**Literature Cited**


**'Coastal Red' Sweet Potato**

Melvin R. Hall¹ and Silas A. Harmon²

*Department of Horticulture, University of Georgia Coastal Plain Experiment Station, Tifton, GA 31793*

*Additional index words. Ipomoea batatas, yield, fusarium wilt, root-knot nematodes, soil insects*

'Coastal Red' sweet potato (*Ipomoea batatas* (L.) Lam.) was developed by the Univ. of Georgia at the UGA Coastal Plain Experiment Station. This cultivar combines high yield with high resistance to fusarium wilt and root-knot nematodes, resistance to soil insects, excellent storage quality, profuse plant production from bedded roots, and good baking and canning quality in a red-skinned cultivar.

**Origin**

'Coastal Red', previously tested as GA-121, originated in 1978 as an open-pollinated seedling from GA-76. GA-76 originated in 1969 as a second-generation open-pollinated breeding clone from a Univ. of Georgia breeding clone of unknown origin.

**Description**

Leaves are entire to slightly shouldered and of medium size. The leaf blade is green, but the midrib and petiole have a purplish cast that grades to a medium purple on the plant stem. Vines have moderate length and vigorous growth. Storage roots are fusiform to blocky-shaped, with a slightly russetted, light purple-red skin that may be copper-red in some soils (Fig. 1). Flesh color is medium orange.

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¹Assistant Professor.


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![Fig. 1. Roots of 'Coastal Red' are fusiform to blocky-shaped, with a light purple-red skin.](image-url)
Table 1. Marketable yields (t·ha·1) of ‘Coastal Red’, ‘Jewel’, and ‘Centennial’ sweet potatoes.

<table>
<thead>
<tr>
<th>Year</th>
<th>Cultivar</th>
<th>Georgia*</th>
<th>National collaborators*</th>
</tr>
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<tr>
<td></td>
<td></td>
<td>U.S. #1</td>
<td>Canner</td>
</tr>
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<td>33.5 a</td>
<td>6.3 ab</td>
</tr>
<tr>
<td></td>
<td>Jewel</td>
<td>28.2 a</td>
<td>7.8 a</td>
</tr>
<tr>
<td></td>
<td>Centennial</td>
<td>13.5 b</td>
<td>3.1 b</td>
</tr>
<tr>
<td>1986</td>
<td>Coastal Red</td>
<td>26.9 a</td>
<td>8.1 a</td>
</tr>
<tr>
<td></td>
<td>Jewel</td>
<td>31.6 a</td>
<td>5.6 a</td>
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<tr>
<td></td>
<td>Centennial</td>
<td>20.4 a</td>
<td>5.6 a</td>
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<td>1987</td>
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<td>19.8 b</td>
<td>8.8 a</td>
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<tr>
<td></td>
<td>Jewel</td>
<td>24.6 a</td>
<td>6.9 a</td>
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<tr>
<td></td>
<td>Centennial</td>
<td>22.6 ab</td>
<td>5.1 a</td>
</tr>
</tbody>
</table>

*U.S. #1 (5.0 to 9.0 cm in diameter, 7.5 to 23.0 cm long); canner (2.5 to 5.0 cm in diameter, 5.0 to 18.0 cm long); jumbo (exceeds length and diameter requirements of U.S. #1).

Performance

‘Coastal Red’ has been evaluated in replicated yield trials with ‘Jewel’ and ‘Centennial’ (1983–87) in Georgia and for 3 years in yield (Table 1), soil pest resistance, and baking and canning tests of the National Sweet Potato Collaborator Group (1985–87) (McLaurin, 1985; McLaurin, 1986; McLaurin, 1987). Yields of ‘Coastal Red’ were generally similar to those of ‘Jewel’ and ‘Centennial’. It has good baking and canning quality, but is slightly less flavorful and the baking texture is somewhat less uniform than ‘Jewel’ or ‘Centennial’. Plant production is profuse and compares with ‘Jewel’ and ‘Centennial’ for earliness and uniformity of emergence.

‘Coastal Red’ has a high level of resistance to fusarium wilt or stem rot [Fusarium oxysporum f. sp. batatas (Wt.) Snyd. & Hans], similar to that of ‘Jewel’ and greater than ‘Centennial’ (McLaurin, 1985; McLaurin, 1986; McLaurin, 1987). ‘Coastal Red’ has higher resistance to root-knot nematode [Meloidogyne incognita (Kofoid and White) Chitwood] than ‘Jewel’ or ‘Centennial’. This selection is slightly more resistant than ‘Jewel’ or ‘Centennial’ to larvae of the wireworm, Diabrotica, Systema soil-insect complex. It exhibits a lower level of resistance to sweet potato flea beetle (Chaetocnema confinis Crotch) and slightly more resistance to grubs (Plectris aliena Chapin) than ‘Jewel’ or ‘Centennial’. ‘Coastal Red’ combines high yield and good baking and canning quality with improved resistance to soil-borne pests in a red-skinned cultivar for Georgia or other areas requiring a sweet potato of this type.

Availability

A limited amount of foundation planting stock will be available from M.R.H. for the 1989 crop season.

Literature Cited