

# Magnolia × Soulangiana in 1827

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One of the most important ancillary references for *Magnolia* × *soulangiana* is in *Anales de la Société d'horticulture de Paris et Journal Spécial de l'État et des Progrès du Jardinage*, volume 1, 1827.

The article is "Hybrides Obtenues par MM. le Baron THOMAS MELAZZO, a Palerme; le Chevalier SOULANGE BODIN, à Fromont; FION, à Paris; et W. HERBERT, à Londres" [Hybrids Obtained by the Messrs. Baron Thomas MELAZZO at Palerme; Chevalier (=Knight) SOULANGE BODIN at Fromont; FION in Paris; and W. HERBERT in London]. It was written by Baron C. Hamelin, president of the Committee of "Végétaux D' Agrément de Pleine Terre, D'Orangerie et de Serres" of the Horticultural Society of Paris.

This paper, on pages 88-101, presents (between pages 90 and 95) a detailed textual and tabular description and opposite page 90 a fine colored plate of *Magnolia* × *soulangiana*. Baron Hamelin's synopsis of the origin and morphology of *M.* × *soulangiana* is only the second published reference to this hybrid, and to our knowledge an English description has not been previously provided. Since *M.* × *soulangiana*, its named cultivars, and hybrid progeny are widely cultivated on a world-wide basis, the authors and the editor of the AMS Newsletter felt that an English translation would be of significance and interest.

So far as possible this translation is literal, retaining much of the early 19th century charm, punctuation and syntax. Square brackets [], however, are used to enclose additional information critical to interpreting and clarifying some seemingly ambiguous sections or phrases in the light of knowledge in 1978 about the genus and this extremely popular hybrid.

*Translation of Baron C. Hamelin's Contribution to Magnolia* × *soulangiana*. (*Ann. Soc. Hort. Paris* 1: 90 (fifth paragraph) -95. 1827).

In 1826, Mr. Soulang Bodin, from a seed of *Magnolia Yulan*, D. C. [= *M. denudata* Desrousseaux: *fide* Rehder, *Bibliography* p. 181 and 182. 1949. = *M. heptapeta* (Buc'hoz) Dandy: *fide*

Dandy, *Jour. Bot.* 72: 103. 1934 and Spongberg, *Jour. Arnold Arboretum* 57 (3): 285 and 304. 1976], fertilized by *Magnolia obovata*, var. *discolor*, D. C. [= *M. liliiflora* Desrousseaux: *fide* Rehder, *op. cit.* p. 181. = *M. quinquepeta* (Buc'hoz) Dandy: *fide* Dandy, *loc. cit.* and Spongberg, *op. cit.* pp. 298 and 304], obtained a magnificent hybrid plant that the Linnaean Society of Paris named *Magnolia soulangiana*. [More correctly the plant flowered for the first time in 1826 and was grown from seed sown circa 1820]. Here is its description (see the first plate):

Tree whose trunk and branches are covered with a grey bark. The young branchlets, which are bent in zigzags at each joint [node], giving rise to leaves, are of a grey-brown, very smooth, glossy, dotted with specks of yellowish white [lenticels]. The youngest shoots are green, tomentose from their base up to the insertion of the petiole of the first leaf.

Leaves alternate, rather distant from each other, ample, large and cuneiform at the apex, terminated by a point [short-acuminate or acute]; narrowed at their base [attenuate or cuneate], which ends abruptly [obtuse-truncate] and unevenly [oblique] on the side of the petiole, at a certain point from its beginning. Their blade is entire to the margin, of a firm consistency [membranous to ± subcoriaceous], soft and silken to touch [on the lower surfaces], of a bright green underneath, more pale above, with oblique regular veins, joined by a very delicate vascular network [reticulate]; bruised, they give off a faint aromatic odor.

Stipules long, greenish and weak.

Terminal peduncles swollen and silken.

Buds covered by a light brown translucent bract.

Calyx [actually involucre] formed of three obtuse sepals [actually spathe-like bracts], small and weak.

Corolla [perianth] composed of nine petals [tepals], arranged in three ranks [generally considered to be arranged in only two whorls]; they are very fleshy and of sweet odor. The three outside ones, less large than the intermediates,

are oval-lanceolate, enlarged near their apex and their base, compressed towards their lower third [". . . the outer whorl circa half the length of the inner tepals . . . generally spatulate to obovate or oblanceolate or rarely . . . greenish and sepaloïd, when present . . .". *vide* Sponberg, *op. cit.* p. 305], pure white inside, but varied as follows: at their insertion is a yellowish-green hue, resting upon a very pale rose purple. The same shade prevails, moreover, all along the middle nerve of the petal [tepala], and takes up more intensity as it gets further from the attachment at the receptacle. At the apex of the petal [tepala], a delicate and very pure purple stands out.

The three intermediate petals [tepals] are the largest: they are spatulate, large and obtuse at the apex, very fleshy and hollow like a spoon at their base and nearly to their middle part; their surface is marked with numerous longitudinal veins; those which are nearest the margins are branching. These three petals are of a porcelain white on the inside; their external surface exposes to view a substrate of this color but from their insertion at the receptacle up towards the middle, is a shade of rosy purple, resting imperceptibly on the substrate, at a distance of less than 14 mm. from the margins. This rose [color] marks the lateral nerves and the middle rib, and comes to an end at some distance from the apex.

The three inside petals [tepals] are smaller, a little less straight than the outside ones, rounded at the apex, narrowed [attenuate] at their base, of a beautiful white on the inside and on the outside, bearing all along their length a purple groove larger than that of the outside petals, but less than that of the intermediate petals, and losing itself gradually in the white mass.

The receptacle is a hexagon, evident with six large facets and with three linear marks [scars of bud scales and bracts] situated underneath.

The stamens are numerous, arranged in a spiral into five rows around an axis which is elevated at the center of the receptacle. The filaments are of the length of the anthers, cylindrical, flattened [contradictory!], of a violet purple; the anthers, backed against two sides of the filament, are purplish-yellow, especially at their tip; a line of the same color prevails in their middle part.



*Reproduction of original color plate*

The ovaries [carpels or follicles] are numerous, elongated, arranged in a spiral, yellow; the styles long, slightly reflexed, of a most dark green.

The core [gynoeceum or strobilus], shortly after the fall of the petals and stamens, has, above the receptacle, up to 54 mm. length [10-20 mm. at anthesis: *vide* Sponberg, *op. cit.* p. 305] on a smooth swelling like that of a stem of a swan feather. The fruit has not yet been observed.

This *Magnolia* has a very great affinity with *Magnolia Yulan* [= *M. denudata* = *M. heptapeta*] and *discolor* [*M. liliflora* = *M. quinquepeta*]; but it offers the peculiarities which set it aside enough from the one and the other that one is able to consider it as a new hybrid plant and a grand prize in the eyes of amateurs of this beautiful genus of trees.

The correlations of the new plant, *Magnolia soulangiana*, with its parents *M. Yulan* and *M. discolor* [= *M. denudata* = *M. heptapeta* and *M. liliflora* = *M. quinquepeta*]:



COMPARATIVE TABLES

<i>M. Yulan</i> [= <i>M. denudata</i> = <i>M. heptape-</i> <i>ta</i> ].	<i>M. Soulangiana</i> [= <i>M. × soulangiana</i> ].	<i>M. discolor</i> [= <i>M. liliflora</i> = <i>M. quinque-</i> <i>petal</i> ].
Flowers very sweet smelling.	Flowers with a sweet and agreeable scent.	Flowers scentless.
Stamens with rosy filaments.	Stamens with purplish filaments.	Stamens nearly entirely dark purplish.
Anthers yellow.	Top and middle part of anthers violaceous.	Anthers yellow.
Ovaries and styles yellow.	omitted [reported earlier in the text as ovaries yellow and styles mostly dark green].	Ovaries, styles, and stigmas green, terminated with purple.
Flowers in March and April before the growth of the leaves.	Flowers in April and May.	Flowers in May through June.
9 petals [tepals] in 3 tiers [whorls]. Unequal [variable in size]. Oblong.	9 petals [tepals] in 3 tiers [whorls]. Unequal [variable in size]. Oblong, hollowed like a spoon at base.	6 petals [tepals] coiled around each other. Unequal [variable in size]. Lanceolate, never opening entirely.
Of a pure white within and outside, with some glint of very pale yellow at the interior base.	Of a pure white within, as also the outside, with a large medium purple streak, and the base of each of a pure rose, ended below by a tint of yellow green on the three outside ones.	Of a pure white within, violet outside, this color extended up to the margin of the limb.
Leaves oboval, ending by a point.	Leaves oval, cuneiform [broadly elliptic to oblong-ob lanceolate or broadly obovate to suborbicular: <i>fide</i> Spongberg, <i>op. cit.</i> p. 304], very large and pointed at the apex [usually abruptly short-acuminate, the apex itself rounded: <i>fide</i> Spongberg, <i>loc. cit.</i> ], whose blade end abruptly [obtuse-truncate] and unequally [oblique] at 27 mm. from the insertion of the petiole [node].	Leaves oval, lanceolate, shining, of a blue green, paler underneath, whose blade spreads imperceptibly on the sides of the petiole [slightly winged] up to its insertion [node].

*M. Yulan.*

Bark smooth, ashy grey, often brownish, with scattered spots in the form of yellowish pimples [lenticels].

Branches few in number, arranged nearly as in the pine [whorled as with *Pinus*].

*M. Soulanguiana.*

Epidermis [bark] smooth, of an ashy brown, dotted with specks of a yellowish white [lenticellate].

Branches bent in regular zigzags.

*M. discolor.*

Bark of a purplish ash-grey, deeper on young shoots where it is violet.

Branches bent, twisted, often undulated.

End of the Translation.

In addition to the name changes of the parent species of *M. × soulanguiana*, there are two other significant differences between Baron Hamelin's analysis and descriptions provided by other authors.

Hamelin describes the lower surfaces of the leaves as bright green and the upper surfaces as paler. On the other hand, Spongberg ("Magnoliaceae Hardy in Temperate North America," *Jour. Arnold Arboretum* 57 (3): 250-312, 1976) describes the lower surfaces as pale green and the upper as "dark ± glossy green." Clearly, Hamelin was describing the features of only one plant, the equivalent of one clone, but Spongberg constructed his description from many distinct plants pertaining to many clones and named cultivars that have arisen and been selected independently since 1826.

Of more serious and fundamental importance is the question of the number of whorls of tepals that comprise the perianth of *M. × soulanguiana*. Hamelin distinctly describes three whorls: an inner, an intermediate, and an outer, each composed of three tepals. Spongberg and all other authorities consulted are consistent and undeviating in describing the perianth as having nine tepals arranged in only two whorls: an outer whorl of three, which may often be sepaloid, and an inner whorl of six tepals always definitely petaloid.

The authority for *M. × soulanguiana* has always been cited as Soulange-Bodin (with a hyphen), i.e. *M. × soulanguiana* Soulange-Bodin, since the name was originally published by Chevalier Étienne Soulange Bodin (note: without hyphen) in his paper "Notice sur une nouvelle espèce de *Magnolia*" in *Mémoires Société Linnéenne Paris*

1826: 266-295. 1826. It has been questioned occasionally whether Chevalier É. Soulange Bodin would really name a plant after himself. After all, he was an officer in the French Army and an eminent horticulturist of the period, as well as being a member in good standing of the French Royal Society and Bureau of Agriculture, of the Horticultural Society of London, and of the Philomatic Society of Paris, and was President of the Linnaean Society of Paris, the founder and secretary-general of the Society of Horticulture of Paris which later became the National Horticultural Society of France, and the owner and horticulturist extraordinary of the estate of Fromont near Paris, between Fontainebleau and Lyon. Baron Hamelin's first paragraph presents evidence that Soulange Bodin did not name this *Magnolia* after himself, and that it was named in his honor by the Linnaean Society of Paris (Paris Linn.).

The question also arises whether the first publishing authority's name should be hyphenated, i.e., as Soulange-Bodin, or merely as Soulange Bodin. At least 90 percent of all authors, bibliographies and library catalogues examined provided a hyphen. However, Baron Hamelin, a contemporary of Chevalier Soulange Bodin, does not use a hyphen, nor does J. G. Millais, the *Magnolia* monographer, in his classic volume — *Magnolias* (1927).

Further evidence that the name should not be hyphenated is found in the first list of officers and membership list of the Society of Horticulture of Paris (*Annales Société d'horticulture de Paris* 1: 6 & 34, 1827). In these lists Soulange Bodin is listed without a hyphen as "M. le Chevalier Soulange Bodin" and as "Soulange Bodin (le Chevalier)." Numerous other officers and members are listed