‘Voyageur’ Plum

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‘Voyageur’ is a self-fruitful, very productive, good-quality, semi-clinging, early-ripening, purple (with heavy bloom) European plum (Prunus domestica L.). ‘Voyageur’ matures during the third week of August in Ontario, about 1 week later than ‘California Blue’. It was introduced primarily for fresh market consumption and for planting in areas where European plums are grown.

Origin

Plum breeding, an ongoing program at the Horticultural Research Institute of Ontario since 1913, has resulted in the naming of six cultivars: ‘Valor’, ‘Verity’, and ‘Vision’ (1); ‘Veeblue’ (3); ‘Vanier’ (4); and now ‘Voyageur’ (Fig. 1). In the 1960s, the emphasis of the breeding program was shifted to breeding cultivars that ripen in August, when a large volume of plums are imported in Ontario for fresh consumption. ‘Voyageur’ is the first August ripening domestica-type plum named from the breeding program at Vineland. Release of additional cultivars, providing for a seasonal succession of early, blue European plums harvested in August, will be forthcoming. ‘Voyageur’ resulted from the open-pollinated seed of ‘Ruth Gerstetter’, which was collected in 1963. It was selected in 1973 and subsequently was distributed and tested as Vineland advanced breeding selection V63022. ‘Voyageur’ has been distributed to cooperative researchers in Austria, England, France, Italy, Switzerland, and United States.

Description

The fruit of ‘Voyageur’ is elliptical in shape and small-size averaging 4.4 cm in length and 3.9 cm in width (Fig. 1). Fruit are easy to pick and very few drop prior to maturity. The average fruit weight is 36 g. The pit is semi-clinging, medium-size, and ovate shaped, accounting for 6.9% of the fruit weight. The skin color of fully mature fruit, with bloom completely removed, is dark purple. With high bloom intact, the color is violet-blue. The violet-blue and purple colors are characterized on the Hunter Color Difference Meter (Model D25D3), using a blue standard (Plate C2-4958) (Table 1). The flesh is yellow, firm, and juicy, and quality is good. The fruit exhibits a low susceptibility to brown rot (Monilia fructicola (Wint.) Honey) under application of the standard spray recommendation for this disease in Ontario. The average ripening date at Vineland, Ont. is 21 Aug., a week later than ‘California Blue’. ‘Voyageur’ is a late-blooming cultivar and its average time to bloom is about mid-May, the same as ‘Italian’, ‘Stanley’, and ‘Valor’ at Vineland. Trees are more productive than ‘Stanley’ and ‘Verity’ and the same vigor as ‘Stanley’ on ‘Myrobalan B’ rootstock (Table 2) and spreading. ‘Voyageur’ has shown good compatibility with ‘Myrobalan B’ (Prunus cerasifera Ehrh.), ‘Brompton’ (P. domestica L.), and ‘St. Julien A’ (P. insititia Bailey). It produces trees with larger trunk area (5) on ‘Myrobalan B’ in comparison to ‘Brompton’ and ‘St. Julien A’ (Table 2). However, there is no difference in yield of this cultivar on the above-mentioned rootstocks (Table 2). Irrespective of rootstocks, the yield effi-

![Fig. 1. ‘Voyageur’ plum.](image)

Table 1. Skin color of ‘Voyageur’ plum as measured by a Hunter colorimeter.

<table>
<thead>
<tr>
<th>Fruit color</th>
<th>L</th>
<th>a</th>
<th>b</th>
<th>Chroma</th>
<th>Hue</th>
</tr>
</thead>
<tbody>
<tr>
<td>High bloomed</td>
<td>35.6</td>
<td>0.5</td>
<td>-6.7</td>
<td>6.8</td>
<td>-85.6</td>
</tr>
<tr>
<td>Bloom removed</td>
<td>15.1</td>
<td>1.2</td>
<td>-1.2</td>
<td>1.74</td>
<td>-47.1</td>
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</tbody>
</table>

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Table 2. Effect of rootstock on cumulative yield, growth, and yield efficiency index of European plum cultivars.

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</thead>
<tbody>
<tr>
<td></td>
<td>Stanley</td>
<td>Verity</td>
<td>Voyageur</td>
<td>Mean</td>
<td>Stanley</td>
<td>Verity</td>
<td>Voyageur</td>
</tr>
<tr>
<td>Brompton</td>
<td>204</td>
<td>156</td>
<td>199</td>
<td>186</td>
<td>133</td>
<td>164</td>
<td>110</td>
</tr>
<tr>
<td>St. Julien A</td>
<td>...</td>
<td>172</td>
<td>192</td>
<td>182</td>
<td>...</td>
<td>187</td>
<td>99</td>
</tr>
<tr>
<td>Myrobalan B</td>
<td>182</td>
<td>146</td>
<td>241</td>
<td>190</td>
<td>175</td>
<td>206</td>
<td>176</td>
</tr>
<tr>
<td>Mean</td>
<td>193</td>
<td>158</td>
<td>211</td>
<td>...</td>
<td>154</td>
<td>186</td>
<td>128</td>
</tr>
</tbody>
</table>

'Trees planted in Spring 1975 and trained to modified leader system and dormant pruned annually from 1976 to 1985.

'Stanley' was not evaluated on 'St. Julien A' rootstock in the experiment for which data is presented in the table.

ciency index, expressed as kilograms fruit per unit area of tree trunk cross-sectional area (cm²), was largest for 'Voyageur' and smallest for 'Verity' (Table 2). Trees have a low susceptibility to black knot [Dibotryon morbosum (Shiv.) Th. and Syd.], bacterial canker [Pseudomonas syringae Van Hall.], and European red mite [Panonychus ulmi (Koch)] when commercial spray recommendations for this crop are followed.

Pollination

The flowers of 'Voyageur' are self-fertile. Field selfing of the flowers resulted in 17% fruit set. 'Voyageur', however, benefits from pollination by 'Earliblue', 'Valor', 'Vee-blue', 'Verity', and 'Vision' European plum cultivars (1). 'Voyageur' is a good pollinator for 'Earliblue', 'Bluebell', 'Italian', and 'Verity'. In some years, this cultivar has a tendency to overbear and will benefit from fruit thinning.

Availability

Trees of 'Voyageur' are available from major fruit tree nurseries in Ont. Canada. Virus-free bud and scionwood of this cultivar are available on request from Horticultural Research Institute of Ontario, Vineland Station, ON LOR 2E0, Canada, and Plant Quarantine Station, Agriculture Canada, 8801 East Saanich Road, Sidney, BC V8L 1H3, Canada.

Literature Cited