COKER STUART AND HAMPTON SOYBEANS

(Reg. Nos. 46 and 47)

Henry W. Webb and John D. Hicks, Jr.

'COKER STUART' soybeans (Glycine max (L.) Merr.) originated as an F1 plant selection from the cross Majos X Lee in a program conducted by Coker's Pedigreed Seed Company, Hartsville, South Carolina. Prior to release Coker Stuart was identified by the number Co. 57-225. It is classed in maturity group VIII and is adapted to the southeastern United States.

Distinguishing characteristics of Coker Stuart are: Flowers—white; Pubescence—gray; Pods—tan; Seed coat—dull yellow; and Hilum—buff.

Tests in its area of adaptation indicate that Coker Stuart is somewhat higher in yield, taller, and superior in shatter resistance and later in maturity than Jackson and Bienville (Table 1). Coker Stuart is resistant to bacterial pustule, wildfire, and frogeye.

Coker Stuart was released in 1964 in the southeast with emphasis placed on the Southern Coastal Plains of South Carolina, Coastal Plains of Georgia, Alabama, and North Florida. Coker's Pedigreed Seed Company will be responsible for maintenance of breeders seed. In 1962 Coker's Pedigreed Seed Company distributed first official brochure on this variety.

'HAMPTON' soybeans (Glycine max (L.) Merr.) originated as an F1 plant selection from the cross Majos X Lee in a program conducted by Coker's Pedigreed Seed Company, Hartsville, South Carolina. Prior to release Hampton was identified by the number Co. 57-225. It is classed in maturity group VIII and is adapted to the Southeastern United States.

Distinguishing characteristics of Hampton are: Flowers—purple; Pubescence—gray; Pods—brown; Seed coat—dull yellow; and Hilum—about 50% of seed have imperfect black and 50% buff color.

Regional tests indicate that Hampton yields more, is higher in oil content, and superior in disease and shatter resistance to Jackson (Table 2). Hampton is resistant to bacterial pustule, wildfire, frogeye, and target spot.

Hampton was initially released in 1962 in North Carolina, South Carolina, Georgia, Florida, Alabama, and Mississippi. Coker's Pedigreed Seed Company will be responsible for maintenance of seed in its area of adaptation.

Hampton's release was announced and a brief description was published in March 1962 issue of Crop Science. In 1962 Coker's Pedigreed Seed Company distributed first official brochure on this variety.

1 Registered under a memorandum of understanding between the Crops Research Division, ARS, USDA, and the American Society of Agronomy.

2 Plant Breeder and Assistant Plant Breeder, Coker's Pedigreed Seed Company, Hartsville, South Carolina.

Table 1. Mean performance of Coker Stuart soybeans in 16 tests at various locations in its area of adaptation (average of 8 tests per year, 1961 and 1962).

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<tbody>
<tr>
<td>Coker Stuart</td>
<td>30.5 1965</td>
<td>+7</td>
<td>1.3 3.5</td>
<td>1.2 1.5</td>
<td>19.5 41.0</td>
<td>20.8</td>
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<tr>
<td>Jackson</td>
<td>30.6 1965</td>
<td>-3</td>
<td>1.1 3.1</td>
<td>1.5 1.3</td>
<td>18.8 36.7</td>
<td>22.4</td>
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<tr>
<td>Bienville</td>
<td>31.1 1890</td>
<td>0</td>
<td>1.2 3.2</td>
<td>1.5 1.9</td>
<td>15.8 41.0</td>
<td>22.9</td>
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</table>
| *From 1 (good) to 5 (poor).† From 1 (no shattering) to 5 (over 20% shattering).‡ From 1 (least) to 5 (very poor).

Table 2. Mean performance of Hampton soybeans in 40 tests at various locations in its area of adaptation (average of 13 tests per year, 1960 to 1962).

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<tbody>
<tr>
<td>Hampton</td>
<td>32.7 1962</td>
<td>+2</td>
<td>1.3 3.3</td>
<td>1.0 1.5</td>
<td>17.3 28.6</td>
<td>22.8</td>
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<tr>
<td>Jackson</td>
<td>30.4 1960</td>
<td>0</td>
<td>1.2 2.4</td>
<td>2.2 3.5</td>
<td>15.5 26.1</td>
<td>22.6</td>
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</tr>
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</table>
| *From 1 (good) to 5 (poor).† From 1 (no shattering) to 5 (over 20% shattering).‡ Bacterial pustule score. From 1 (immune to highly resistant) to 5 (leaves covered with lesions and much necrosis.

CYPRESS WHEAT

(Reg. No. 440)

Hugh McKenzie and M. N. Grant

'CYPRESS' (Triticum aestivum L.), CI 13344, a hard red spring wheat, was developed in Canada through the co-ordinated efforts of the Prairie Region Project Group. Cypress is a selection from the cross 'Rescue' X 'Chinook' made in 1947 at the Experimental Farm, Swift Current, Saskatchewan. Selection in early generations was primarily for superior agronomic characteristics and resistance to the wheat stem sawfly (Cephus cinctus Nort.). Cypress possesses a high degree of resistance to the sawfly combined with good milling and baking quality. The grain is very attractive in appearance.

Cypress is similar to the two older sawfly-resistant varieties, Rescue and Chinook, in yield, bushel weight, and maturity. It is superior to Rescue in baking quality and superior to Chinook in resistance to both sawflies and shattering.

The spike of Cypress is fusiform, mid-long, mid-wide, smooth and white; the shoulders are square, some slightly elevated and some slightly oblique, and the bulbs are mid-wide and acute. The kernels are ovoid to elliptical, mid-long, mid-wide, hard and red; the crest is mid-wide and mid-deep; the cheeks are rounded to angular; the brush is mid-size to large, short to mid-long; and the germ is mid-size and oval.

Cypress has some resistance to stem rust but is susceptible to stem rust race 198 and to leaf rust and the smuts.

Cypress is adapted to the dry prairie areas where sawflies and drought are the main hazards in wheat production.

Breeder seed will be maintained at the Canada Department of Agriculture Research Station at Lethbridge, Alberta.

Additional information on Cypress was reported by McKenzie et al.

Table 3. Mean performance of Hampton soybeans in 40 tests at various locations in its area of adaptation (average of 13 tests per year, 1960 to 1962).

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DELTAPINE 15, DELTAPINE STAPLE, DELTAPINE SMOOTH LEAF, FOX 4, AND DELTAPINE 45 COTTONS

(Reg. Nos. 46, 47, 48, 49, and 50)

E. C. Ewing, Jr.

'DELTAPINE 15' was selected by E. C. Ewing from Deltapine 14. Selected in 1938 and first distributed in 1948, it was originally designated as Deltepine-14-833. It has the same general characteristics of 'Deltapine 14', i.e., high yield under a wide variety of environmental conditions, medium early maturity, rather indeterminate fruiting habit, high lint percentage, and small bolls. Deltapine 15 was selected for its improved fiber strength and slightly larger bolls as compared with its parent. This improvement in fiber properties came about as a result of the use of the Pressure Tester and the setting up of commercial fiber test facilities by the then P&MA division of the USDA. Deltapine 15 has some tolerance to the common diseases of cotton except for the Fusarium wilt-Nematode complex.

In 1934, approximately 54% of the cotton acreage in the United States was planted to this variety. It was also the dominant variety in Mexico and Central America.

1 Registered under a memorandum of understanding between the Crops Research Division, ARS, USDA, and the American Society of Agronomy.