No. 7200100

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Coker's Pedigreed Seed Company

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF seventeen YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. IN THE UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS CERTIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

COTTON

'Coker 312'

In Testimony Whereof, *I have hereunto set my hand and caused the seal of the* Plant Variety Protection Office *to be affixed at the City of* Washington *this* 26th *day of* July *in the year of our Lord one thousand nine hundred and* seventy-four

Attest:

Commissioner
Plant Variety Protection Office
Grain Division
Agricultural Marketing Service

Secretary of Agriculture

FORM GR-470
(2-12-71)

UNITED STATES DEPARTMENT OF AGRICULTURE
CONSUMER AND MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

FORM APPROVED
OMB NO. 40-R3712

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

INSTRUCTIONS: *See Reverse.*

1. VARIETY NAME OR TEMPORARY DESIGNATION: Coker 312	2. KIND NAME: Cotton	FOR OFFICIAL USE ONLY — PVPO NUMBER: 72100
3. GENUS AND SPECIES NAME: Gossypium hirsutum	4. FAMILY NAME *(Botanical)*: Malvaceae (mallow)	FILING DATE: 3·6·72 — TIME: 10 (A.M.) P.M.
	5. DATE OF DETERMINATION: January 1970	FEE RECEIVED: $750.00 — CHARGES: —
6. NAME OF APPLICANT(S): Coker's Pedigreed Seed Company	7. ADDRESS *(Street and No. or R.F.D. No., City, State, and ZIP Code)*: P.O. Box 340, Hartsville, South Carolina 29550	8. TELEPHONE AREA CODE AND NUMBER: 803-332-7531
9. IF THE NAMED APPLICANT IS NOT A PERSON, FORM OF ORGANIZATION: *(Corporation, partnership, association, etc.)*: Corporation	10. STATE OF INCORPORATION: South Carolina	11. DATE OF INCORPORATION: June 12, 1918

12. Name and mailing address of applicant representative(s), if any, to serve in this application and receive all papers:

Henry W. Webb, Director
Cotton-Soybean Division
Coker's Pedigreed Seed Company
P.O. Box 340
Hartsville, South Carolina 29550

13. CHECK BOX BELOW FOR EACH ATTACHMENT SUBMITTED:

- [X] 12A. Exhibit A, Origin and Breeding History of the Variety *(See Section 52, P.L. 91-577)*
- [X] 12B. Exhibit B, Botanical Description of the Variety
- [ ] 12C. Exhibit C, Objective Description of the Variety
- [X] 12D. Exhibit D, Data Indicative of Novelty
- [X] 12E. Exhibit E, Statement of the Basis of Applicant's Ownership

The applicant declares that a viable sample of basic seed of this variety will be deposited upon request before issuance of a certificate and will be replenished periodically in accordance with such regulations as may be applicable. *(See Section 52, P.L. 91-577).*

14A. Does the applicant(s) specify that seed of this variety be sold by variety name only as a class of certified seed? *(See Section 83(a), P.L. 91-577) (If "Yes," answer 14B and 14C below.)* [X] YES [ ] NO

14B. Does the applicant(s) specify that this variety be limited as to number of generations? [X] YES [ ] NO

14C. If "Yes," to 14B, how many generations of production beyond breeder seed? Foundation (1 year), Registered (1 year), Certified (1 year)

Applicant is informed that false representation herein can jeopardize protection and result in penalties.

The undersigned applicant(s) of this sexually-reproduced novel plant variety believes that the variety is distinct, uniform, and stable as required in Section 41 and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act (P.L. 91-577).

February 29, 1972
(DATE)

Robert R. Coker
(SIGNATURE OF APPLICANT)
Robert R. Coker, President

(DATE)

(SIGNATURE OF APPLICANT)

13 A. EXHIBIT A, ORIGIN AND BREEDING HISTORY OF VARIETY - COKER 312

Stage	Year	Activity
1	1948	Cross; Coker 100 Staple X Deltapine 15
2	1950-1959	Line selection program thru successive generations produced the strain Coker 60-111.
3	1960-1966	Line selection in Coker 60-111 produced the strain Coker 66-115, later named Coker 310.
4	1966-1968	Line selection in Coker 66-115 produced the strain Coker 68-312, now named Coker 312.
5	1968-1971	Coker 68-312 evaluated in replicated yield trials and disease screening trials across the Cotton Belt. Concurrent seed increase was accomplished to produce a small volume of foundation seed during the 1970 season in South Carolina. Continued reselection within Coker 68-312 has produced maintenance strains which will be used to produce foundation seed in years ahead.
6	1971	Produced certified seed of Coker 312 under contract with Canyon Gin, Lubbock, Texas, for distribution to farmers for 1972 plantings in that area.

Variants: Occasional variants are to be found in any cotton variety due to frequency of natural cross pollination. However these are at a minimum in Coker 312 due to the long period of selection and reselection and relatively high degree of homozygosity.

13 B. EXHIBIT B, BOTANICAL DESCRIPTION OF THE VARIETY - COKER 312

1. a. Seed: Seed of Coker 312, are medium in size with a seed index averaging about 11.0. The raw, gin run seed have a rather heavy covering of linters or fuzz fibers.

The seed coat is very tough and usually resists fracturing and dehulling in the ginning and delinting processes. Comparable to Coker 310.

The acid delinted seed is quite uniform in size and shape averaging about 10 seed per gram.

b. Young Plant: The plant is vigorous in seedling stage,growing rapidly and developing rather large leaves. The flowering usually starts one to three days earlier than Coker 310. Coker 312 has shorter internodes and consequently fruits somewhat faster and closer than Coker 310.

2. Mature Plant Characteristics:

a. Stalk: Erect, excellent resistance to lodging.

b. Foliage: Medium heavy, medium size leaves, medium lobed.

c. Bolls: Medium oblong to slightly pointed. Averages about 70 - 75 per pound seed cotton.

d. Plant Type: Open, well balanced, more determinate than Coker 310, with somewhat shorter internodes and closer fruiting.

e. Storm Resistance: Excellent for open boll type. Better than Coker 310 and most other rain belt cottons.

f. Wilt Tolerance: Good tolerance to fusarium and moderate tolerance to verticillium wilt.

g. Maturity: Usually 2 - 5 days earlier than Coker 310.

3. Lint Characteristics, under average seasonal conditions:

a. Length: Averages 1 1/16 - 1 5/32. May reach 1 3/16 under favorable conditions, equal to Coker 310.

b. Fiber Strength: 80,000 - 86,000 p.s.i., slightly lower than Coker 310.

c. Micronaire: Averages 4.0 - 4.8. Same range as Coker 310 under average conditions. May be higher under stress conditions.

d. Yarn Strength: 22's yarns average about 112 - 120 pounds.

e. Gin Turnout (lint percent): 39 - 41%, averages about 1 1/2 percentage units higher than Coker 310.

f. Coker 312 possesses an unusual combination of fiber properties, earliness and storm resistance. It's response to the Texas High Plains environment makes it particularly well suited to that area where earliness and determinancy are desirable.

EXHIBIT D: PARTICULARS OF TRIAL PERFORMANCE, COKER 312, PV. No. 72100

Novelty is based on the following unique characters and/or combinations of characters which are of considerable significance in the primary area of adaptation of Coker 312.

Coker 312 most closely resembles Coker 310, except that it has:

1. A higher micronaire value, ranging from 0.1 to 0.2 micronaire units higher.

2. A more storm resistant boll having less "fluff", "stringing-out" and consequently a lower field loss (see following data).

Variety	Storm Resistance Ratings (Score)	Pre-harvest field loss. (lbs / Acre)
Coker 310	4.4	58
Coker 312	3.9	3

Storm resistance ratings: 1-6

1 = very tight, storm resistant Boll

6 = loose, open Boll

Note: All data taken from Coker's performance trials, Lubbock, Texas

Henry W. Webb
Director Cotton Division
Coker's Pedigreed Seed Co.

SUPPLIMENT TO: EXHIBIT D SUBMITTED OCTOBER 5, 1973

EXHIBIT D: PARTICULARS OF TRIAL PERFORMANCE, COKER 310, PV No. 7121

Item 4: More resistance to Verticillium wilt.

Item 5: More resistance to lodging.

Variety	Verticillium Rating	Lodging Rating
Coker 310	3.0	1.5
Coker 201	4.2	2.5

Verticillium resistance ratings: 1-5

1 = Very tolerant to resistant
5 = Highly susceptible

Lodging ratings: 1-5

1 = Very erect & resistant to lodging.
5 = Lodging badly, most plants down.

Above data were accumulated by Coker's Pedigreed Seed Company from yield trials, disease screenings and numerous field observations in the Southeast and Mid-South. While these values and their relationships may vary in response to environments and individuals making evaluations, we feel that these are sound relative differences based on years of experience with these varieties over a range of environments.

Henry W. Webb
Director Cotton Division
Coker's Pedigreed Seed Co.

January 3, 1974

13 E. EXHIBIT E, STATEMENT OF THE BASIS OF APPLICANTS OWNERSHIP, COKER 312

The variety, Coker 312, is the property of Coker's Pedigreed Seed Company by virture of the fact that the original cross and all subsequent developmental research and related activities pertaining to the development of Coker 312 were performed by company personnel and utilizing company finances and facilities.

COKER'S PEDIGREED SEED COMPANY

Henry W. Webb

Henry W. Webb
Director, Cotton-Soybean Division
February 29, 1972

TRANSFER OF OWNERSHIP

In consideration of the sale of the Lubbock Cotton Research Station to Seedco Corporation, Coker's Pedigreed Seed Company does hereby convey to Seedco Corporation, free from all encumbrances, ownership of the following protected varieties:

Cotton Varieties

Variety Name	Plant Variety Certificate No.	Issue Date
Coker 312	7200100	July 26, 1974
Coker 500	8300078	August 31, 1983
Coker 4360	8200071	December 30, 1982
Coker 5110	7200101	June 28, 1974

COKER'S PEDIGREED SEED COMPANY

By: E. Joe Dahmer
E. Joe Dahmer, President

Date: 9/24/84

Sworn and subscribed to before me
this 24 day of September, 1984.

Mary M. Cooley
Notary Public for South Carolina

My Commission Expires August 25, 1991

FORM APPROVED. OMB NO. 40-R3712

FORM GR-470-8
(10-2-72)

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE
GRAIN DIVISION
HYATTSVILLE, MARYLAND 20782

EXHIBIT C
(Cotton)

OBJECTIVE DESCRIPTION OF VARIETY
COTTON (*GOSSYPIUM SPP.*)

Data developed at Coker's Lubbock, Tex. research program

INSTRUCTIONS: *See Reverse.*

NAME OF APPLICANT(S)
Coker's Pedigreed Seed Co.

ADDRESS (*Street and No. or R.F.D. No., City, State, and ZIP Code*)
P. O. Box 340
Hartsville, S. C. 29550

FOR OFFICIAL USE ONLY

PVPO NUMBER
72100

VARIETY NAME OR TEMPORARY DESIGNATION
Coker 312

Place the appropriate number that describes the varietal character of this variety in the boxes below.
Place a zero in first box (e.g. [0][8][9] or [0][9]) when number is either 99 or less or 9 or less.

1. SPECIES:

[1] 1 = GOSSYPIUM HIRSUTUM 2 = GOSSYPIUM BARBADENSE

2. AREA(S) OF ADAPTION (0 = Not Tested, 1 = Not Adapted, 2 = Adapted):

[ ] EASTERN [ ] DELTA [ ] CENTRAL [2] HIGH PLAINS [ ] EL PASO AREA
[ ] WESTERN LOW HOT VALLEYS [ ] SAN JOAQUIN [2] OTHER (*Specify*) Short seasonal — narrow row systems

3. MATURITY (50% Open Boll):

[0][3] NO. OF DAYS *EARLIER* THAN ..... [1]
[0][5] NO. OF DAYS *LATER* THAN ..... [7]

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1
7 = LANKART 57 8 = OTHER (*Specify*) ____

4. PLANT HABIT:

[2] 1 = SPREADING 2 = INTERMEDIATE 3 = COMPACT

[3] 1 = FOLIAGE SPARSE 2 = DENSE 3 = OTHER (*Specify*) med. dense

5. PLANT HEIGHT:

[0][7] CM. *SHORTER* THAN ..... [1]
[1][5] CM. *TALLER* THAN ..... [4]

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
4 = PAYMASTER 111 5 = ACALA 1517-70 6 = ACALA SJ-1
7 = LANKART 57 8 = OTHER (*Specify*) ____

6. MAIN STEM:

[3] 1 = LAX 2 = ASCENDING 3 = ERECT

[-] CM. TO FIRST FRUITING BRANCH N.A. (Not available)

[0][7] NO. OF NODES TO FIRST FRUITING BRANC (*from cotyledonary node*)

7. LEAF: N. A.

[-][-] CM. WIDTH OF WIDEST LEAVES AT MATURITY

8. LEAF PUBESCENSE:

[3] 1 = GLABROUS (HAIRS AS SPARSE AS D_2 SMOOTH)
2 = SMOOTH LEAF (DELTAPINE SMOOTH LEAF) 3 = PUBESCENT (STONEVILLE 213)
4 = HEAVY PUBESCENCE (H_1 OR H_2) 5 = OTHER (*Specify*) ____

9. LEAF COLOR:

[3] 1 = VIRESCENT YELLOW 2 = LIGHT GREEN 3 = DARK GREEN (*Acala-442*) 4 = RED
5 = OTHER (*Specify*) ____

10. LEAF TYPE:

[1] 1 = NORMAL 2 = OKRA 3 = SUPER OKRA 4 = OTHER (*Specify*) ____

11. FLOWER:

[2] 1 = NECTARILESS 2 = NECTARIED

[1] Petals: 1 = CREAM 2 = YELLOW

[~~3~~] Pollen: 1 = CREAM 2 = YELLOW ~~3 = Mixed~~

2/27/74 per request 2/11/74 9JB

12. FRUITING BRANCH TYPE:

[3] 1 = CLUSTER 2 = SHORT 3 = NORMAL

[3] 1 = DETERMINATE 2 = INDETERMINATE 3 = Intermediate

13. GOSSYPOL CONDITION:

[3] 1 = GLANDLESS 2 = REDUCED GLANDS 3 = NORMAL GLANDS
4 = OTHER (*Specify*) ____

[1] 1 = NORMAL BUD GOSSYPOL
2 = HIGH BUD GOSSYPOL

14. SEEDS:

[0][1][1] ± [0][1] SEED INDEX (*Fuzzy seed basis*)

[2] Seed Fuzz: 1 = SPARSE (GREGG 35) 2 = MODERATE (DPL-16) 3 = HEAVY (ACALA SJ-1) 4 = OTHER (*Specify*) ____

4

15. BOLLS:

[2] Locules: 1 = 3-4, 2 = 4-5 | [3 6] NO. SEEDS PER BOLL | [3 7 4] LINT PERCENT | [N.A.] MM. DIAMETER

[1] Pitted: 1 = NONE, 2 = FINELY, 3 = COURSELY | [5 1 8] GRAMS SEED COTTON PER BOLL | [2] Breadth: 1 = BROADER AT BASE, 2 = BROADER AT MIDDLE

[3] Type: 1 = STORMPROOF (WESTBURN 70), 2 = STORM RESISTANT (LANKART 57), 3 = OPEN (DELTAPINE 16) | [3] Shape: 1 = LENGTH < WIDTH, 2 = LENGTH = WIDTH, 3 = LENGTH > WIDTH

16. BRACTEOLES:

[3] Breadth: 1 = LENGTH < WIDTH 2 = LENGTH = WIDTH 3 = LENGTH > WIDTH

[1] Teeth: 1 = FINE 2 = COURSE | [3] Teeth: 1 = 3-4 2 = 5-7 3 = 8-10 4 = OTHER *(Specify)* _____

17. YIELD: Compared to—

[ ] PERCENT *LESS* THAN ..... [ ]

[1 1 0] PERCENT *MORE* THAN ..... [4]

1 = COKER 310 2 = DELTAPINE 16 3 = STONEVILLE 213
4 = PAYMASTER 111 5 = ACALA 1517-70
6 = ACALA SJ-1 7 = LANKART 57

18. FIBER LENGTH (Complete one or more of the following and give the means):

[ ] SPAN LENGTH 50% | [1 1 3] SPAN LENGTH 2.5% | [ ] U.H.M. LENGTH

[ ] MEAN LENGTH | [3 5] STAPLE LENGTH 32nd INCHES

[ ] UNIFORMITY RATIO (MEAN/U.H.M.) | [4 5] UNIFORMITY INDEX (50% SPAN/2.5% SPAN)

19. FIBER STRENGTH AND ELONGATION:

[0 8 4] 1,000 P.S.I. | [0 7 5] ELONGATION E_1 | [ ] STILOMETER T_0

[4 3 0] MICRONAIRE READING | [1 1 6] YARN STRENGTH *(Give test method)* Min. spin | [ ] STILOMETER T_1

20. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant) 3 = Tolerant

[3] VERTICILLIUM WILT | [3] FUSARIUM WILT | [3] ROOT KNOT NEMATODE | [1] BACTERIAL BLIGHT *(Race 1)*

[1] BACTERIAL BLIGHT *(Race 2)* | [1] ASCOCHYTA BLIGHT | [1] PHYMATOTRICHUM ROOT ROT | [1] RHIZOCTONIA

[0] ANTHRACNOSE | [0] RUST | [ ] OTHER *(Specify)* _____

21. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

[1] BOLL WEEVIL | [1] APHID | [1] FLEAHOPPER | [1] LEAFWORM

[1] FALL ARMYWORM | [1] GRASSHOPPER | [1] LYGUS | [1] PINK BOLLWORM

[1] STINKBUG | [1] THRIP | [1] CUTWORM | [1] SPIDERMITE

[ ] OTHER *(Specify)* _____

REFERENCES: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

(1) Brown, Harry B., and J. O. Ware, 1958, Cotton, McGraw-Hill Book Company, Inc., New York.
(2) Lewis, C. F., and H. H. Ramey, Jr., 1971, 1970 Regional Cotton Variety Tests, ARS 34-130, United States Department of Agriculture.

COLORS: Nickerson's or any recognized color fan may be used to determine flower color of the described variety.