SOUTHLAND is a new cantaloupe variety adapted for growing in the Southeastern United States. It has relatively high resistance to downy mildew and powdery mildew and moderate resistance to gummy stem blight. It produces good yields of high quality fruit.

Prevalence of downy mildew and gummy stem blight and susceptibility of existing varieties to these diseases discourages the growing of cantaloupes in Southeastern States. The introduction from an unknown source, in the late thirties, of the high quality downy mildew resistant variety, Smith's Perfect, demonstrated the existence of resistance to downy mildew. It also demonstrated that high quality fruits could be produced in humid climates. Although Smith's Perfect is still grown to a limited extent, its lateness and erratic productivity does not warrant its planting for commercial production. Breeding for varieties adapted to conditions in the Southern States has increased rapidly and has resulted in introduction of varieties such as Seminole, Florida No. 1, Florisun, Georgia 47, Edisto, Edisto 47, and Gulfstream (developed by Florida, Georgia, and South Carolina agricultural experiment stations and the USDA Agricultural Research Service, respectively).

Southland is an inbred line from the cantaloupe cross Florisun x Georgia 47. Following the cross, seed from several selfed F₂ field selections were combined to form the foundation stock for Southland. Seed from naturally pollinated field selections in isolated “mass blocks” were massed for field plantings. Thus, Southland originated from a mixed program of controlled inbreeding and of mass selection of resistant plants to obtain resistance to downy mildew, powdery mildew, and gummy stem blight.

Southland combines powdery mildew, downy mildew, and gummy stem blight resistance derived from Georgia 47 and Florisun respectively with high quality derived from both parental varieties.
In well-grown spring plantings, the fruit of Southland resemble those of Hale’s Best Jumbo, and they have superior quality for eating and shipping. The seedlings of this plant are vigorous, becoming exceedingly vigorous at relatively high temperatures. Although Southland possesses resistance to prevalent diseases, spraying for control of diseases is desirable when weather is favorable for development of these diseases.

The fruits are mostly elliptical in shape, although many may be more rounded than elliptical. Fruit will measure 5 to 6 inches in diameter and 6 to 8 inches in length. Fruit size will vary at different fertility levels and in different production areas but will average close to Hale’s Best Jumbo. The melon averaged 3.04 pounds as compared with 2.73 pounds for Hale’s Best Jumbo. The fruit of Southland are slightly to deeply ribbed and are well covered with a medium to rather coarse net. The flesh is thick, deep orange in color, and of excellent flavor and aroma under moderately dry conditions and fair to good under more humid conditions. Seed cavity is moderately small. The fruit matures in 70 to 75 days, approximately same as Hale’s Best Jumbo. For best quality, it should be harvested near the full-slip stage.

Southland has been grown in trials as AC-63-11 at a number of substations of the Auburn University Agricultural Experiment Station, the Southern Cooperative Cantaloupe Variety Trials in other southern states, and grown in demonstration plantings by commercial growers.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Average all locations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yield/acre</td>
</tr>
<tr>
<td>Southland²</td>
<td>19,569</td>
</tr>
<tr>
<td>Hale’s Best Jumbo</td>
<td>14,621</td>
</tr>
<tr>
<td>Edisto 47</td>
<td>15,932</td>
</tr>
</tbody>
</table>

² Gulf Coast, Wiregrass, Chilton Area Horticulture, and North Alabama Horticulture Substations, and Main Station, Auburn.

² Tested under number AC-63-11.
Southland compares favorably with established varieties in yielding ability, but it is superior to these varieties in quality and sugar as indicated by soluble solids in the table.

**AVAILABILITY OF SEED**

Seed of Southland are being increased by the Alabama Crop Improvement Association and will be available from local seed dealers for 1970 plantings.

**SUMMARY**

The cantaloupe variety, Southland, developed in a continuing breeding program, has been described. The variety possesses resistance to downy mildew, powdery mildew, and gummy stem blight. It produces melons of excellent edible quality and market appearance. The new variety should help fill the need for commercial acceptable varieties of good quality adapted to production in the South.

**ACKNOWLEDGMENTS**

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The valuable assistance of participants in the Southern Cooperative Cantaloupe Variety Trials is also acknowledged. La. 7-1 and La. 8-2 were developed by R. T. Brown, South Louisiana Experiment Station, Port Sulfur, Louisiana. L-561B1A and L-273A1A were developed by the author following original research by Dr. J. M. Montelaro, University of Florida, Gainesville, Florida.

**LITERATURE CITED**

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