

## NEPETA MUSSINII AND N. × FAASSENII

William T. Stearn

ABOUT 1802 a Russian count, APOLLOS APOLLOSOVICH MUSSIN-PUSHKIN, made an expedition to the Caucasus. Little is known about him or his travels, which may have been in search of minerals, for he was a chemist and physicist, but he certainly collected specimens of Caucasian plants, and among them were several new species. Accordingly, in 1805, the year of his death, a compatriot, J. M. F. ADAMS, named a new genus of liliaceous bulbous plants Puschkinia in his honour, this being typified by the now well-known *P. scilloides*. Another plant which commemorates MUSSIN-PUSHKIN is a Catmint, *Nepeta Mussinii*. This was dedicated to him by a German professor, KURT SPRENGEL (1766–1833), but the original description, based on a Caucasian plant grown in the Halle botanic garden, was published by SPRENGEL's pupil, COUNT LEO VICTOR FELIX HENCKEL VON DONNERSMARK (1785–1861), in a slim quarto work entitled *Adumbrationes Plantarum nonnullarum Horti Halensis Academici* (24 pages; Halae, 1806). Study of his detailed description removes all doubt as to the identity of the original *N. Mussinii*. It was introduced into English gardens about 1802 or 1803 and figured in the *Botanical Magazine*, 23, t. 923 (April 1806), as *N. longiflora* (non Ventenat). Another figure of *N. Mussinii* (Fig. 205) was published by REICHENBACH in his *Iconographia Critica*, 6, no. 806, t. 587 (1828). Both illustrations portray a low-growing plant with heart-shaped leaves and a short inflorescence, very different in general appearance from the plant commonly grown in British gardens to-day as *N. Mussinii*. They agree, moreover, with HENCKEL's description of his *N. Mussinii*, and a plant of the same character is still to be found in British gardens. There are, in short, two plants now cultivated as *N. Mussinii* and the one generally known under this name in British gardens is not *N. Mussinii* at all. They may be readily distinguished by their leaves. In the true *N. Mussinii*, a native of the Caucasus and Persia, the leaves are ovate to broadly ovate (length to breadth often about 3 to 2) with a cordate base, up to 2.1 cm. broad. In the false *N. Mussinii* (i.e. *N. Faassenii*) the leaves are lanceolate to narrowly ovate (length to breadth often almost 3 to 1) with an almost truncate base. This misapplication of the name *N. Mussinii* became evident fifteen years ago\* and the writer accordingly tried to ascertain the identity of the popular garden plant, commonly though wrongly known in England as *N. Mussinii*, by means of a cursory survey of botanical literature relating to *Nepeta*, and of specimens in the Kew, Berlin and Weimar herbaria. The only herbarium specimens which exactly matched it were from cultivated plants; there seemed no wild species with which it could satisfactorily be identified and no published name whereby it could be designated as distinct from the true *N. Mussinii*. Hence the plant either belonged to a species rare in nature or was of garden origin. It appeared to be unnamed. The genus *Nepeta* includes, however, about 150 or more species, upon which botanists have bestowed more than 390 names, and like so many other genera it stands greatly in need of critical revision.

\* In 1921 JOHN FRASER pointed out in the *Gardener's Chronicle*, 70, 171 (Oct. 1921) that there were two forms in cultivation under the name *N. Mussinii*.

A detailed investigation ought to precede the publication of new names within the group. In these circumstances it seemed best to continue calling the garden plant "*N. Mussinii*" hort. non Sprengel, knowing full well that sooner or later it would have to receive another name. Since then two names have been given to it, JOHN BERGMANS naming it *N. × Faassenii* in a Dutch book on herbaceous plants in 1939 and ERNST VILHELM FLOTO naming it *N. × pseudomussinii* in a Danish horticultural journal in 1944. (Fig. 204.)

*Nepeta Faassenii* (syn. *N. pseudomussinii*) is always propagated vegetatively because it does not set seed. Examination of its pollen by FLOTO and his collaborator, GUDNI GUDJONSSON, revealed this to be completely sterile. Reduced fertility or complete sterility of the pollen often characterizes hybrid plants. Cytological study proved *N. Faassenii* to be triploid with  $2n = 26$  chromosomes, whereas the related *N. Mussinii* having almost completely fertile pollen (about 96 per cent. fertile) is a diploid with  $2n = 18$  chromosomes. These facts suggested that the triploid *N. Faassenii* might be a hybrid between the diploid *N. Mussinii* and a related tetraploid species, the most likely being *N. Nepetella*, which has  $2n = 34$  chromosomes (probably derived from 36, the basic number in *Nepeta* being 9). This south European species is often cultivated in botanic gardens along with *N. Mussinii* and has lanceolate leaves. It grows up to 2 feet or so high and is of erect habit. In leaf-form and other characteristics the triploid *N. Faassenii* thus stands midway between the diploid *N. Mussinii* and tetraploid *N. Nepetella*, and there seems no reason to doubt that these are its parents. Further evidence is supplied by "the fact that one large chromosome, identical with that of *N. Nepetella*, is present in the root-tip plates." Of the 26 chromosomes of *N. Faassenii*, 17 are considered to be of *N. Nepetella* origin and 9 from *N. Mussinii*. For fuller particulars the detailed paper by FLOTO and GUDJONSSON in *Royal Veterinary and Agricultural College, Copenhagen, Yearbook (Kongel. vet. Landbohøjskole, København, Aarsskrift) 1947, 31-39 (1947)*, should be consulted. In England L. F. LA COUR has confirmed the triploid nature of *N. Faassenii*.

It may be noted here that floral differences are associated with those in habit, leaf, fertility and chromosomes already mentioned. The flowers of *N. Faassenii* are slightly smaller and paler than those of *N. Mussinii* and have the anthers included instead of protruding.

The history of *N. Faassenii* is obscure. *N. Nepetella* was introduced into British gardens about 1760, *N. Mussinii* about 1803. Since then there must have been many opportunities for the two species to cross in Continental as well as in British botanic gardens. It is worth noting that BENTHAM, writing in 1834 about *N. grandiflora*, stated that "this plant is common in continental botanical gardens where it appears to have mixed with *N. Mussini* and produced a variety of hybrids, which have been published under various names, borrowed from most of the other species of this section; and, in general, less reliance is to be placed on the names of *Nepeta* in various herbaria and gardens than of almost any other genus of the order." (*Gen. Sp. Lab.* 481). FLOTO and GUDJONSSON state that in the Copenhagen Botanic Garden, where *N. Mussinii* and *N. Nepetella* are grown side by side, "several seedling

plants, resembling *N. pseudomussinii* to a very high degree and sterile as this plant, have been found. Their chromosome number is also 26." The Kew Herbarium possesses a specimen, grown sometime before 1876 under the name *N. caerulea* in the garden of EDWARD LEEDS, of Narcissus fame, which appears to represent this plant. That it had arisen by 1890 is shown by a detailed article on "*Nepeta Mussini*," by E. ANDRÉ in the French horticultural journal *Revue Horticole*, 1891, p. 300. This has a coloured plate depicting not the true *N. Mussinii* but the plant so commonly known under that name to-day, i.e. *N. Faassenii*; ANDRÉ remarked that it was rarely cultivated. Since then this Catmint has become a common edging plant in British gardens, esteemed both for its greyish-green foliage and its profuse spikes of lavender flowers. As a garden plant it is far superior to both its parents. In the genus *Heuchera* hybrids have superseded the parent species as plants for garden decoration. The hybrid *Anemone × hybrida* and its white sport 'Honorine Jobert' have become widely known under the name *A. japonica*, which belongs rightly to one of their parents, *A. hupehensis japonica*, now a scarce plant in cultivation. *Romneya × hybrida* (*R. Coulteri × R. trichocalyx*) is sometimes grown as *R. Coulteri*. This example given by *Nepeta × Faassenii* of a hybrid becoming widespread in gardens under the name of one of its parents is thus by no means a solitary one.

On a light well-drained soil and in a sunny position *N. Faassenii* is perfectly hardy in England and grows vigorously; it is an excellent plant for a dry-wall as well as for edging. On a heavy damp clay soil, however, it may perish during the winter. FLOTO and GUDJONSSON state that "in Denmark *N. pseudomussinii* is not hardy in all years, and in severe winters it will easily be damaged if not covered." Spring planting gives better results than autumn planting. It is debatable as to whether the old dead growths should be left untrimmed during the winter, indeed up to the middle of April, to protect the new shoots from frost. Cuttings of flowerless shoots about 3 inches long, taken in June or July and inserted in moist sand or sandy soil in a cold frame or under a bell-glass or a large glass jam-jar, root within a month and may be planted out in August or September. The statement in some books that *N. Mussinii* can be propagated by seed refers to the horticulturally less important true species and not to its showy profuse-flowering sterile descendant *N. Faassenii*. It was the latter which received in 1935 the R.H.S. Award of Garden Merit and which is described in R.H.S. JOURNAL, 67, 169, fig. 59 (1942) as *N. Mussinii*.

Since no Latin diagnosis accompanies the original Dutch description of *N. Faassenii* by BERGMANS, *Vaste Planten* 2nd. ed. 544 (1939) and the English description by LAWRENCE in *Gentes Herb.* 8, 64 (1949), the Danish description of *N. pseudomussinii* by FLOTO in *Gartner-Tidende*, 60, 450 (1944), and the English description by FLOTO and GUDJONSSON in *Yearbook Roy. Veterin. Agric. Coll. Copenhagen*, 1947, 33, one is provided here to validate the name in accordance with *Int. Rules Bot. Nomencl.* 3rd ed., art. 38 (1935):—

*Nepeta × Faassenii* Bergmans, hybrida hortensis nova; a *N. Mussinii*, quacum in hortis confusa est, foliis angustioribus lanceolatis vel anguste oblongo-ovatis basi fere truncatis (nec ovatis vel late ovatis basi distincte cordatis), a *N. Nepetella* habitu procumbente humiliore, ab ambabus sterilitate pollinis inter alia distinguitur. Specim. authent. in *Herb. Hort. Kew!* *Herb. Mus. Brit.!* *Herb. Mus. Paris!* *Herb. Bailey Hort.!*

FLOTO's original Danish description may be translated as follows:—

"Plant perennial, short-tomentose throughout, grey-green, profusely branched from the base and forming a dense mound 1 metre across, 40 to 50 cm. high. Stems slightly four-angled, prostrate or ascending, more or less strongly branched. Internodes 2 to 4, seldom 6 cm. long. Leaf-blades oblong-ovate, evenly tapering to the tip, coarsely serrate. Veins impressed on the upper side of the blade, elevated on the lower side. Length of blade varies from barely 1 cm. up to 3 cm. Petiole up to 1 cm. long but often less than 5 mm. long. Calyx 5 to 6 mm. long, narrowing towards the tip. Calyx-lobes 1-1.5 mm. long. Corolla-tube very slender, slightly bent, only a little longer than the calyx. The short-stalked almost sessile flowers, which are gathered together on terminal branched shoots, have a length of 7-8 mm. Colour red-violet with darker spots on the inside. Lip violet. The whole plant has an aromatic mint-like smell and is probably completely sterile. From the investigations of MR. GUDNI GUDJONSSON, M.Sc., it is evident that the plant does not form properly developed (i.e. fertile) pollen." (FLOTO, l.c., 1944.)

#### SUMMARY

Under the name *Nepeta Mussinii* two plants are widespread in gardens. One is the true *N. Mussinii*, a species native to the Caucasus, but this is neither so popular nor horticulturally so valuable as its hybrid descendant *N. × Faassenii*, a plant of garden origin unknown in a wild state. The distinguishing features of the two plants are stated above.

## WISLEY TRIALS, 1950

### RHODODENDRONS AT WISLEY, 1950

The following varieties of Rhododendrons were recommended for Awards after trial at Wisley, by the Rhododendron Trials Committee, who made their recommendations for awards on May 5 and May 31, 1950, as given below.

**Rhododendron (Azalea) 'Addy Wery'** (*malvatica* × 'Flame'). A.M. May 5, 1950.—Of compact, dwarf, very free flowering habit, evergreen, with one or two open funnel-shaped flowers in a truss. The corolla 1½ inch diameter, the five petals Blood Red (H.C.C. 820/2) on Orient Red (H.C.C. 819/2) with a dull orange-bronze flush. Raised and introduced by The Old Farm Nurseries, Boskoop, Holland, and sent by Messrs. M. P. Cooper & Son, Muirfield, Ferndown, Dorset.

**Rhododendron (Azalea) 'Apple Blossom'** (*Azuma Kagami*). A.M. May 5, 1950.—Of compact, dwarf, very free flowering habit, evergreen, with two or three open funnel-shaped flowers in a truss. The corolla 1½ inch diameter, the ten petals Neyron Rose (H.C.C. 623/2) with a small blotch of Phlox Pink (H.C.C. 625). Sent by the Knap Hill Nursery, Ltd., Woking, Surrey.

**Rhododendron 'Dawn'**, A.M. May 5, 1950.—Bush compact, very free flowering, carrying the trusses well above the foliage, with eight large open funnel-shaped flowers in a round, flat-topped truss. The corolla 4 inches diameter, 2½ inches long, margins somewhat reflexed, of good texture; colour white flushed Phlox Pink (H.C.C. 625/3); buds flushed Phlox Pink (H.C.C. 625/2). Sent by Messrs. Waterer, Sons, & Crisp, Ltd., Bagshot, Surrey.

**Rhododendron (Azalea) 'Exquisita.'** A.M. May 31, 1950.—Plant vigorous, forming a well-shaped, compact, free-flowering bush with deciduous light glossy green foliage. Flower trusses flat domed, 12 to 20 flowered. Flowers 2 inches long, 2½ inches diameter, long funnel-shaped, expanded,