

**T**he popularity of roses is centuries old,



or insecticides to ensure that accurate disease and insect resistance information was collected. However, the roses in the open site were accidentally treated one time in 1994 with diazanon to control rose midge when the adjacent All-America Rose Selections (AARS) plants were sprayed. Leaves infected with black spot were removed from the ground each fall to help decrease the level of the disease in both test areas.

## **O s a**

The evaluation projects were undertaken in order to study the attributes of three new series of shrub roses, not to make a direct comparison between the English and Canadian roses. Plants were evaluated on winter hardiness; disease and insect resistance; flower color, size, bloom period and coverage; plant size and form; and health. The English roses were observed from spring 1990 until fall 1995, and the Explorer/Parkland roses were evaluated from spring 1992 until fall 1995. A summary rating was given to each rose based on bloom coverage at peak, habit quality, plant health, resistance to diseases and insects and winter hardiness.

### **The English Roses**

The term “English roses” was coined by David Austin to describe the shrub roses resulting from his breeding program. His roses combine the old flower forms with the colors and repeat flowering aspect of modern shrub roses. English roses, although not a recognized rose class, are commonly accepted as a distinct type of modern shrub rose.

The following 25 roses were located in Pullman Evaluation Garden: ‘Belle Story’, ‘Bredon’, ‘Cymbeline’, ‘Dapple Dawn’, ‘English Elegance’, ‘Fair Bianca’, ‘Francine Austin’, ‘Gertrude Jekyll’, ‘Graham Thomas’, ‘Heritage’, ‘Mary Rose’, ‘Othello’, ‘Perdita’, ‘Pretty Jessica’, ‘Saint Cecilia’, ‘The

The most significant external influence on flower production was rose midge (*Dasineura rhodophaga*) damage. The larvae of rose midge feed on shoots and flower buds, resulting in the death of the injured plant tissue. Flowering can be greatly reduced when the rose midge adult emerges from the soil early in the spring to lay its eggs. However, a cool spring can delay the emergence of the adult until after the rose has produced its first flowers. Many generations of rose midge can occur within a year (Johnson and Lyon 1991). Rose midge damage was first observed in the evaluation plots in 1993 and subsequently in 1994. Flower production on affected plants was reduced, and midge damage was most severe in 1994. Damage was first noted in late May to early June of 1993, but due to the cold winter of 1993-94, damage was not observed until late June to mid-July of 1994. Six roses had significant reductions in flower production during 1993 and/or 1994 because of rose midge damage. 'Lucetta', 'The Reeve' and 'Windrush' had decreases of 40% to 60% in flower coverage in both years whereas 'Mary Webb', 'Othello' and 'Wife of Bath' had 30% to 40% decreases in 1993 or 1994.

Japanese beetles were first observed on test roses in 1993 but were not present in significant numbers until 1995.<sup>1</sup> Damage to flower buds, flowers and leaves was minor, although at times beetle populations appeared significant. Minor to moderately serious damage from deer and rabbits was also noted periodically. Deer browsing was infrequent, but loss of flowers was noted on 'Belle Story', 'Bredon', 'Graham Thomas', 'Othello', 'Perdita', 'Saint Cecilia' and 'The Reeve'. Rabbit damage occurred in both spring and summer, and the loss of canes was noted on 'Belle Story', 'Cymbeline', 'Dapple Dawn', 'Francine Austin', 'Gertrude Jekyll', 'Heritage', 'Mary Rose', 'Perdita', 'Pretty Jessica', 'The Countryman', 'The Miller', 'The Reeve', 'Troilus', 'Warwick Castle' and 'Wenlock'.

There were no complete losses of any cultivar, although there were incidences of individual plants being killed over winter. One or two plants of 'Belle Story', 'English Elegance' and 'Fair Bianca' were killed, and one plant of 'Windrush' never fully recovered to good health after a near loss the winter of 1993-94. That winter was the most severe of the evaluation period with eight consecutive days of subzero temperatures in January of

1994. The highest daytime temperatures ranged from -1 to -12 degrees Fahrenheit, with nightly lows to -22 degrees. All English roses died back to the crowns or to the snow line, which was about 6 inches above ground level. In other years, injury ranged from tip damage to one-year wood to full cane loss. Typical winter injury patterns are noted in Table 2.

**Black Spot**

**Powdery Mildew**

**Rose Midge**

**Japanese Beetle**

**Winter Injury**

	<b>Black Spot</b>	<b>Powdery Mildew</b>	<b>Rose Midge</b>	<b>Japanese Beetle</b>	<b>Winter Injury</b>

## 5 Plant Evaluation Notes

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programs. All roses were evaluated in the open, exposed test site.

Nineteen shrub roses from Agriculture Canada were evaluated: 'Adelaide Hoodless', 'Assiniboine', 'Champlain', 'Cuthtgh1ss',

Davis', 'John Franklin', 'Morden Amorette' and 'William Baffin', had rose midge damage in both years. The accidental application of diazinon in 1994 did not decrease or stop rose midge damage. In fact, in addition to the roses that were damaged in both years, six other cultivars were damaged in 1994 only, including 'Adelaide Hoodless', 'Assiniboine', 'Cuthbert Grant', 'Morden Blush', 'Morden Fireglow' and 'Winnipeg Parks'. Only 'Morden Cardinette' had damage noted in 1993, but not in 1994. The *Rosa rugosa* types were highly resistant to rose midges, and no damage was noted on 'David Thompson', 'Henry Hudson', 'Jens Munk' and *R. rugosa* 'Albo-Plena', although 'Martin Frobisher' did have some damage in 1993. 'Morden Centennial' and 'Morden Ruby' were the only non-rugosa types that were uninjured.

Damage to flowers and leaves from Japanese beetles was rarely more than minor, and did not usually decrease the ornamental display. Foliage and flowers of 'Cuthbert Grant' were severely damaged by beetles in 1995. The following plants were never observed with beetles present or with feeding damage: 'John Davis', 'John Franklin', 'Morden Cardinette', 'Morden Centennial', 'Morden Ruby' and 'Winnipeg Parks'.

Winter hardiness was not a primary consideration with the Explorer/Parkland roses. Tip dieback was the most common injury observed each year. Roses with damage to one-year wood and the oldest canes in some years were 'Champlain', 'David Thompson', 'Henry Hudson', 'John Franklin', 'Morden Cardinette'

and 'Morden Ruby'. In the severe winter of 1993-94, about half of the roses died back to the snow line. The roses that were not killed to the snow line in 1994 were 'Assiniboine', 'David Thompson', 'Henry Hudson', 'Jens Munk', 'John Davis', 'Martin Frobisher', 'Morden Blush', 'Morden Fireglow', *Rosa rugosa* 'Albo-Plena' and 'Winnipeg Parks'. Two plants of 'John Franklin' were killed during the 1993-94 winter season, and all plants of 'Morden Ruby' died after three seasons. 'Assiniboine' and 'Martin Frobisher' were never injured during winter.

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So, which shrub roses are best suited for Midwestern gardens? When considering winter hardiness alone, just about every rose in this evaluation project is suitable. Winter losses were insignificant since only nine plants out of 153 were killed over six years. The English roses proved to be hardy beyond our expectations. All of the English roses died to the ground during the coldest weather of 1994, but half of the hardy shrub roses from Canada also died to the ground that winter.

Winter hardiness alone does not make the best shrub rose. Flowers, habit and disease and insect resistance must also be taken into account. The charming allure of the English roses was undeniable, but the often severe susceptibility to black spot lessened the ornamental quality and health of these plants. The winter hardy roses from Canada not only had attractive blossoms but in more cases exhibited greater resistance to black spot.

F a c a 1992, 1993 a d 1994, e e c e .  
 P a e 1992, 1993 a d 1994, e e c e .  
 a d . a a . 1992, 1993 a d 1994, e e c e .