HORTSCIENCE, VOL. 34(2), APRIL 1999

Table 1. Mean percentage of flower cover^a and flowering duration of selected rose cultivars at the AAFC–Morden Research Centre during the growing seasons of 1994–97.

Cultivar ^a	Week ^b														
	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
Adelaide Hoodless (P)	0.0	0.0	15.0	20.0	30.0	10.0	10.0	5.0	5.0	5.0	10.0	10.0	5.0	10.0	10.0
Blanc Double de Coubert (R)	0.0	5.0	15.0	10.0	10.0	10.0	15.0	10.0	15.0	15.0	15.0	10.0	15.0	0.0	0.0
Henry Hudson (R)	0.0	0.0	15.0	20.0	30.0	35.0	25.0	10.0	5.0	5.0	5.0	5.0	15.0	10.0	10.0
Morden Amorette (P)	0.0	0.0	15.0	18.3	28.3	21.7	11.7	8.3	20.0	15.0	20.0	25.0	13.3	10.0	5.0
Morden Blush (P)	0.0	6.0	40.0	30.0	26.0	20.0	12.0	16.0	24.0	24.0	20.0	16.0	14.0	4.0	0.0
Morden Snowbeauty (P)	0.0	2.0	32.0	28.0	26.0	18.0	16.0	14.0	26.0	22.0	18.0	14.0	10.0	10.0	6.7
Prairie Joy (P)	0.0	0.0	18.3	30.0	25.0	16.7	20.0	21.7	15.0	11.7	15.0	11.7	8.3	5.0	10.0
Prairie Princess (B)	0.0	5.0	5.0	5.0	15.0	5.0	5.0	5.0	5.0	10.0	10.0	10.0	10.0	0.0	0.0
Mean	0.0	2.3	19.4	21.4	23.8	14.3	14.3	11.3	13.8	13.4	14.1	12.7	11.3	6.1	5.2

^a0 = no flowers, 10 = 10% coverage of the whole plant, etc.

^bWeek 23 = 4 June; Week 37 = 16 Sept.

^cP = Parkland roses; R = *R. rugosa* shrub rose; B = hybrid roses developed by the late G. Buck, Iowa State Univ.

been under evaluation at the AAFC–Morden Research Center for >10 years. In addition, plants have been entered into regional trials conducted across western Canada. Plants have survived in Agriculture Canada hardiness zone 2 with no protection (Ouellet and Sherk, 1967; Sherk and Buckley, 1968). Stem dieback may occur in severe winters, but regrowth generally is very good.

Mature plant size is ≈85 cm. Juvenile cane growth is more arching and less erect than subsequent growth. At Morden, flower production begins in early June from previous season's buds, continues on current-season growth, and generally is completed by the middle of September (mean duration 14 weeks) (Table 1). The blossom coverage (0 = no flowers; 100 = 100% coverage of the whole plant) compares favorably with that of other "Parkland" roses, other white-flowered shrub roses at Morden, and the parents used in the cross (Table 1). Hips are formed each season but often do not ripen fully under our conditions.

Disease screening trials indicate excellent resistance to local populations of blackspot (*Diplocarpon rosae* Wolf.), powdery mildew [*Sphaerotheca pannosa* (Wallr. ex Fr.) Lev.], and rust (*Phragmidium* sp.) (data not presented). Xue and Davidson (1998) identified the importance of partial resistance to blackspot as a key component in the future development of garden roses. Components examined included incubation period, leaf area with symptoms, number of lesions, lesion length, and sporulation capacity. Differences in cultivar/

selection responses were found for all components. 'Morden Snowbeauty' was identified as having a high level of partial resistance, which was critical in the decision to release this cultivar.

'Morden Snowbeauty' can be distinguished from other white-flowered shrub roses based on a number of characteristics: semi-double flat white flowers; petaloid stamens; disease resistance (especially to blackspot); low stature; long period of bloom; dark, shiny, green leaves; and hardiness.

Propagation and uses

'Morden Snowbeauty' is propagated by softwood cuttings, as are other members of the "Parkland" rose series. This is important for colder regions, where most budded or grafted roses often suffer winter injury to the scion portion of the plant, and the resulting growth may be from the rootstock only. Softwood cuttings of one to three nodes in length, taken during late spring through midsummer, treated with rooting hormone (e.g., 3000–5000 mg·L⁻¹ indole butyric acid), and placed under intermittent mist or fog will root at high rates (>85%). Plants also may be propagated by tissue culture.

'Morden Snowbeauty' is suitable for a wide variety of landscape applications from individual plants to mass planting. This is the first white-flowered "Parkland" cultivar and has excellent blackspot disease resistance. Both characteristics should contribute to wide-scale utilization in the landscape.

Availability

'Morden Snowbeauty' rose is registered with the Canadian Ornamental Plant Foundation (COPF), P.O. Box 21083, North Bay, ON, P1B 7N8, Canada, and with the American Rose Society, P.O. Box 30,000, Shreveport, LA 71130-0030. Exclusive propagation and distribution rights have been awarded to: COPF for Canada, Bailey Nurseries, Inc., 1325 Bailey Road, Newport, MN, 55055-9597, in the United States; and Pan American, 5151–152 St. Surrey, BC, V4P 2J9, Canada, in the ASEAN and EC countries. Research propagation material is available on a limited basis after signing a nonpropagation agreement.

Literature Cited

- Cairns, T. 1993. Modern roses 10. Amer. Rose Soc., Shreveport, La.
- Collicutt, L.M. 1992. Hardy-rose breeding at the Morden Research Station. HortScience 27:1070, 1147.
- Marshall, H.H. 1977. New rose series meets demand. Canada Agr. 22:24–26.
- Ouellet, C.E. and L.C. Sherk. 1967. Woody ornamental plant zonation. III. Suitability map for probable winter survival of ornamental trees and shrubs. Can. J. Plant Sci. 47:3513–3518.
- Royal Horticultural Society. 1986. Royal Horticultural Society Color Chart. London.
- Sherk, L.C. and A.R. Buckley. 1968. Ornamental shrubs for Canada. Can. Dept. Agr. Pub. #1286, Research Branch, Ottawa.
- Xue, A.G. and C.G. Davidson. 1998. Components of partial resistance to black spot disease (*Diplocarpon rosae* Wolf.) in garden roses. HortScience 33:96–99.