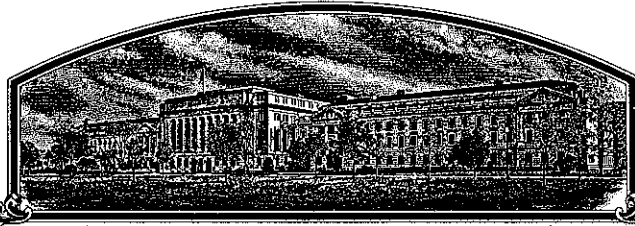


No.

9400221



THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Kentucky Agricultural Experiment Station

**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 *eighteen* 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, 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. UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS SPECIFIED BY THE OWNER OF THE RIGHTS. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

SOYBEAN

'Calhoun'

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, D.C. this 29th day of December in the year of our Lord one thousand nine hundred and ninety-five.

Attest:

Martha A. Stanton
Commissioner
Plant Variety Protection Office
Agricultural Marketing Service

Samuel J. Hittman
Secretary of Agriculture



U.S. DEPARTMENT OF AGRICULTURE
AGRICULTURAL MARKETING SERVICE

APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE
(Instructions on reverse)

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

1. NAME OF APPLICANT(S) (as it is to appear on the Certificate) Kentucky Agricultural Experiment Station		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NO. KY85-09073	3. VARIETY NAME Calhoun
4. ADDRESS (street and no. or R.F.D. no., city, state, and ZIP) S107 Agriculture Science Building-North University of Kentucky Lexington, KY 40546		5. PHONE (include area code) (606) 257-3333	FOR OFFICIAL USE ONLY VPVO NUMBER 9400221
6. GENUS AND SPECIES NAME Glycine max	7. FAMILY NAME (Botanical) Leguminosae	FILING Date July 11, 1994 Time <input type="checkbox"/> A.M. <input type="checkbox"/> P.M.	
8. CROP KIND NAME (Common Name) Soybean	9. DATE OF DETERMINATION June 1, 1993	FEE S Filing and Examination Fee: \$2150.- Date July 11, 1994	RECEIVE Certificate Fee: \$300.00 Date Oct. 10, 1995
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.) Agricultural Experiment Station - U.S. Government		11. IF INCORPORATED, GIVE STATE OF INCORPORATION	
12. DATE OF INCORPORATION		13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS Dr. James Boling-Associate Director S107 Agriculture Science Building-North University of Kentucky Lexington, KY 40546 PHONE (include area code): (606) 257-3333	

14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow INSTRUCTIONS on reverse)

a. Exhibit A, Origin and Breeding History of the Variety.

b. Exhibit B, Novelty Statement.

c. Exhibit C, Objective Description of Variety.

d. Exhibit D, Additional Description of Variety.

e. Exhibit E, Statement of the Basis of Applicant's Ownership.

f. Seed Sample (2,500 viable untreated seeds). Date Seed Sample mailed to Plant Variety Protection Office 5/26/94

g. Filing and Examination Fee (\$2,150) made payable to "Treasurer of the United States."

15. 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) of the Plant Variety Protection Act.)

YES (If "YES," answer items 16 and 17 below) NO (If "NO," skip to item 18 below)

16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS?

YES NO

17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED?

FOUNDATION REGISTERED CERTIFIED

18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.?

YES (If "YES," through Plant Variety Protection Act Patent Act. Give date: _____)

NO

19. HAS THE VARIETY BEEN RELEASED, USED, OFFERED FOR SALE, OR MARKETED IN THE U.S. OR OTHER COUNTRIES?

YES (If "YES," give names of countries and dates) June 1, 1993 U.S. release
8/10
8/13 July 1994

NO

20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable.

The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) 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.

Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF APPLICANT [Owner(s)] <i>James A. Boling</i>	CAPACITY OR TITLE Assoc. Director	DATE May 11, 1994
SIGNATURE OF APPLICANT [Owner(s)] <i>Clayton F. Little</i>	CAPACITY OR TITLE Director	DATE 5/11/94

14.a. Calhoun is an F_4 plant selection from the cross 'Ripley' x 'Pershing'. The cross was made and the F_1 plants were grown in 1983, greenhouse and field, respectively, at the Kentucky Agricultural Experiment Station. The seeds were advanced from the F_2 to the F_4 generation by modified single-seed descent (harvesting one pod per plant followed by subsampling to maintain a constant population size) at the Iowa State University soybean breeding nursery at the University of Puerto Rico, Isabela Substation. The F_4 plant selection was made in 1984 in Lexington, KY. The F_4 -derived line was evaluated for seed yield in Kentucky from 1987 through 1992 and in the Uniform Soybean Tests Northern States (Group IV) in 1989 and 1990 under the designation KY85-09073. In 1990 72 $F_{9:10}$ progeny rows were screened for segregation and offtypes and the nonsegregating rows were bulked. All subsequent seed increase derived from this seed bulk. Copies of the 1991 and 1992 Kentucky Agricultural Experiment Station Seed Laboratory Reports and the 1992 Kentucky Seed Improvement Association field inspection report are attached as evidence of uniformity. The performance in 33 Kentucky environments and 29 regional environments is submitted as evidence of stability.

14.a. continued

Yield and agronomic summaries of Calhoun.

Calhoun was evaluated in the Northern Regional Group IV Uniform Soybean Performance Tests in 1989 and 1990. The results are shown in Table 1. Comparisons in full season and double crop soybean performance tests in Kentucky from 1987 to 1992 are summarized in Table 2.

Table 1. Average performance of Calhoun and check cultivars in the Preliminary Group IV test 1989 (8 tests) and in the Uniform Group IV test 1990 (21 tests).

Entry	Yield bu/a	Mat.	Lod. 1-5	Ht. in	Seed Qual. 1-5	Seed Size g/100	Protein %	Oil %
Calhoun	49.7	+2.0	1.2	24	1.6	15.4	40.8	20.9
Ripley	48.3	-1.0	1.2	21	1.6	14.0	39.1	21.0
Flyer	51.0	-3.5	1.4	30	1.8	15.0	41.5	21.0
Spencer	49.4	9/30	1.4	33	2.0	17.8	40.7	21.4
Pennyrile	49.0	+5.5	1.7	39	1.7	16.2	41.5	20.7

Table 2. Yield (bu/acre) data from Kentucky including breeding tests 1987 - 1992 and Kentucky Soybean Performance Tests 1991-1992.

	13 envs that tested Ripley	33 envs in common with A3935 Essex	31 envs in common with Pennyrile	21 envs in common with Hutcheson
Calhoun	51.2	48.8	47.9	48.5
A3935	48.7	47.5	46.9	47.5
Ripley	45.8	----	----	----
Pennyrile	----	----	45.3	46.0
Essex	----	44.7	43.4	43.4
Hutcheson	----	----	----	45.8

14.b. This variety is distinguishable from most other early maturity group IV varieties in that it has a determinate growth habit. Calhoun is distinguishable from many other maturity group III and IV semidwarf determinate varieties such as Pixie, Elf, Sprite, etc. in that it is later maturing, taller and has gray pubescence. Calhoun responds similarly in soybean sudden death syndrome evaluations as Ripley, R6 disease incidence less than 10%, which is different from many other maturity group IV varieties. Calhoun is visually similar to its maturity group IV parent Ripley. It may be distinguished from Ripley in that it matures about three days later, is approximately 8 cm taller, and has 10% larger seed size.

U.S. DEPARTMENT OF AGRICULTURE
 AGRICULTURAL MARKETING SERVICE
 LIVESTOCK, MEAT, GRAIN & SEED DIVISION
 PLANT VARIETY PROTECTION OFFICE
 BELTSVILLE, MARYLAND 20705

EXHIBIT C
 (Soybean)

OBJECTIVE DESCRIPTION OF VARIETY
 SOYBEAN (*Glycine max* L.)

NAME OF APPLICANT(S) Kentucky Agricultural Experiment Station	TEMPORARY DESIGNATION KY85-09073	VARIETY NAME Calhoun
ADDRESS (Street and No., or R.F.D. No., City, State, and Zip Code) S107 Agriculture Science North University of Kentucky Lexington, Kentucky 40546		FOR OFFICIAL USE ONLY PVPO NUMBER 9400221

Choose the appropriate response which characterizes the variety in the features described below. When the number of significant digits in your answer is fewer than the number of boxes provided, place a zero in the first box when number is 9 or less (e.g.,). Starred characters ★ are considered fundamental to an adequate soybean variety description. Other characters should be described when information is available.

1. SEED SHAPE:



1 = Spherical (L/W, L/T, and T/W ratios = < 1.2)
 3 = Elongate (L/T ratio > 1.2; T/W = < 1.2)

2 = Spherical Flattened (L/W ratio > 1.2; L/T ratio = < 1.2)
 4 = Elongate Flattened (L/T ratio > 1.2; T/W > 1.2)

★ 2. SEED COAT COLOR: (Mature Seed)

1 = Yellow 2 = Green 3 = Brown 4 = Black 5 = Other (Specify) _____

3. SEED COAT LUSTER: (Mature Hand Shelled Seed)

1 = Dull ('Corsoy 79'; 'Braxton') 2 = Shiny ('Nebsoy'; 'Gasoy 17')

★ 4. SEED SIZE: (Mature Seed)

Grams per 100 seeds

★ 5. HILUM COLOR: (Mature Seed)

1 = Buff 2 = Yellow 3 = Brown 4 = Gray 5 = Imperfect Black 6 = Black 7 = Other (Specify) _____

★ 6. COTYLEDON COLOR: (Mature Seed)

1 = Yellow 2 = Green

★ 7. SEED PROTEIN PEROXIDASE ACTIVITY:

1 = Low 2 = High

★ 8. SEED PROTEIN ELECTROPHORETIC BAND:

1 = Type A (SP1^a) 2 = Type B (SP1^b)

★ 9. HYPOCOTYL COLOR:

1 = Green only ('Evans'; 'Davis') 2 = Green with bronze band below cotyledons ('Woodworth'; 'Tracy')
 3 = Light Purple below cotyledons ('Beeson'; 'Pickett 71')
 4 = Dark Purple extending to unifoliate leaves ('Hodgson'; 'Coker Hampton 266A')

★ 10. LEAFLET SHAPE:

1 = Lanceolate 2 = Oval 3 = Ovate 4 = Other (Specify) _____

11. LEAFLET SIZE:

1 = Small ('Amsoy 71'; 'A5312')
3 = Large ('Crawford'; 'Tracy')

2 = Medium ('Corsoy 79'; 'Gasoy 17')

12. LEAF COLOR:

1 = Light Green ('Weber'; 'York')
3 = Dark Green ('Gnome'; 'Tracy')

2 = Medium Green ('Corsoy 79'; 'Braxton')

★ 13. FLOWER COLOR:

1 = White 2 = Purple 3 = White with purple throat

★ 14. POD COLOR:

1 = Tan 2 = Brown 3 = Black

★ 15. PLANT PUBESCENCE COLOR:

1 = Gray 2 = Brown (Tawny)

16. PLANT TYPES:

1 = Slender ('Essex'; 'Amsoy 71')
3 = Bushy ('Gnome'; 'Govan')

2 = Intermediate ('Amcor'; 'Braxton')

★ 17. PLANT HABIT:

1 = Determinate ('Gnome'; 'Braxton')
3 = Indeterminate ('Nebsoy'; 'Improved Pelican')

2 = Semi-Determinate ('Will')

★ 18. MATURITY GROUP:

1 = 000 2 = 00 3 = 0 4 = I 5 = II 6 = III 7 = IV 8 = V
9 = VI 10 = VII 11 = VIII 12 = IX 13 = X

★ 19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

BACTERIAL DISEASES:

★ Bacterial Pustule (*Xanthomonas phaseoli* var. *sojensis*)

★ Bacterial Blight (*Pseudomonas glycinea*)

★ Wildfire (*Pseudomonas tabaci*)

FUNGAL DISEASES:

★ Brown Spot (*Septoria glycines*)

Frogeye Leaf Spot (*Cercospora sojina*)

★ Race 1 Race 2 Race 3 Race 4 Race 5 Other (Specify)

Target Spot (*Corynespora cassiicola*)

Downy Mildew (*Peronospora trifoliorum* var. *manshurica*)

Powdery Mildew (*Microsphaera diffusa*)

★ Brown Stem Rot (*Cephalosporium gregatum*)

Stem Canker (*Diaporthe phaseolorum* var. *caulivora*)

19. DISEASE REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant) (Continued)

FUNGAL DISEASES: (Continued)

- ★ 1 Pod and Stem Blight (*Diaporthe phaseolorum* var; *sojae*)
- Purple Seed Stain (*Cercospora kikuchii*) Zero under artificial inoculation 1990
Uniform Test 4
- 0 Rhizoctonia Root Rot (*Rhizoctonia solani*)
- Phytophthora Rot (*Phytophthora megasperma* var. *sojae*)
- ★ 2 Race 1 0 Race 2 0 Race 3 0 Race 4 0 Race 5 0 Race 6 1 Race 7
- 0 Race 8 0 Race 9 Other (Specify) _____

VIRAL DISEASES:

- 0 Bud Blight (Tobacco Ringspot Virus)
- 0 Yellow Mosaic (Bean Yellow Mosaic Virus)
- ★ 0 Cowpea Mosaic (Cowpea Chlorotic Virus)
- 0 Pod Mottle (Bean Pod Mottle Virus)
- ★ 1 Seed Mottle (Soybean Mosaic Virus)

NEMATODE DISEASES:

- Soybean Cyst Nematode (*Heterodera glycines*)
- ★ 0 Race 1 0 Race 2 1 Race 3 1 Race 4 Other (Specify) _____
- 0 Lance Nematode (*Hoplolaimus Colombus*)
- ★ 0 Southern Root Knot Nematode (*Meloidogyne incognita*)
- ★ 0 Northern Root Knot Nematode (*Meloidogyne Hapla*)
- 0 Peanut Root Knot Nematode (*Meloidogyne arenaria*)
- 0 Reniform Nematode (*Rotylenchulus reniformis*)
- 2 OTHER DISEASE NOT ON FORM (Specify): Sudden Death Syndrom-1993 Southern Illinois Univ. SDS Test

20. PHYSIOLOGICAL RESPONSES: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

- ★ 1 Iron Chlorosis on Calcareous Soil
- Other (Specify) _____

21. INSECT REACTION: (Enter 0 = Not Tested; 1 = Susceptible; 2 = Resistant)

- 0 Mexican Bean Beetle (*Epilachna varivestis*)
- 0 Potato Leaf Hopper (*Empoasca fabae*)
- Other (Specify) _____

22. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED.

CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant Shape	Ripley	Seed Coat Luster	Ripley
Leaf Shape	Ripley	Seed Size	
Leaf Color	Ripley	Seed Shape	
Leaf Size	Ripley	Seedling Pigmentation	Ripley

23. GIVE DATA FOR SUBMITTED AND SIMILAR STANDARD VARIETY: Paired Comparison Data

VARIETY	NO. OF DAYS MATURITY	PLANT LODGING SCORE	CM PLANT HEIGHT	LEAFLET SIZE		SEED CONTENT		SEED SIZE G/100 SEEDS	NO. SEEDS/POD
				CM Width	CM Length	% Protein	% Oil		
Calhoun Submitted	127	1.3	61	6.7	11.2	41.0	20.8	15.0	
Ripley Name of Similar Variety	124	1.2	53	6.9	11.6	39.5	21.1	13.9	

PUBLICATIONS USEFUL AS REFERENCE AIDS FOR COMPLETING THIS FORM:

1. Caldwell, B.E., ed. 1973. Soybeans: Improvement, Production, and Uses. Amer. Soc. Agron. Monograph No. 16.
2. Buttery, B.R. and R.J. Buzzell. 1968. Peroxidase activity in seeds of soybean varieties. Crop Sci., 8: 722-725.
3. Hymowitz, T. 1973. Electrophoretic analysis of SBTI-A₂ in the USDA soybean germplasm collection. Crop Sci., 13: 420-421.
4. Payne, R.C. and L.F. Morris. 1976. Differentiation of soybean cultivars by seedling pigmentation patterns. J. Seed Technol. 1: 1-19.

14.b(2) Data from the 1990 Uniform 4 tests showing Calhoun significantly different from Ripley in height and maturity.

Location	Height -----cm-----		Maturity -days +/- Spencer-	
	Calhoun	Ripley	Calhoun	Ripley
Georgetown	43	36	- 1	- 1
Belleville	71	71	11	7
Ridgway	53	46	1	- 4
Urbana	86	71	- 3	- 6
Lafayette	81	65	2	- 1
Vincennes	81	71	0	0
Manhattan	74	68	- 2	- 2
Lexington	74	68	4	- 1
Queenstown	56	51	0	0
Portageville	38	30	- 1	- 8
Adelphia	74	66	3	- 3
Mt. Orab	56	46	4	- 1
S. Charleston	74	68	4	0
Landisville	79	74	3	0
Lubbock	28	28	11	12
Orange	64	53	5	0
Middletown	43	33		
Carbondale	43	30		
Powhattan	48	43		
Topeka	51	38		
Columbia	64	48		
mean	61	53	2.6	- 0.5
difference				
mean		8		3.1
SS		369.29		94.94
df		20		15
s ²		18.46		6.33
s \bar{x}		0.938		0.629
t _{calc}		8.53		4.86
t(0.025,df)		2.08		2.13

The hypotheses that the mean of Calhoun minus the mean of Ripley equals zero for both height and maturity are rejected. The alternative hypotheses that the mean of Calhoun minus the mean of Ripley is different from zero (thus, the means of the cultivars are different) for both height and maturity are accepted.

UNIVERSITY OF KENTUCKY
DIVISION OF REGULATORY SERVICES
103 REGULATORY SERVICES BUILDING
LEXINGTON, KENTUCKY 40546-0275
606-257-5656

9400221

SEED LABORATORY REPORT

DATE 12/10/91
ACCOUNT NO. 3585
LAB NO. R-3906

KY. FOUNDATION SEED PROJECT
P.O. BOX 11950
LEXINGTON, KY 40579

NOTE: This report is based on the sample as submitted and received. Persons submitting samples for analysis and/or test should insure that the sample submitted is representative of the lot from which taken. Reports are not on varietal trueness when such designation can be determined only by trueness-to-variety tests.

Lot No. NOT STATED

VARIETY and KIND	PURE SEED percent	GERMINATION percent	HARD SEED percent
Breeders 9073 Soybean	99.88	96	

Crop Seed 0.00 % Inert 0.12 % Weed Seed 0.00 % Date Tested 11/25/91

NAME AND NUMBER OF KENTUCKY NOXIOUS WEED SEED PER POUND

NAME AND NUMBER PER POUND OF FOREIGN SEED FOUND IN SAMPLE			
WEED SEED	NO.	CROP SEED	NO.

PEROXIDASE - 100 SEED: ALL POSITIVE

HYPOCOTYL - 100 SEED: 98 PURPLE; 2 DEAD

*SEED COUNT-2728 SEED PER LB.

Dan Niffenegger
Interim-Director of Seed Program

Tina Tillery
Lab Manager

KY FOUNDATION
SEED PROJECT

DEC 13 1991

9400221

UNIVERSITY OF KENTUCKY
DIVISION OF REGULATORY SERVICES
103 REGULATORY SERVICES BUILDING
LEXINGTON, KENTUCKY 40546-0275
606-257-5656

SEED LABORATORY REPORT

DATE 12/01/92
ACCOUNT NO. 3585
LAB NO. R-3177

KY. FOUNDATION SEED PROJECT
P.O. BOX 11950
LEXINGTON, KY 40579

NOTE: This report is based on the sample as submitted and received. Persons submitting samples for analysis and/or test should insure that the sample submitted is representative of the lot from which taken. Reports are not on varietal trueness when such designation can be determined only by trueness-to-variety tests.

~~Lot No. 86-92-S-1~~

VARIETY and KIND	PURE SEED percent	GERMINATION percent	HARD SEED percent
Foundation KY 09073 Soybean	99.91	93	

Inert 0.09 % Crop Seed 0.00 % Weed Seed 0.00 % Date Tested 11/27/92

NAME AND NUMBER OF KENTUCKY NOXIOUS WEED SEED PER POUND

NAME AND NUMBER PER POUND OF FOREIGN SEED FOUND IN SAMPLE	
WEED SEED NO.	CROP SEED NO.

*SEED COUNT 2,580/LB.

Dan Niffenegger
Coordinator, Seed Regulatory and Testing Program

Tina Tillery
Lab Manager

KY FOUNDATION
SEED PROJECT

DEC 3 1992

SOYBEAN FIELD INSPECTION REPORT

NAME FOUNDATION SEED PROJECT NO. 000086 F.A.N. 6001 I.D. 86-92-S-1
 ADDRESS P O BOX 11950/KY SEEDS BLDG SPINDLETOP CROP SOYBEAN ONE0001
 CITY LEXINGTON ZIP 40579 VAR. KY 09073 CLASS PROF
 COUNTY FAYETTE PHONE 606-257-2972 ACRES 10 DATE PLANTED 05/19/92
 CN GR HENTON/ HOPPY # 007078 SEED LOT 1991-09073
 ADDRESS HENTON FARMS INC/3767 FRANKFORT PIKE AND HISTORY HYBRID CORN
 CITY VERSAILLES PHONE 606-873-8730 FIELD MONITORING YES X NO

PLANT COUNTS

OFF-TYPES FLOWERING	OFF-TYPES LEAF-FALL	BLACK NIGHTSHADE
1. 0	1. 1	1. 11
2. 0	2. 1	2. 12
3. 0	3. 2	3. 13
4. 0	4. 1	4. 14
5. 0	5. 1	5. 15
6. 0	6. 0	6. 16
7. 0	7. 0	7. 17
8. 0	8. 0	8. 18
9. 0	9. 1	9. 19
10. 0	10. 0	10. 20
TOTAL 0	TOTAL 7	TOTAL
AVG.	AVG.	AVG.

INDICATE INTENSITY OF DISEASE, OTHER CROP AND WEED INFESTATION

BY MARKING S SLIGHT M MODERATE H HEAVY

DISEASES

- S BUD BLIGHT (18)
- _____ CYST NEMATODE (11)
- _____ POD STEM BLIGHT (12)
- _____ PRPL SD. STAIN (13)
- _____ SOYBEAN MOSAIC (17)
- _____ SDS (37)
- _____ OTHER CROPS
- S CORN (31)
- _____ SORGHUM (32)
- _____ SUNFLOWERS (98)

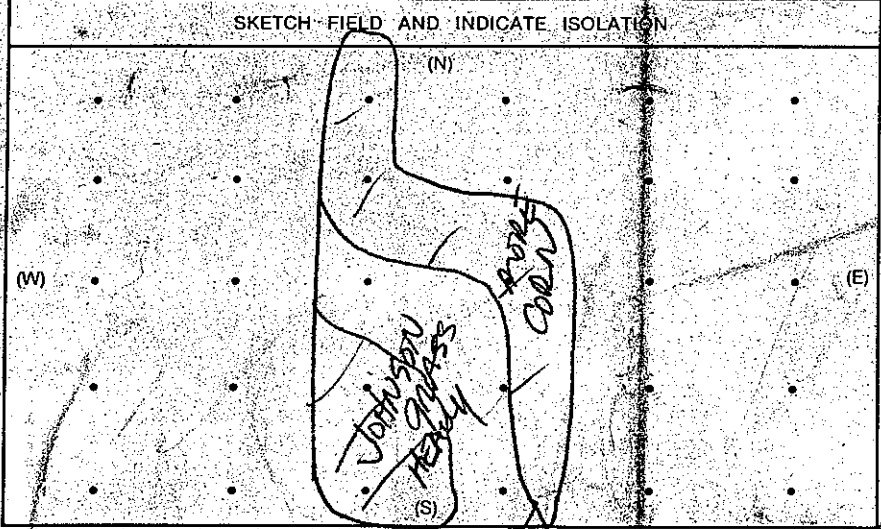
WEEDS

- _____ BALLOONVINE (2)
- _____ BLK. NIGHTSHADE (3)
- _____ COCKLEBUR (9)
- _____ COMMON PIGWEED (74)
- _____ COMMON RAGWEED (12)
- _____ COPPER LEAF (75)
- _____ FIELD BINDWEED (20)
- _____ FALL PANICUM (19)
- _____ GIANT FOXTAIL (21)
- _____ GIANT RAGWEED (22)
- S GROUND CHERRY (23)
- _____ HORSE NETTLE (26)
- _____ JIMSONWEED (28)

- H JOHNSONGRASS (29)
- S LAMBSQUARTER (30)
- _____ MILKWEED (32)
- _____ MORNING GLORY (33)
- _____ POKE (35)
- S PRICKLY SIDA (36)
- _____ SICKLEPOD (41)
- _____ SMARTWEED (42)
- _____ SPINEY PIGWEED (43)
- _____ SPINEY AMARANTH (106)
- _____ THISTLE (44)
- _____ VELVETLEAF (45)
- S VIRGINIA COPPERLEAF (75)
- S WILDCANE (77)
- _____ YELLOW CUCUMBER (49)
- _____ YELLOW NUTSEDEGE (53)

- 1. 1,000 PLANTS / COUNT
- 2. 1/10 ACRE / COUNT

SKETCH FIELD AND INDICATE ISOLATION



ESTIMATED YIELD

- _____ POOR
- ✓ FAIR
- _____ GOOD
- _____ EXCELLENT

FIELD ISOLATION

- GRASS NORTH
- GRASS SOUTH
- 30ft bears EAST other variety
- 5ft bears WEST other variety

DESCRIBE OFF-TYPES SEEN IN FIELD

PLANT HEIGHT	FLOWER COLOR
1. <u>TALL</u>	_____
2. _____	_____
3. _____	_____
PLANT MATURITY	PLANT PUBESCENCE
1. <u>HARVEST</u>	<u>BROWN</u>
2. _____	_____
3. _____	_____
COLOR	OTHER CHARACTERISTICS
1. _____	_____
2. _____	_____
3. _____	_____

GENERAL APPEARANCE OF FIELD: NICE / uniform short
 STAGE OF MATURITY: Bloom / Harvest FLOWER INSPECTION DATE: 7-28-92
 AMOUNT OF LODGING, SHATTERING, ETC.: Slight LEAF-FALL INSPECTION DATE: _____
 EXPLAIN PROBLEM AREAS IN FIELD: cut in field with ears - will be removed by KSP personnel at harvest.
 OTHER COMMENTS: 15 off types brown pubescence - all pulled as found in field.
 REJECTED, SUBJECT TO REINSPECTION BY _____ FOR _____
 (DATE) _____
 ACRES PASSED: 10 ACRES REJECTED: 0 FOR _____
 FIELD INSPECTOR: Williams INSPECTOR NO: 38
 APPLICANT: Seth Jones DATE: _____

14.e. Basis of ownership: The Kentucky Agricultural Experiment Station is the employer of the soybean breeder, T.W. Pfeiffer, who developed, tested, and coordinated the multiplication of this variety. The Kentucky Agricultural Experiment Station is the institution listed on the release notice for this variety.

Exhibit E: Statement of Ownership (Revised 11 Sept. 1995)

'Calhoun' was originated and developed by Todd Pfeiffer, soybean breeder employed by the Kentucky Agricultural Experiment Station. By agreement between Todd Pfeiffer and the Kentucky Agricultural Experiment Station all rights to Calhoun are assigned to the Kentucky Agricultural Experiment Station and no rights to Calhoun are retained by Todd Pfeiffer.

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