‘Northern Beauty’ Lily

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Lilies are grown throughout the world as flowering landscape plants, greenhouse cut flowers, and pot plants. There are seven sections of the genus *Lilium* based on botanical classifications (Comber, 1949). Interspecific hybridization has been widely used to develop new commercial lily cultivars. Although successful hybridization within botanical sections of the genus has been readily obtained and results in fertile hybrids, intersectional hybridization is more difficult and progeny are often sterile (e.g., Ronald and Ascher, 1976).

‘Northern Beauty’ is a complex intersectional hybrid that combines the *Sinomartagon* and *Archelirion* sections (female parent ‘Black Beauty’) with the *Sinomartagon* and *Leucolirion* sections (male parent ‘White Henryi’). ‘Northern Beauty’ is the first named cultivar to be derived from diploid ‘Black Beauty’ and, as such, represents an important advance in lily breeding with potential for fertility restoration in a wide interspecific cross.

Origin

‘Northern Beauty’ originated from a cross made in 1978 between *Lilium* × ‘Black Beauty’ and ‘White Henryi’ [*L. henryi* × *L. leucanthum* var. *centifolium* (Stapf) Stearn]. Controlled crossing was done in the greenhouse. Hybrid embryos were extracted and grown on a lily embryo culture medium (Stimart and Ascher, 1974). ‘Black Beauty’, the female parent, is a unique intersectional hybrid developed from a cross between *L. speciosum* Thunb. var. *rubrum* and *L. henryi* Bak. (Woodriff, 1958). Its parentage was later confirmed by karyotype studies as *L. speciosum* Thunb. var. *punctatum* × *L. henryi* (Emsweller and Uhring, 1962). Sterility has been a hindrance to further breeding using ‘Black Beauty’ (Emsweller and Uhring, 1966; Ronald and Ascher, 1976; Uhring, 1968).

Efforts to restore fertility and to hybridize it with induced tetraploids of ‘Black Beauty’ have had limited success (Griesbach, 1985). While the original diploid ‘Black Beauty’ has

previously been reported as sterile, Ronald and Ascher (1976) reported limited embryo development in diploid ‘Black Beauty’ when pollinated with pollen of *Archelirion* or *Leucolirion* section lilies. These embryos generally developed without endosperm and therefore required embryo culture (Ronald and Ascher, 1976). The introduction of *L. henryi* from the *Sinomartagon* section (section 5a) into the *Archelirion* section (section 4) by sexual means incorporated improved vigor and disease resistance into the Oriental lilies (*Archelirion*). Since its introduction in 1957, ‘Black Beauty’ has remained a popular lily and has Hall of Fame status in the North American Lily Society Popularity Poll (Wais,

1992) and the Award of Achievement given by the same society (Helsley, 1990).

Description

Derived plants and flowers of ‘Northern Beauty’ (Fig. 1) closely resemble ‘Black Beauty’, except that ‘Northern Beauty’ has a distinct yellow throat, larger flowers, and less recurved tepals (petals and showy sepals). In Man., Canada, ‘Northern Beauty’ flowers in late July or early August. This early flowering contrasts with ‘Black Beauty’, which flowers late in the growing season (2 to 3 weeks later than ‘Northern Beauty’), so that plants often are not fully dormant before winter in northern zones.

‘Northern Beauty’ plants grown in Zone 3 average 80 ± 9 cm in height with green stems [Royal Horticultural Society (RHS) 143B] overlaid with grey-purple spots (RHS 187A) (Royal Horticultural Society, 1986). Leaves are 12.3 ± 3.4 cm long, 3.5 ± 0.6 cm wide, and are yellow-green (RHS 146A). Mean tepal length and width are 10.2 ± 0.8 cm and 3.3 ± 0.5 cm, respectively. Tepals are strongly reflexed. Flowers are down-facing and red-purple (RHS grey-purple 187B, C, or red-purple 59B) with a white edge (RHS 155D). The throat is yellow-green (RHS 144A, 143B) with a yellow (RHS 9C, D) edge. Papillae are located on

Fig. 1. ‘Northern Beauty’ lily; (top) flower, (bottom) plant.

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the inner half of the tepals and are 0.1 to 0.8 mm long and are dark purple (RHS 187A, B). The stigma is grey (RHS 202D) and pollen is grey-orange (RHS 175-B).

'Northern Beauty' plants have survived and grow well outdoors in protected locations in Canadian Plant Hardiness Zone 3 and warmer (Ouellet and Sherk, 1967). This proven performance combined with new ornamental characteristics and breeding value indicate the potential value of this cultivar.

Propagation

'Northern Beauty' plants are propagated by division, scaling of bulbs, or by tissue culture using Lily Multiplication Medium (Carolina Biological Supply Co., Burlington, N.C.). Flowering plants can be developed in 1.5 to 2 years depending on growing conditions. 'Northern Beauty' is registered with the International Register (Royal Horticultural So-

ciety) and the Canadian Ornamental Plant Foundation (COPF) (652 Aberdeen Ave., North Bay, Ont. P1B 7H9, Canada).

Availability

Limited amounts of propagating stock are available to members of COPF upon request to W.G.R. Agriculture Canada will collect royalties from this cultivar via COPF.

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