'Petite Wonder' Monarda

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'Petite Wonder' is the second dwarf hybrid cultivar of *Monarda* L. (Lamiaceae Lindl., Labiatae Juss.), a summer-flowering, herbaceous perennial, to be introduced from the Agriculture and Agri-Food Canada, Morden Research Centre (Fig. 1). This clone combines flower qualities, dwarf stature, good winter hardiness, a high resistance to powdery mildew, and an adaptability to the hot, dry summers of the prairies.

Origin

'Petite Wonder' monarda was developed from a series of open-pollinated and controlled crosses (Fig. 2) in a lineage from 'Souris', an early introduction by H.H. Marshall. The Morden *Monarda* program was initiated by the late H.H. Marshall when he transferred to Morden, and continued by L.M. Collicutt (Collicutt, 1989). As a result of these efforts, a new series of dwarf monardas have been developed (Collicutt and Davidson, 1999). 'Petite Wonder' has been tested for disease resistance and hardiness under field conditions at several locations in Manitoba and in field trials at the Chicago Botanic Garden (Glencoe, Ill.).

Description

'Petite Wonder' is a dwarf plant averaging 23–35 cm in height and width, slightly smaller and more compact than 'Petite Delight'. Plants are round to oval in shape and appear similar to bedding chrysanthemums when viewed from a distance. Foliage is dense, shiny, dark green (137B, Royal Horticultural Society, 1986) and borne on four-sided stems. Leaf length ranges from 50.2 to 59.7 mm (mean 56.2), with an average width ranging from 18.4 to 26.7 mm (mean 21.4 mm).

Flowers form a dense compound inflorescence (verticillaster), which is borne terminally, and range from 45.7 to 58 mm (mean 50.2 mm) in diameter. Flower color is light pink (RHS 73A). Flower duration averages 6–8 weeks beginning in late July in Morden, Manitoba, conditions. Flowers fade to a lighter color as they age. Plants should be "dead-headed" after flowering to improve the visual

appearance of the plant. Regrowth of the foliage after flowering is good, providing a "fresh" green appearance later in the season and throughout the fall. Flowers, stems, and foliage are aromatic, which is typical of both *M. didyma* L. and *M. fistulosa* L.

Powdery mildew has not been observed as a major problem on 'Petite Wonder' during the course of the evaluations. Rust has been observed on this cultivar, but infections generally occurred late in the season and were not severe. In comparative trials, 'Petite Wonder' rated "very good" in relation to disease resistance against other cultivars in the trade (data not presented).

Plants are hardy to at least Agriculture Canada zone 3 with no winter protection other than naturally occurring snowfall (Ouellette and Sherk, 1967; Sherk and Buckley, 1968). Due to the low-growing habit of the plants,

snow cover could easily extend this range to colder regions. Plants should be mown or cut back in the spring to remove old foliage and promote new growth. Care should be exercised not to damage the crown of the plant.

Propagation and Uses

'Petite Wonder' can be propagated by rhizome and softwood stem cuttings, division, and tissue culture. Rhizome cuttings are very successful and appear to be a very rapid means of increasing this cultivar. About 30 rhizome cuttings have been obtained from 2- to 3-year-old plants. Rhizome pieces, 2.5 to 5 cm in length, should be harvested in early spring or fall with 0.5 to 1 cm of terminal growth. Then they are inserted into potting media and grown in greenhouses or outdoors under protection. This technique will not be successful if rhizome cuttings have too much vegetative leaf growth. Softwood stem cuttings should be taken early in the growing season and rooted under intermittent mist. Rooting success drops dramatically in midsummer (unpublished data). Cuttings will root without hormones, but using auxins will speed up rooting. Divisions have been successful for small increases of material, generally yielding 6–10 divisions from a 2-year-old plant. Tissue culture protocols are being developed and have been successful for other monardas (unpublished data).

Fig. 1. 'Petite Wonder' monarda.

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M. didyma x *M. fistulosa* var. *menthifolia* (Graham) Fern.

* Released from the AAFC Brandon Research Station by H.H. Marshall

Fig. 2. Parentage of 'Petite Wonder' monarda.

'Petite Wonder' is suited ideally for large mass plantings. Floral designs could easily be sculpted using this plant in combination with other low-growing herbaceous plants. The shiny, dark green foliage contrasts well with the light pink flowers. Also, plants can be used as specimen plants or as borders, dividing sections of beds or defining boundaries. 'Petite Wonder' can be used in traditional formal beds providing mid- to late-season bloom. 'Petite Wonder', similar to most monardas, requires well-drained soil to flourish. Plants in poorly drained clay soils are subject to various unknown root rot pathogens.

Availability

'Petite Wonder' monarda is registered with the Canadian Ornamental Plant Foundation (COPF), P.O. Box 21083, North Bay, ON, P1B 7N8, Canada. Propagation material is available to COPF members by contacting the author. Research material is available on a limited basis after signing a non-propagation agreement. In the United States, Bailey Nurseries Inc., 1325 Bailey Road, St. Paul, MN 55119, and in Europe, FarPlants Sales Ltd., Littlehampton, West Sussex, UK, have exclusive propagation and distribution rights to this cultivar.

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