Availability

'Double Delight' is propagated by tissue culture procedures by Prairie Plant Systems (108-106 Research Drive, Saskatoon, SK, Canada, S7N 3R3) and by traditional procedures by Jeffries Nurseries Ltd. (P.O. Box 402, Portage la Prairie, MB, Canada, R1N 3B7) under a royalty agreement. Limited number of plants are available for research purposes from C. G. Davidson.

Acknowledgements

The author would like to thank Valerie Orr and Richard Enns for their technical expertise.

Literature Cited

1. Davidson, C. G. 1993. 'Red River' red raspberry, HortScience 28:960-961.
2. Wolukau, J. N. 1992. Effect of nitrogen and cane density of cane architecture and fruit yield in primocane bearing red raspberries, MSc Thesis, U. of Manitoba, Winnipeg, MB.

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'Souris' Red Raspberry

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Abstract

'Souris' is a floricane-fruiting (summer-bearing type) red raspberry (*Rubus idaeus* ssp. *strigosus* Michx.) cultivar, developed by the Agriculture and Agri-Food Canada, Morden Research Centre breeding program. This new cultivar is specifically adapted to colder growing regions of the northern USA and southern Canada. 'Souris' has good berry quality and yield potential.

Origin

'Souris' originated from a cross between 'Asker' and 'Boyne' made in the mid-1960's and subsequently selected and identified as MRS#1x8. Since the original selection was made, several nonreplicated and replicated test plantings have been established to help determine both yield potential and quality characteristics of this clone.

Description

This new cultivar was named after the river and town of Souris, Manitoba, where one of the test sites was located. 'Souris' has very good fruit qualities. Berries are hemispherical in shape. In similarly sized berries, numbers of drupelets per fruit was lower in 'Souris' than 'Boyne' hence drupelet size was larger. Mean berry weight was 2.52 ± .29 gm. Mean berry length and diameter was 1.7 ± 0.2 cm. Soluble re high solids a(13.3 Brix) and pH is relatively low (pH = 2.98).

In sensory panel evaluations (6 trained panelists), 'Souris' is rated superior to 'Boyne' and the other 2 selections for fresh flavour and similar in appearance over a three year period. 'Boyne' was rated slightly higher in flavour scores when frozen berries were used. 'Souris' fruit is sweet and tart with excellent "raspberry" flavour. Dates of initiation of fruit harvest was similar to 'Boyne'; however, the time to ¾ complete harvest for 'Souris' was shorter by an average of 4 days.

'Souris' had fewer (18.8 ± 4.7 per cm of stem) short spines than 'Boyne' (39.6 ± 8.6 per cm of stem). Cane height ranged from 0.9 m to 1.8 m at the test sites, with a mean of 1.5 ± 0.3 m or slightly shorter than 'Boyne.' Cane diameter at 5 cm was 1.5 ± 0.3 cm and at 50 cm was 1.0 ± 0.2 cm. Cane diameter at the lowest fruiting lateral was 1.1 cm. Trellis support was not

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required under the test conditions. An average of 25.7 ± 4.2 laterals were produced on each fruiting cane. Mean length was 16.8 ± 3.6 cm for fruiting branches and 9.7 ± 2.8 cm for non-fruiting or vegetative branches. The average distance between laterals was 5.7 ± 2.3 cm and the height to the first lateral averages 18.6 ± 4.1 cm. In both 1989 and 1990, 'Souris' produced greater numbers of primocanes than 'Boyne' and thus may require greater amounts of thinning to maintain optimum yields.

Anthracnose [*Elsinoe veneta* (Burkholder) Jenk.] was very limited in 'Souris.' No serious infections of this disease or any others were noted in the replicated field trials. Field observation and virus indexing indicated no infection by known common raspberry viruses.

Performance

In 1987, replicated yield trials were established at four locations (Morden, Souris, St. Adolphe and Portage la Prairie) in southern Manitoba (1). All sites except Morden were located on commercial farms. The Morden site was located at the Morden Research Centre.

'Souris' was compared with one other MRC selection and with 'Boyne,' the current industry standard. Fruit from 'Souris' ripened at the same time as 'Boyne' (July 10 to August 7). Yield of fruit (mean 1100 gm m^{-1}) was similar to 'Boyne' and higher than the other selection. Harvests were conducted weekly, thus yield estimates may be low. There was no significant difference between the three clones for flower number per cane (158 ± 18.9), flowers per lateral (5.5 ± 1.7), fruiting laterals per cane (15.0 ± 2.4), fruit per fruiting lateral (4.7 ± 1.2) or number of fruit per cane (70 ± 9.8). Cane dieback due to winter injury for 'Souris' was significantly less than 'Boyne' at all locations over both 1989 and 1990. 'Boyne' has 55.9 cm of tip (stem) injury at one test site (Souris) while 'Souris' averaged 24.0 cm of dieback.

Hardiness

'Souris' should be hardy to at least USDA zone 2 and have as good or better adaptability as 'Boyne.'

Availability

'Souris' is propagated by Jeffries Nurseries Ltd. (P.O. Box 402, Portage la Prairie, MB, Canada, R1N 3B7) under a royalty agreement. Limited number of plants are available for research purposes from C. G. Davidson.

Acknowledgements

The author would like to thank Valerie Orr and Richard Enns. Without their technical expertise in the field, the release of this cultivar would have been much more difficult.

Literature Cited

1. Davidson, C. G. 1993. 'Red River' red raspberry, HortScience 28:960-961.

List 36 Register of New Fruit Varieties

The latest list has been published in *HortScience* Vol. 29(9):942-969. Included are 23 apple, 14 grape, 61 nectarine, 58 peach, 9 pear, 14 plum, 33 raspberry, 45 strawberry and a number of fruits with smaller numbers of releases.