemum pugioniforme</i>	<b><i>Conicosia</i></b> sp. aff. <b><i>fusiformis</i></b> N. E. Br.	N. E. Br. in G.C. 1932
13	73	<i>Tillaea muscosa</i>	<b><i>Crassula muscosa</i></b> (L.) Roth.	Don III as <i>Tillaea muscosa</i> L.
1801	74	<i>Bulliarda vaillantii</i> ( <i>Tillaea aquatica</i> Lam non L. ; <i>T. vaillantii</i> Willd.)	<b><i>Crassula vaillantii</i></b> (Willd.) Roth	Schonl.
	75	<i>Aloe plicatilis</i>	<b><i>Aloe plicatilis</i></b> (L.) Mill.	Reyn.
	76	<i>Cotyledon orbiculata</i>	<b><i>Cotyledon orbiculata</i></b> L.	Harv. in Fl. Cap II
	77	<i>Euphorbia officinarum</i>	<b><i>Euphorbia officinarum</i></b> L.‡	Berg.
	77*			
	78	<i>Mesembryanthemum tuberosum</i>	<b><i>Mestoklema</i></b> sp. aff. <b><i>tuberosum</i></b> (L.) N. E. Br.	N. E. Br. in G.C. 1936
14	79	<i>Crassula portulacea</i>	<b><i>Crassula argentea</i></b> Thunb.	Schonl.
1801	80	<i>Aloe serra</i>	<b><i>Aloe brevifolia</i></b> Mill. <b><i>depressa</i></b> (Haw.) Bak.	Reyn.
	81	<i>Aloe brevifolia</i>	<b><i>Aloe brevifolia</i></b> Mill.	Reyn. non N. E. Br.‡
	82	<i>Mesembryanthemum tenuifolium</i>	<b><i>Lampranthus tenuifolius</i></b> (L.) Schwant.	Berg. as <i>Mesem. tenuifolium</i> L.

† Referred to synonymy under *K. laciniata* (L.) D.C. by R. Hamet ; to *K. crenata* Haw. by Britten in Fl. Trop. Afr. II. 395.

†† Baker refers this plate to *G. disticha* Haw. in Fl. Cap. VI ; Berger doubtfully assigns it to *G. angustifolia* (Ait.) Haw.

‡ See L. Croizat " De *Euphorbia Antiquorum* " 1934, 95.

§ " Not of Miller, which has the leaves spaced, amplexicaul, and spotted with white and spiny on the upper surface. " N. E. Br. MSS.

Fascicle and presumed date	Page	De Candolles name	Modern name	Authority
	83	Mesembryanthemum coccineum†	<b>Lampranthus coccineus</b> (Haw.) N. E. Br.	Berg. as Mesem. coccineum Haw.
	84	Mesembryanthemum violaceum	<b>Lampranthus violaceus</b> (D.C.) Schwant.	Sond. in Fl. Cap. II as Mesem. violaceum D. C.
15 1801 or 1802	85 [85*]	Aloe soccotrina	<b>Aloe succotrina</b> Lam.	Reyn.
	86	Cotyledon tuberculosa	<b>Cotyledon grandiflora</b> Burm. f.	N. E. Br. MSS
	87	Cotyledon hemisphaerica	<b>Adromischus hemisphaericus</b> (L.) Lem.	Berg.
	88	Mesembryanthemum nodiflorum	<b>Mesembryanthemum nodiflorum</b> L.	N. E. Br. in G.C. 1928 as Cryophytum nodiflorum (L.) N. E. Br.
	89	Mesembryanthemum acinaciforme	<b>Semnanthe lacera</b> (Haw.) N. E. Br.	N. E. Br. MSS syn. Mesem. dimidiatum Haw.
	90	Cacalia ficoidea	<b>Senecio ficoides</b> (L.) Sch. Bip.	Berg. as Kleinia ficoidea (L.) Haw.
16 1802	91 92 [92*]	Aloe obliqua Sedum telephium	<b>Gasteria pulchra</b> (Aft.) Haw. <b>Sedum telephium</b> L. <b>telephium</b>	Berg. Praeg. as S. telephium L. purpureum (Link) Praeg.
	93	Sedum dasyphyllum	<b>Sedum dasyphyllum</b> L.	Don III. Untypical, over-grown plant.
	94	Mesembryanthemum tortuosum	<b>Sceletium expansum</b> (L.) L. Bol.	Berg. and N. E. Br. MSS. as Mesem. expansum L.
	95	Mesembryanthemum caninum	<b>Carruanthus caninus</b> (Haw.) Schwant.	N. E. Br. in J. Bot 1928
	96	Pelargonium tetragonum (Geranium tetragonum)	<b>Pelargonium tetragonum</b> (L.f.) L'Her.	Harv. in Fl. Cap. I
17 1802	97	Aloe picta	<b>Aloe</b> sp. aff. <b>saponaria</b> (Ait.) Haw.	Reyn. (p. 290)
	98	Aloe umbellata	<b>Aloe saponaria</b> (Ait.) Haw.	Reyn.
	99	Aloe mitraeformia (A. mitriformis)	<b>Aloe mitriformis</b> Mill.	Reyn.
	100	Kalanchoe laciniata (Cotyledon laciniata)	<b>Kalanchoe laciniata</b> (L.) D.C.	Berg.
	101	Sedum aizoon	<b>Sedum aizoon</b> L.	Praeg.
	102	Mesembryanthemum cordifolium	<b>Aptenia cordifolia</b> (L.f.) N. E. Br.	N. E. Br. in G.C 1928
18 1802	103	Rochea falcata	<b>Crassula falcata</b> Wendl.	Schonl.
	104	Sempervivum tectorum	<b>Sempervivum tectorum</b> L.	Praeg.
	105	Sempervivum montanum	<b>Sempervivum montanum</b> L.	Praeg.
	106	Sempervivum arachnoideum	<b>Sempervivum arachnoideum</b> L.	Praeg.
	107	Sempervivum hirtum	<b>Sempervivum hirtum</b> L.	Praeg.
	108	Mesembryanthemum corniculatum	<b>Cephalophyllum loreum</b> (L.) Schwant.	Sond. in Fl. Cap II as Mesem. corrilculatum L.
19 1803	109	Trianthema monogyna (T. portulacastrum)	<b>Trianthema monogyna</b> L.	Don III
	110	Sedum populifolium	<b>Sedum populifolium</b> Pall.	Praeg.

† Text of some copies of large paper edition only headed “ Mesembryanthemum croceum D.C. ” in error.



Fascicle and presumed date	Page	De Candolles name	Modern name	Authority
	111 111*	Cactus mammillaris	<b>Mammillaria simplex</b> Haw.	Br. & R. as Neo-mammillaria mammillaris (L.) Br. & R.
	112	Cactus melocactus	<b>Melocactus communis</b> Lk. & Otto	Br. & R. as Cactus melocactus L.
	113	Tetragonia echinata (T. herbacea)	<b>Tetragonia echinata</b> Alt.	Sond. in Fl. Cap II
	114	Tetragonia expansa	<b>Tetragonia tetragonoides</b> (Pallas) Kuntze	Don III as T. expansa Ait.
20	115	Sedum rupestre	<b>Sedum reflexum</b> L.	N. E. Br. MSS.
1803	116	Sedum reflexum	<b>Sedum rupestre</b> L.	N. E. Br. MSS non Praeg.
	[117] (as " 17 " in L.) 117*	Sedum acre	<b>Sedum acre</b> L.	Praeg.
	118	Sedum sexangulare	<b>Sedum sexangulare</b> L.	Praeg.
	119	Sedum saxatile	<b>Sedum annuum</b> L.	Praeg
	120	Sedum atratum	<b>Sedum atratum</b> L.	Don III
21	121	Crassula cordata	<b>Crassula cordata</b> Thumb.	Schonl.
1803	122	Cotyledon hispanica (Cotyledon pistorinia)	<b>Pistorinia hispanica</b> (L.) D.C.	Berg
	123 123*	Portulaca oleracea	<b>Portulaca oleracea</b> L.	Sond in. Fl. Cap. II
	124	Euphorbia lophogona	<b>Euphorbia lophogona</b> Lam.	
	125	Sempervivum arboreum Inflorescence	<b>Aeonium arboreum</b> (L.) Webb & Berth.	Praeg.
	125*	Do. Branches		
22	126	Furcraea gigantea (Agave foetida) Flowering plant	<b>Furcraea cubensis</b> Vent. <b>inermis</b> Bak.	J. R. Drummond in 18th Ann. Rep. Miss. Bot. Gdn. 1907. 72
1803	126*	Do. Flower details		
	127	Cactus flagelliformis (" flagilliformis on plate)	<b>Aporocactus flagelliformis</b> (L.) Lem.	Br. & R.
	128	Mesembryanthemum crystallinum	<b>Mesembryanthemum crystallinum</b> L.	N. E. Br. in G. C. 1928 as Cryophytum crystallinum (L.) N. E. Br.
	128*			
	129	Mesembryanthemum brachiatum	<b>Drosanthemum nitidum</b> (Haw.) Schwant.	N. E. Br. in J. Bot. 1928 as Andaria nitida (Haw.) N. E. Br.
	130	Mesembryanthemum striatum	<b>Drosanthemum pallens</b> (Haw.) Schwant.	Berg. as Mesem. striatum $\alpha$ pallidum D.C
23	131	Claytonia virginica	<b>Claytonia grandiflora</b> Sweet	Don III
1803	132	Portulacaria afra (Claytonia portulacaria)	<b>Portulacaria afra</b> Jacq.	Berg.
	133	Crassula nudicaulis	<b>Crassula nudicaulis</b> L.	Schonl., who says : " Evidently grown in a damp atmosphere . . . "
	134	Mesembryanthemum cuneifolium	<b>Micropterum cuneifolium</b> (Jacq.) Schwant.	
	135	Mesembryanthemum helianthoides	<b>Carpanthea calendulacea</b> (Haw.) L. Bol.	N. E. Br. MSS.†

† " Carpanthea candollei N. E. Br. (Mesemb. candollei Haw.) "

" = Macrocaulon candollei N. E. Br. This plate was published after 1806. " Brown does not, however, indicate what the justification is for this later date.

Fascicle and presumed date	Page	De Candolles name	Modern name	Authority	
24 1804	136	Aizoon canariense	<b>Aizoon canariense</b> L.	Sond. in Fi. Cap II	
	137	Cactus coccinellifer ("cochenillifer on plates) In flower	<b>Opuntia tomentosa</b> S.D.	Br. & R. "fide Berger.	
25 1804	137*	In fruit			
	138	Cactus opuntia nana	<b>Opuntia humifusa</b> Rafin.	Br. & R. as Opuntia opuntia (L.) Karst	
	138*	Cactus opuntia tuna	<b>Opuntia vulgaris</b> Mill.	Br. & R.	
	[138**]	Cactus opuntia inermis	<b>Opuntia stricta</b> Haw.	Br. & R.	
	[138***]	Cactus opuntia polyanthos	<b>Opuntia tuna</b> (L.) Mill.	Br. & R.	
	139	Euphorbia meloformis ("Euforbia " on L text)	<b>Euphorbia infausta</b> N. E. Br.	N. E. Br. in Fl. Cap V	
	140	Euphorbia canariensis Habit	<b>Euphorbia canariensis</b> L.	Berg	
	140*	Do. Stem and flower close-up			
	141	Sempervivum canariense Inflorescence	<b>Aeonium canariense</b> (L.) Webb & Berth.	Praeg.	
	[141*]	Do. Barren rosette			
	26 1804	142	Mesembryanthemum pinnatifidum	<b>Micropterum pinnatifidum</b> (L.f.) Schwant.	Berg as Mesem. pinnatifidurn LI.
143		Sedum rhodiola (Rhodiola rosea) Male plant	<b>Sedum rosea</b> Scop.	Praeg. as Sedum roseum Scop.	
143*		Female plant			
144		Euphorbia tridentata (E. anacantha Ait.)	<b>Euphorbia tridentata</b> Lam.	N. E. Br. in Fl. Cap V	
145		Cactus phyllanthus (page heading) Cactus phyllanthus (in syns. and on plate)	<b>Epiphyllum phyllanthus</b> (L.) Haw.	Br & R	
146		Mesembryanthemum glaucum ("claucum " on S text)	<b>Lampranthus glaucus</b> (L.) N. E. Br.	Berg. as Mesem. glaucum L.	
147		Mesembryanthemum longistylum ("longiftylum " on S text)	<b>Aridaria reflexa</b> (Haw.) N. E. Br.	N. E. Br. in J. Bot. 1928	
27 1804		148 Stapelia cespitosa	<b>Duvalia radiata</b> (Sims)	W. & S. ; N. E. Br.	
or 1805		148*	(in text) Stapelia coespitosa (on plate)	Haw. <b>hirtella</b> (Jacq.) W. & S.	MSS. as "D. hirtella non D. coespitosa."
		149	Stapelia variegata	<b>Stapelia variegata</b> L. <b>planiflora</b> (Jacq.) N. E. Br.	N. E. Br. in Fl. Cap. IV
28 1805	150	Euphorbia caput-medusae	<b>Euphorbia bergeri</b> N. E. Br.	N. E. Br. in Fl. Cap. V	
	151	Euphorbia uncinata	<b>Euphorbia stellata</b> Willd.	N. E. Br. in Fl. Cap. V	
	152	Mesembryanthemum felinum	<b>Faucaria felina</b> (West.) Schwant.	N. E. Br. in J.L.S. 1920 as Mesem. felinum Hill.	
	153	Mesembryanthemum spectabile	<b>Lampranthus spectabilis</b> (Haw.) N. E. Br.	Berg. as Mesem. spectabile Haw.	
	154	Zygophyllum album	<b>Zygophyllum album</b> L.f.	Don I	
	155	Sedum nudum	<b>Sedum nudum</b> Ait.	Praeg.	
	156	Sempervivum tortuosum	<b>Aichryson x domesticum</b> Praeg.†	Praeg.	

† N. E. Br. MSS. : "D.C. not of Ait. S. lindleyi Webb " (= Aeonium lindleyi Webb & Berth.).

Fascicle and presumed date	Page	De Candolles name	Modern name	Authority
	157	Sempervivum monanthos	<b>Monanthes polyphylla</b> Haw.	Praeg.
	158	Mesembryanthemum micans	<b>Drosantheum micans</b> (L.) Schwant.	Berg. as Mesem. micans L. " t. 167 "
	159	Mesembryanthemum viridiflorum	<b>Aridaria viridiflora</b> (Ait.) L. Bol.	N. E. Br. in G.C. 1928 as Sphalmanthus viridiflorus (Ait.) N. E. Br.
29 ?	[160]	Scapelia hirsuta	<b>Stapelia hirsuta</b> L.	N. E. Br. in Fl. Cap. IV " not seen. "
1829 plates ; 1832 text	[161]	Cactus royeri (C. lanuginosus)	<b>Harrisia gracilis</b> (Mill.) Br. & R.	Salm-Dyck in Cact. in Hort. Dyck. 1849, 44 as Cereus repandus Haw. non L.
	162	Umbilicus pendulinus	<b>Umbilicus rupestris</b> (Salisb.) Dandy 1948, 622	Dandy in Riddelsdell Flora of Gloucs.
	[163]	Anchericum asphodeloides	<b>Bulbine asphodeloides</b> (L.) Spreng.	
	[164]	Mesembryanthemum lateriflorum	<b>Drosantheum erigeriflorum</b> (Jacq.) Steam	Stearn
	[165]	Mesembryanthemum scabrum	<b>Lampranthus scaber</b> (L.) N. E. Br.	
30	166	Stapelia asterias	<b>Stapelia asterias</b> Mass.	N. E. Br. in Fl. Cap IV
1829 plates ; 1832 text	167	Stapelia reticulata (Huernia reticulata)	<b>Huernia reticulata</b> (Mass.) Haw.	
	168	Cotyledon unguolata	<b>Cotyledon decussata</b> Simst†	
	169	Mesembryanthemum albidum	<b>Machairophyllum albidum</b> (L.) Schwanc.	
	170	Mesembryanthemum tuberculacum (M. hispifolium)	<b>Drosantheum hispifolium</b> (Haw.) Schwant.	Sond. in Fl. Cap. II as Mesem. striatum Haw. ♂ hispifolium S. D.
	171	Mesembryanthemum radicans	<b>Disphyma australe</b> (Sol.) N. E. Br.	
31 ?	172	Stapelia grandiflora	<b>Stapelia grandiflora</b> Mass.	N. E. Br in Fl. Cap. IV
1829 plates	173	Talinum patens (T. paniculata Porculaca patens ; P. paniculata Rulingia patens)	<b>Talinum patens</b> Willd.	
1832 to 1837 text	174	Kalanchoe crenata (Kalanchoe in L text)	<b>Kalanchoe crenata</b> Haw,	
	175	Reaumuria vermiculata	<b>Reaumuria vermiculata</b> L.	
	176	Mesembryanthemum lacerum (M. miller ; M. gladiatum)	<b>Semnanthe lacera</b> (Haw.) N. E. Br.	
	177	Mesembryanthemum crassifolium	<b>Disphyma crassifolia</b> (L.) L. Bol.	Berg. as Mesem. crassifolium L. " t.175. "
[32]	[178]	Stapelia punccata Fig. I	<b>Piaranthus decorus</b> (Mass.) N. E. Br.	

† N. E. Br. MSS. : " C. spuria L. "

Fascicle and presumed date	Page	De Candolles name	Modern name	Authority
? never issued	[179]	Sesuvium revolutum Fig. 2	<b>Sesuvium portulacastrum</b> L.	Kew Index
No text seen	[180]	Agave vivipara Fig. 3		? Artistic chimera†
	[181]	Mesembryanthemum apetalum	<b>Mesembryanthemum nodiflorum</b> L.	
	[182]	Crassula scabra brevifolia Fig. 4	<b>Crassula scabra</b> L. <b>minor</b> Schonl.	

Unidentifiable : probably a rejected or suppressed plate. Mr. E. W. Macdonald has kindly compared this with the fine Agave collection at Kew for me and we agree that the rosette is not *A. vivipara* of any author. The inflorescence (which looks more like *Sempervivum* than any Agavaceae) was probably added to the original painting later from some misunderstanding between botanist and artist.

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- 4 1910 Stapelien und Kleinien
- 5 1915 Die Agaven
- 6 1930 Crassulaceae
- 7 Br. & R. N. L. BRITTON & J. N. ROSE, 1919-23 The Cactaceae
- 8 Don = GEORGE DON, 1831-8 General History of the Dichlamydeous Plants, 4 Vols. (Volume stated as I, II, III or IV).
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(Volume stated as I, II, etc.)
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- 14 Praeg. = R. L. PRAEGER, 1921 in J. Roy. Hort. Soc. XLVI, 1-314
- 15 1932 An Account of the Sempervivum Group.
- 16 Reyn. = G. W. REYNOLDS, 1950 The Aloes of South Africa.
- 17 Schonl. = S. SCHONLAND, 1929 in Trans. Roy. Soc. S. Afr. XVII, 151.293.
- 18 Stearn = W. T. STEARN, 1938-9 in Cactus J. Gt. Brit. VII, 34-44, 66-85.
- 19 W. & S. = A. WHITE & B. L. SLOANE, 1937 The Stapelieae.

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Numbers refer to the plates of the *Plantes Grasses*, although actually printed on the adjacent text pages.

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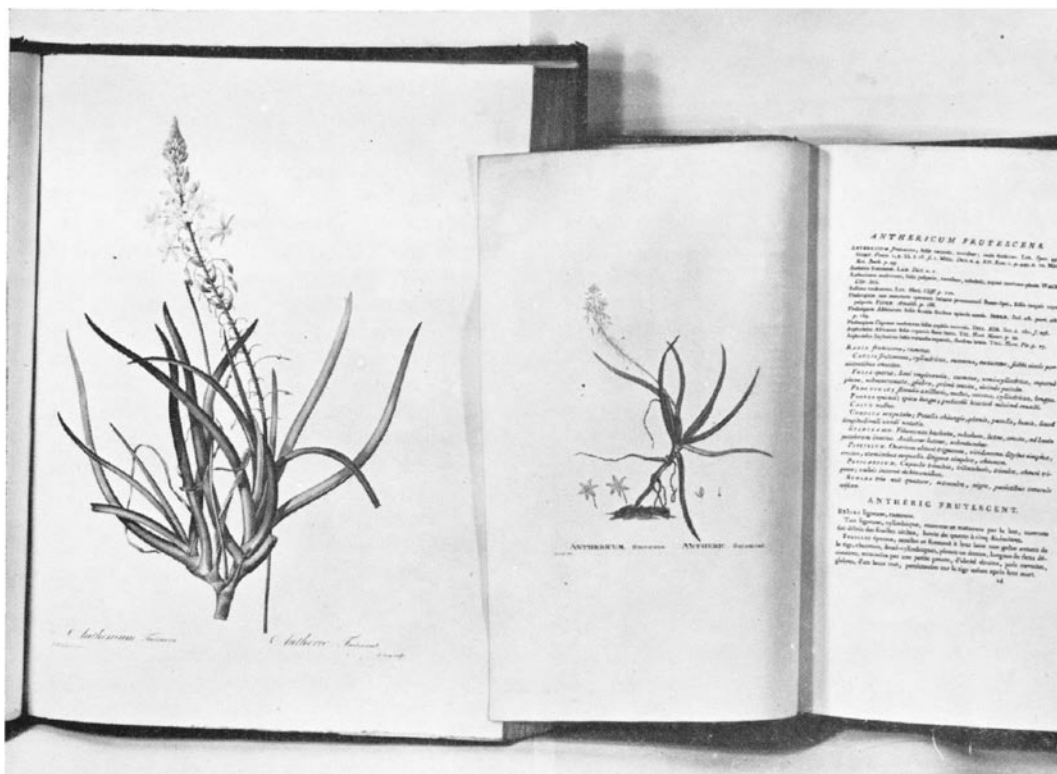


Fig. 5. PIERRE-JOSEPH REDOUTÉ—" Les Liliacées " (left) and " Plantes Grasses " (right). The same plant. *Bulbine caulescens* L., showing the gain in effect from the larger plate size

## II. OTHER ILLUSTRATIONS OF SUCCULENTS

The " Plantes Grasses " came as a welcome answer to Haworth's plea that his own monographs of succulents would one day be supplemented by illustrations. In turn these beautiful plates were to act as a source of inspiration to others. One such was the young Prince Salm-Dyck, who was so impressed with them that he became a friend and pupil of Redouté and eventually produced a splendid " Monographia Generum Aloes et Mesembryanthemi " with 352 illustrations, all by his own hand.<sup>18</sup>

However, Redouté produced other works beside which even the " Plantes Grasses " was eclipsed in grandeur and opulence. Two reasons contribute to this eclipse. The first is the plants themselves. Succulents do not lend themselves to the flamboyance of display of lilies and roses, and while offering a greater challenge to the artist the result has less immediate and universal an appeal to the public eye. Second, and in part as a result of this, the other books mostly adopted (at least in their de luxe editions) a large page and plate size. Just how great a difference this can make is seen by comparing side by side the succulents figured in both " Les Plantes Grasses " and the large paper edition of " Les Liliacées " (Fig. 5). In every case the plate in the latter work is double the size and has a wealth of minute detail and shading, a superb sweep and splendour that make its counterpart seem mean and pinched by comparison, in spite of the inclusion here of dissections and enlargements to add botanical interest in the smaller book. The eight succulents included in this work are :—

P. -J. REDOUTE		Les Liliacées*	1802-16	8 Vols.	
		Text by A. P. De CANDOLLE et alia.			
Vol.	Plate	De Candolle's name	Modern name		Authority
5	[283]	Anthericum alooides (plate)	<b>Bulbine alooides</b>		Bak. in Fi. Cap. VI
		Anthericum abides (text)	(L.) Willd.		
		(cf. Pl. Gr. 26)			

\* It would be churlish and ungentlemanly to ask what Agaves and Furcraeas are doing in a book entitled Liliaceae.

An artist of Redouté's standing could get away with Bananas and Pondweeds in the Lily family if he wanted to—in fact, he actually does ! (Plates 443-4. 206). One glance at this sumptuous production and all such quibbles dissolve like icicles before a furnace.



Fig. 6. PIERRE-JOSEPH REDOUTÉ — “ Les Liliacées ” *Agave brachystachys* Cav.

Vol.	Plate	De Candolle's name	Modern name	Authority
	[284]	Anthericum frutescens (cf. Pl. Gr. 14) Fig. 5	<b>Bulbine caulescens</b> L.	Bak. in Fl. Cap. VI
6	328 329	<i>Agave yuccaefolia</i>	<b>Agave yuccaefolia</b> D. C.	Berg.
7	[397]	Anthericum annuum (cf. Pl. Gr. 8)	<b>Bulbine annua</b> (L.) Willd.	Bak. in Fl. Cap. VI
	[401- [402]	<i>Yucca aloifolia</i> (cf. Pl. Gr.20)	<b>Yucca aloifolia</b> L.	Trelease in 13th Ann. Rep. Miss. Bot. Gdn. 1902, 88.
8	[423]	Anthericum longiscapum	<b>Bulbine altissima</b> (Mill.) Fourc.	Bak. in Fl. Cap. VI as <i>B. longiscapa</i> Willd.
	[476]	<i>Furcraea gigantea</i> (non Pl. Gr.126, 126*)	<b>Furcraea gigantea</b> Vent.	J. R. Drummond in 18th Ann. Rep. Miss. Bot. Gdn. 1907, 72.
	[485]	<i>Agave spicata</i> Fig. 6	<b>Agave brachystachys</b> Cav.	Berg.

The same work contains superlative portraits of Bromeliads, Sansevierias and other occasional inhabitants of succulent collections.

Redouté's first published coloured illustration of a succulent seems to be that of *Cocalia articulata* L. (= *Senecio articulatus* (L) Sch. Bip. ; c.f. Pl. Gr. 18), the well-known "Candle Plant." It appears as Plate LXXXIII of L'HÉRITIER'S "Stirpes Novae aut minus cognitae illustravit," a beautiful flower album of 90 plates published in Paris in 1784-5, of which 54 of the plates are signed by Redouté. The plant is accurately portrayed although a little drawn up by lush cultivation. No other succulents are in this book.



Fig. 8. *Nyctocereus serpentinus*  
(Lag. & Rodr.) Br. & R.



Fig. 7. *Nopalxochia phyllanthoides* (D.C.) Br. & R.

PIERRE-JOSEPH REDOUTÉ—Cacti from Bonpland's "Description des Plantes Rare ; . . .".

The finest of his cactus studies are two plates in a folio volume by BONPLAND. "Description des Plantes rares cultivées à Malmaison et à Navarre" (Figs. 7-8). This came out in parts between 1812 and 1817, and 54 of its 64 coloured plates are by Redouté. The succulents are :—

Plate	Date	Bonpland's name	Modern name	Authority
3	1812	Cactus speciosus Fig. 7	<b>Nopalxochia phyllanthoides</b> (D.C.) Br. & R.	Br. & R.
36	1814	Cactus smbiguus Fig. 8	<b>Nyctocereus serpentinus</b> (Lag. & Rodr.) Br. & R.	Br. & R.
37	1814	Cotyledon tardiflorum	<b>Cotyledon paniculata</b> L.f.	N. E. Br. MSS

Another lavish florilegium with 89 of its coloured plates by Redouté is VENTENAT'S "Jardin de la Malrnaison" in two volumes folio, 1803-5. Three of these plates are beautiful and lifelike studies of succulents :—



Plate	Date	Bonpland's name	Modern name	Authority
49	1804	Cotyledon crenata	<b>Kalanchoe crenata</b> Haw.	Britten in Fl. Trop. Afr. II
65	1804	Peiargonium radicatum (Geranium ciliatum)	<b>Pelargonium radicatum</b> Vent.	Harv. in Fi. Cap. I
109	1805	Mesembryanthemum carinatum	<b>Semnanthe lacera</b> (Haw.) N. E. Br.	Sond. in Fi. Cap. H

Probably this does not exhaust the list, which could be greatly extended if monochrome plates were also considered. It is a little odd to have to admit that Redouté's finest published pictures of succulents are not to be found in the one book devoted especially to them at all.

## INTERPRETATION

Flowers may be portrayed on a two-dimensional sheet of paper in various ways and to suit various tastes. A botanical drawing may boast little in the way of art, while the opulent canvasses of Van Huysum could scarcely be used to illustrate a flora or monograph. A degree of accuracy, of nature-copying, is inherent in both, but even that can be overdone if too much insisted upon. As early as 1530 Weiditz, who made the woodcuts for Brunfel's Herbal direct from nature, engraved plants that were obviously wilted or had the foliage diseased or nibbled. Few puritans would deny the artist the privilege of making good such flaws, otherwise we could dispense with his services in favour of a photographer. Interpretation, then, or "rubato," is the important point here. A painting or drawing can be made to satisfy both botanist and artist, but often one has to suffer at the expense of the other. Truly great flower painters are few in number, and their published work may be but a small or untypical part of their output, or ruined by coarse engraving and poor colouring. Certainly no estimate of Redouté's stature as a flower painter would be complete without studying the vellums in the Paris Museum and private collections. Here my aim is altogether more modest, and confined to notes on the value of his pictures of succulents as compared with his non-succulents, and with the succulents of other artists.

The more extreme succulent plants, because of their condensed form, simplicity of outline and intensified geometrical patterns, pose special problems in delineation. As anyone can find out who tries to sketch a *Mammillaria*, a steady hand and complete mastery of perspective and parallel lines are needed. The very stiffness and symmetry which is so characteristic a feature and endears them to their admirers can be anathema to an artist accustomed to the informality of a rose or a ranunculus. And so it was, I think, to Redouté, who exercised his genius on proving that the cactus is no less easy to apotheosize than any other flowering plant, and in similar fashion. We can see evidence of this in two ways his choice of plants, and his treatment of them on paper.

An analysis of the plants grouped together in the "Plantes Grasses" reveals a curious and surprising situation. Only 30 stem succulents are included, mostly toward the end of the work, and the remaining 84 of the plates are of leaf-succulents plus one or two mesophytes. There are several plants like *Aizoon*, *Tetragonia* and *Trianthema* on the borderline of succulence and horticulturally uninspiring, but almost a complete absence of the dwarf, highly specialised, xerophytic Ficoideae like *Conophytum* and *Argyroderma*, and of globular cacti. By modern standards the Malmaison collection would be considered dull and untypical of succulents as a whole. Now why is this? It could be because the more extreme succulents (which we know from Aiton and Haworth to have been in cultivation then) were not available to Redouté, or were beyond the skill of the Malmaison gardeners to grow. Since some of the plates show drawn and over-lush specimens, there is some support for this. But I think it more probable that Redouté picked just those plants least removed from their mesophytic ancestors as most amenable to what has been called his "feminine" style of presentation. We know that he had first choice of the plants for painting, not the botanist, who was called in afterwards to fit a literary frame to the masterpiece. Where he does undertake stiff, formal subjects like *Euphorbias* and cacti, we can marvel how skilfully he softens the rigidity and starkness with but the least departure from botanical accuracy. A Redouté *Opuntia* is still an *Opuntia*, but it looks fit almost for a lady's corsage. His cacti are beautiful in spite of their spines—not because of them.

In this respect it is instructive to compare his cacti with, for example, the famous steel engravings of George Engelmann's books, which in their own right deserve equal praise. In the Engelmann plates the spines are everything: a quite different type of beauty emerges from their interplay and extraordinary profuseness. If I may be forgiven a musical analogy here, the difference is as great as that of Sibelius interpreted by Beecham and by Serge Koussevitsky: the former links him with the nineteenth century romantics, the latter establishes him firmly among contemporary composers.

In daring to criticise Redouté's approach to succulents I hasten to add how much, in such a controversial subject, depends on personal tastes. A few will turn to Ehret, Jacquin and even the humbler Botanical Magazine and Britton & Rose plates for the truest illustrations of succulents, whereas others—notably those who share his

aesthetic approach, or regard succulents merely as the ugly matrix to a beautiful bloom-will continue to enthrone Redouté as exponent supreme.

Redouté's art lives on today as ever, surviving changes of fashion and plant nomenclature. Unhappily for the botanist his books are much in vogue as collectors' pieces, and when fine copies come on the market the bidding can be expected to rise to the four-figure level. Even single plates, once a feature of Paris bookstalls along the banks of the Seine, are no longer cheap or easy to get. However, the books can be consulted in the larger libraries, though not always under ideal lighting conditions. The Ariel Press has recently issued first-class and very inexpensive reprints of some of Redouté's flowers and fruits,<sup>24-26</sup> and so well reproduced by modern techniques as to invite comparison with the originals. It is to be hoped that public support will be strong enough to encourage them to extend this scheme to the succulents, which have never been re-issued.

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## SUMMARY

Over 200 published illustrations in colour of succulents by Pierre-Joseph Redouté have been examined and catalogued, together with their sources, dates and modern names. The greater number appeared in the *Plantarum Succulentarum Historia* (*Plantes Grasses*), usually cited under the authorship of A. P. De Candolle, who wrote nearly all the text. Thirty-one fascicles of six plates each\* with text were published over about 32 years. Four additional plates, perhaps for a further but unpublished thirty-second fascicle, are reproduced here for the first time from a copy in the Library of the Royal Botanic Gardens, Kew.

Some aspects of Redouté's interpretation of succulent plants and of succulent plant illustration in general are discussed.

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## ACKNOWLEDGMENTS

I want to express sincere thanks to the Director of the Royal Botanic Gardens, Kew, for allowing me use of the Library, and permission to have photographed and reproduce plates from Redouté's books. I am also indebted to Messrs. Wheldon and Wesley for enabling me to examine various copies of the *Plantes Grasses*, including one in original wrappers which has established beyond doubt the composition of fascicles 1-28, and to Mrs. V. Higgins for reading and commenting on the typescript.

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- 22 LEGER, C. *Redouté et son Temps*. Paris 1945.
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- 24 An ideal introduction to Redouté's style with non-succulents are the Ariel Press, London, volumes of "Roses"
- 25 (1954, 25/-; popular edition by Foyle, London 1955, 15/-); "Roses II" (1956, 30/-) and "Fruits and
- 26 Flowers" (1956, 35/-), each with 24 full-size facsimile plates in colour.

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\* Seven in fasc. 12.

† A similar copy has also been seen at Oxford University Botany Department.