Registration of Crop Varieties

REGISTRATION OF COBAL COTTON
(Reg. No. 42)

E. N. Duncan and J. B. Pate

'COBAL' cotton (*Gossypium hirsutum* L.) was selected by D. M. Simpson in 1942 at Knoxville, Tennessee, from a segregating population of 'Coker 33-12' × 'Ballard 136'. The parents are early maturing non-commercial strains. Coker 33-12 is a small boll prolific strain while Ballard 136 is a large boll nonprolific strain from the Stoneville 2 variety. Early selection pressure for the Ballard 136 biotype resulted in a strain, T-416, very similar to the 'Empire' variety though somewhat earlier. This strain was released in 1950 as Cobal.

The Cobal plant is bushy in appearance, medium in height, with moderately lobed, slightly cupped leaves of medium size allowing more than average light penetration. Cobal fruits rapidly and matures early. The bolls are large, oval-blunt, well fluffed upon opening, and are easily picked by hand or machine with little field loss. Grades of machine picked Cobal have compared favorably with other varieties produced under similar conditions.

Comparative agronomic and fiber characteristics of Cobal and certain other varieties are summarized in Table 1. Cobal is similar in most respects to Empire. It is well adapted to wilt-free areas of North Carolina, North Alabama, North Mississippi, and Tennessee.

Cobal was developed and released by the Tennessee Agricultural Experiment Station and the Cotton and Cordage Fibers Research Branch of CRD, ARS, USDA, cooperatively. Maintenance of seed stocks remains with the breeders and periodically breeder seed is supplied to the Tennessee Seed Products, Inc., Nashville, Tennessee for increase and distribution.

Table 1. Comparative agronomic and fiber properties of 5 cotton varieties grown in 17 Tennessee yield tests in 1958-1960.

<table>
<thead>
<tr>
<th>Variety</th>
<th>Lint yield lb./A.</th>
<th>Lint %</th>
<th>20 bolls per acre</th>
<th>Fiber length</th>
<th>Strength</th>
<th>Mic.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cobal</td>
<td>807</td>
<td>39.8</td>
<td>55</td>
<td>106</td>
<td>34</td>
<td>1.14</td>
</tr>
<tr>
<td>Pope</td>
<td>948</td>
<td>40.3</td>
<td>67</td>
<td>111</td>
<td>33</td>
<td>1.06</td>
</tr>
<tr>
<td>Delilene 15</td>
<td>812</td>
<td>38.4</td>
<td>71</td>
<td>111</td>
<td>34</td>
<td>1.11</td>
</tr>
<tr>
<td>Empire W. R.</td>
<td>805</td>
<td>36.4</td>
<td>65</td>
<td>97</td>
<td>44</td>
<td>1.12</td>
</tr>
<tr>
<td>Fox 4</td>
<td>800</td>
<td>36.7</td>
<td>68</td>
<td>109</td>
<td>34</td>
<td>1.12</td>
</tr>
</tbody>
</table>

* Calculated by expressing the yield at 1st picking as a percentage of the yield of Fox 4 at 1st picking.

REGISTRATION OF POPE COTTON
(Reg. No. 43)

E. N. Duncan and J. B. Pate

'POPE' cotton (*Gossypium hirsutum* L.) was selected by D. M. Simpson and E. N. Duncan in 1948 from a segregating population of ('Coker 33-12' × 'Acala 5675') × 'Acala 5675'. The two parents are noncommercial longtime selfed stocks. Coker 33-12 is a small boll, early, prolific strain while Acala 5675 is a large boll medium late strain with superior fiber properties.

Following 6 generations of selfing and selection for prolificacy, and fiber quality, 2 strains, T-899 and T-899, were increased for testing. After 3 years of field and laboratory tests, it was concluded that there were no real differences between the 2 strains and they were combined for further increase and release as the Pope variety in 1956.

The Pope plant is in general cylindrical in shape with round vegetative with small semi-cupped leaves. The leaf is ovate-slightly pointed, and well fluffed when opened, held loosely in the burr making it easily picked by hand or machine. Appreciable field loss is experienced if the plants are delayed after 50% of the crop is open. Pope foliage is less pubescent than average cottons which may result in less than average grades when machine picked. Under conditions of high fertility and high plant populations lodging may be moderate; however, following opening the plants become erect.

Comparative agronomic and fiber characteristics of certain other varieties are summarized in Table 1. Pope is well adapted to wilt free areas of North Carolina, North Alabama, North Mississippi, and Tennessee.

Pope was developed and released by the Tennessee Agricultural Experiment Station and the Cotton and Cordage Fibers Research Branch of CRD, ARS, USDA, cooperatively. Maintenance of seed stocks remains with the breeders and periodically breeder seed is supplied to the Tennessee Seed Products, Inc., Nashville, Tennessee for increase and distribution.

REGISTRATION OF PLAINS COTTON
(Reg. No. 44)

Albert L. Smith

'PLAINS' cotton (*Gossypium hirsutum* L.), was selected by author from a cross of 'Clevewilt 6' × 'Stoneville 2B' in 1937. The strain is a product of cooperative cotton breeding investigations of the Georgia Agricultural Experiment Stations and the Cotton and Cordage Fibers Research Division, U. S. Department of Agriculture. It is largely developed in Georgia but was moved to

1 Registered under a memorandum of understanding between the Crops Research Division, ARS, USDA, and the American Society of Agronomy. Cooperative investigations of the Crops Research Division, ARS, USDA, and the Tennessee Agricultural Experiment Station. Received Feb. 14, 1964.


3 Registered under a memorandum of understanding between the Crops Research Division, ARS, USDA, and the American Society of Agronomy. Cooperative investigations of the Crops Research Division, ARS, USDA, and the Tennessee Agricultural Experiment Station. Received Mar. 19, 1964.

