

ANNUAL REPORT - JANUARY 1, 1955 - DECEMBER 31, 1955

SOUTHERN REGIONAL PROJECT S-9

INTRODUCTION AND EVALUATION OF NEW PLANTS

and

PRESERVATION OF GERMPLASM

COOPERATIVE AGENCIES AND PRINCIPAL LEADERS

State Agricultural Experiment Stations

Representative

Alabama	W. R. Langford
Arkansas	R. L. Thurman
Florida	F. H. Hull
Georgia	A. H. Dempsey
Kentucky	E. N. Fergus
Louisiana	J. C. Miller
Mississippi	H. W. Bennett
North Carolina	F. D. Cochran
Oklahoma	R. S. Matlock
Puerto Rico	R. O. Woodbury
South Carolina	J. A. Martin
Tennessee	J. K. Underwood
Texas	R. G. Reeves
Virginia	T. J. Smith

United States Department of Agriculture

Plant Introduction Section

C. O. Erlanson

Soil Conservation Service

A. D. Stoesz

Regional Headquarters - Cooperative with Agricultural Research Service,
U. S. D. A., and the Georgia Experiment Station

Southern Regional Plant Introduction Station
Experiment, Georgia

Edwin James,
Coordinator

Office of Experiment Stations - Agricultural Research Service

F. D. Fromme
H. R. Thomas

Regional Administrative Advisor

R. D. Lewis
Texas Agricultural
Experiment Station

PROGRESS OF WORK AND PRINCIPAL ACCOMPLISHMENTS

Southern Regional Plant Introduction Station

Improvement of Facilities: During the year the nursery area has been completely re-terraced through the assistance of the local Soil Conservation Service. Approximately two acres of brush--covered land adjacent to the existing nursery area is being cleared for cultivation. An additional acre area has been treated chemically to kill Bermuda grass. These areas should be ready for cultivation during the 1957 growing season. One new thresher and an additional 200 feet of irrigation pipe have been added to the present equipment.

Work Accomplished: A total of 2,246 new introductions were received in 1955. Catalogs representing 1,225 accessions were distributed. A summary by crop groups is presented below:

Introductions, Received and Cataloged - 1955

<u>Crop Classes</u>	<u>Forage Legumes & Grasses</u> number	<u>Other Field Crops</u> number	<u>Vegetable Crops</u> number	<u>Misc. Crops</u> number	<u>Totals</u> number
Introductions received	928 (1)	108	845 (2)	65	2246
Introductions cataloged	1030 (1)	57	153	--	1225

- (1) Includes 628 grasses in Texas collection.
- (2) Includes 566 old PIs from Cheyenne Horticultural Field Station.

Shipments of seed to various agencies totaled 5345. Southern workers received from other regions 2,691 accessions making a total of 5,892 distributions in the Southern region alone. The appended table shows the distribution by states and crop groups.

The evaluation studies by the cooperators during 1955 have shown several accessions to be of potential use, either directly or as sources of

needed characters. These preliminary evaluations are summarized in the appended table of "Promising Introductions Reported in 1955" pages 11-14.

One of the principal accomplishments of the year has been the publication of Southern Cooperative Ser. Bul. 27, "Progress and Potentials in Plant Introduction for the South". The numerous requests for this publication indicates a stimulated interest in the cooperative program.

Activities by States

Alabama. No supporting project.

Received 153 accessions, including corn, ornamentals, grasses and legumes. Work continued on evaluation of accessions of Hardinggrass, Bahiagrass, pepper, and ornamentals received prior to 1955. Two accessions of pepper have shown high resistance to tobacco etch virus. Plans are to use them in the breeding program on improvement of pepper. Some accessions for Hardinggrass appear promising because of their growth at low temperatures in late fall and winter. Magennis grass, PI 184339 and Agrostis tenuis, PI 172698 are two turf grasses that looked good in the testing program. The latter remains green throughout the year and attempts are being made to increase seed for further testing. Many of the ornamental plants have been disappointing and were discarded. A few still are in evaluation tests.

Arkansas. Project - Investigations with New Crops.

Received a total of 1221 accessions during the past years under the New Crops Project. Of these 992 have been discarded, leaving the balance for further evaluation or disposition. Guar has been grown the past two years but is being discontinued because of poor adaptation. Sesame will be included in tests for 1956. A number of introductions of cucumbers, cowpeas, sorghums, and millets are now in active breeding programs. Pennisetum glaucum 182975 was found to be early, drought resistant, and productive. Seventy-three accessions were received in 1955. Interest on the part of S. C. S. men in forage grasses and legumes accounted for many of these.

Florida. Project - Screening Forage and Cover Crop Introductions for Ecological Adaptation and Use in Florida.

Testing new introductions was continued with 329 new legumes and grasses, many new ornamentals, and 206 vegetables and field crops. Earlier introductions are being used in breeding programs with tobacco, sugar cane, peanuts, corn, oats, sorghums, lupines, crotolaria, grasses for forage and turf, tomatoes, beans, peas, various ornamentals, soybeans, castor beans, watermelons, and muskmelons. A new peanut, the Florispan, has in its parentage an introduction from Africa. Developmental work with sansevieria, kenaf, ramie, and lychee nuts is in progress. About \$2,000 was expended for punch-card analysis of long time climatological records at three locations in the state and in relating variations to adaptations of introduced plant types.

Georgia. Project - The Introduction, Testing, and Multiplication of New and Useful Plants of Potential Value for Industrial and Other Uses.

Most of the 219 introductions requested by workers in Georgia during the year consisted of agronomic crops. Participation by the plant materials men in the S. C. S. has been considerably higher than in past years. Both the Experiment and Athens Stations have increased interest in sorghum breed-

ing wherein the yellow endosperm sorghums collected by Webster have played a prominent part. The Georgia Station is continuing the testing of all peanut introductions. During the year single plant selections have been made for further testing from most of the 193 introductions planted during the 1954 season. Particular interest is shown in a Virginia bunch type from Japan, PI 212232. Experimental crosses have been made with Arachis pusilla 210553 on A. hypogea 212232 and also on A. glabrata 163452. In the horticultural field the station is active in the testing for internal cork, the Ipomoea collection from the Caribbean. A lady-type southern pea selected from a collection maintained by the Southern Regional Plant Introduction Station is in its advanced stages. Seed stocks are being built up for wide-scale testing. Georgia Red, a 1955 sweet potato introduction by the Georgia Station, has been well received. This variety has as its principal parentage a Puerto Rico introduction.

Kentucky. Project - Introduction, Multiplication, Preservation, and Determination of Potential Value of New Plants and Plant Species for Industrial and Other Purposes, and for the Preservation of Valuable Germplasm of Economic Plants.

One hundred forty five accessions from the Regional Station have been or are being studied. Approximately one half are forage legumes. Others are somewhat evenly distributed among the forage grasses, corn and sorghum, and horticultural and ornamental species. The principal effort during the current year was attempted hybridization of Trifolium pratense with other species of these genus obtained from the Southern Regional Station. These efforts had two objectives. First it was desired to learn which species were compatible with pratense or could be treated to induce compatibility. Second, it is hoped that a better root system and virus resistance may be transferred from another species to pratense. Another effort in the present year under this project has been exploration in the state for superior smooth brome-grass germplasm. Some promising material was found.

Louisiana. Project - Introduction and Testing of New Crops.

There were 264 new introductions sent to the departments of Horticulture, Agronomy, and Plant Pathology this year. From the earlier introductions of sweet potatoes we have found seven which are resistant to soil rot. Irish potato introductions are used in our breeding program and one valuable accession has been found which survives temperatures as low as 26 degrees without damage, and is being used to develop a frost-resistant variety. A breeding line of okra resulting from a cross of an introduction from the Gold Coast of Africa on a commercial variety is near the point of release as a new variety. Other crops under test in our project include, sweet corn, peaches, strawberries, pears, figs, and pigeon peas. Some good selections have been made from a number of Dioscorea seedlings. The Agronomy department has under test various species of forage grasses and legumes, and soil building crops. The Plant Pathology department assists in disease studies of sweet potato introductions and are also active in testing sugar cane for mosaic and other diseases.

Mississippi. No supporting project.

Workers in Mississippi are now concentrating in an endeavor to incorporate characteristics sought and found in plant introductions in breeding material and superior strains. Of particular interest are the following activities and accomplishments:

Breeding for resistance to races of wilt in Southern or cowpeas.

Breeding for heat and drought tolerance in raspberries.
Breeding for fruiting and growth characteristics plus disease
resistance in beans, tomatoes, pepper, and cabbage.
Screening genus Pisum for ascochyta resistance.
Screening okra for desirable characteristics.
Doubling rust resistance in five ryegrass introductions.
Selected superior strains of Sanyo millet.
Screening orchard grass introductions for rust resistance.
Finding of smut resistance in rescuegrass.

New varieties to be released which have used introductions are: crimson clover, ryegrass, and southern pea.

North Carolina. Project - New Plants Investigations.

During the 1955 season, work at the station has continued as in previous years. The Horticulture Department had 989 beans under test for resistance to cyst nematode. Unfavorable weather following the hurricanes brought about a failure in this test, but it will be repeated in 1956. The Agronomy Department is cooperating with the Regional Plant Introduction Station in the increase and maintenance of a large number of peanut introductions, including several "wild types". Two introductions, Stylosanthes bojeri, PI 219853, and S. gracilis, PI 219854 show considerable vigor and it is felt that they should be tested along the Gulf coast. In breeding work with some of the earlier corn introductions is being continued. This station maintains a collection of cotton species which are used in cytogenetic studies to determine the mode of inheritance in interspecific hybrids. Plans have been made to maintain a large collection of Nicotiana species which were previously collected by the University of California.

Oklahoma. Project - Introduction and Evaluation of New Crops for Oklahoma.

The Oklahoma station personnel extends appreciation to the various agencies involved in making new germplasm available. This meeting is too early for a complete report on the 368 accessions received during 1955. Screening of a large number of forage accessions by Mr. Harlan showed 51 accessions (6 genera & 15 species) with real promise for Oklahoma. These were equal to or superior to standard checks. Specific reference to promising introductions was summarized in the 1954 annual Report of Progress. The results of studies on old world bluestems has just been published (Okla. Agr. Sta. Tech. Bul.-58--Studies on Old World Bluestems). The Bothriochloa-Dicanthium complex contain introductions which are superior to American forms in quality, production, persistence under grazing, and ability to respond to high fertility levels. A total of 551 domestic and foreign introductions of miscellaneous crops were grown in 1954. A few brief comments regarding these follows:

Cowpea - Several of the 237 new and old accessions were continued this year. Paraguay No. 1 appeared to have good drought resistance in 1954 and showed good hay and forage characteristics this year.

Peanuts - Thirty-five introductions were evaluated in replicated plots at two locations. In one location 15, and in the other 17 were superior in yield to the mean of three check varieties. PI 185632 appeared to be highly resistant or immune to leaf-spot disease. Four new introductions, PIs 210320, 210325-26, and 215696 will be advanced to replicated lists next year.

Mungbeans - Twenty-eight mungbeans were found to be more productive than the one commonly grown over the state. Those showing promise include the following PIs: 164301, 164301-3, 164436, 164436-1, 164436-3, 164436-4, 164427,

164720, 164778, 179960-1, 183065.

Guar - Guar appears very promising for Oklahoma. The 53 strains grown this year were variable in plant type. Several different types are being continued, since the breeder must know more regarding utilization before a definite type is selected.

Castor beans and Sesame - Most of the 27 introductions showed good drought tolerance in 1954. The breeding work of both these crops is now being done by Dr. Wade Parkey.

Safflower and Sunflowers - Work on both of these crops is now retarded because of low yields and lack of farmer interest.

Sesbania and Croton - Promising types of these plants are available. It is difficult to advocate their planting until more work is done on utilization. C. spectabilis may have a place in peanut rotations in the irrigated sections of Oklahoma where a population of root-knot nematode has been built up.

Horticulture work - The Horticulture Department has an active program with Rubus and Fragaria species. Work has not progressed to the extent that a full report can be made on introductions of these. The department is also very active in the screening of the Caribbean collection of Ipomoea species.

Puerto Rico. Project - The Introduction and Evaluation of New Plants for Industrial and Other Purposes, and the Preservation of Valuable Germ-plasm of Economic Plants.

Under a program of expanded industrialization and crop diversification, plant introduction work has been accelerated. In addition to introductions received under the cooperative program a large number have been obtained independently, including a few native species. Many more native collections will be under test next year. Exclusive of sugar cane, coffee and some vegetables, 221 new accessions were added to the project this year. In an effort to find resistance to coffee rust and to find species adapted to sunny situations, 123 new varieties were introduced this year including Coffea arabica, C. canephora, C. congensis, C. demerei, C. excelsa, C. eugenioides, C. kevuensis, C. liberica, C. purpurascense, and a near relative Psilanthopsis kapakata. Because of the high vitamin C content of Acerola, Malpighia sp., work is directed toward the collection of high-yielding varieties and root stocks resistant to nematodes. Work with grass introductions has been temporarily suspended but the introduction nursery is being maintained. Sweet corn introductions from temperate zones have proven unsatisfactory and tropical types will be collected for future tests. From 1800 sweet potato seedlings, 28 have been selected for further tests. A variety adapted to all sections of the Island is the prime objective in this work. Screening work with papayas to find resistance to "bunch top" has resulted in a one-plant selection out of "Solo Line 8" from Hawaii with resistance to this disease. An attempt is also being made to find varieties with a shorter ripening period. In order to develop a summer variety of bush beans, 130 accessions were screened with negative results. Preliminary trials are in progress with several introduced crops including castor bean, sesame, and guar, and a tropical type with a high oil percentage.

South Carolina. Project - Investigations with New or Special Crops.

Peppers - Fifty-one new accessions were evaluated and increased in 1955. An additional 245 old introductions were also screened for various characteristics. Attention is called to the following valuable introductions:

Hot peppers--PIs 155349, 169121, 194260, 213918 with deciduous calyx which would reduce the harvest cost of this type. PI 159242 has the

largest placenta found to date in this type. Most of the capsaicin is found in the placenta. Good color retention was found in paprika types, PIs 219869, 222133-36 and 223551 are valuable breeding lines. PI 215740 with purple flowers has unusual genetic value. Twenty-five others are promising as ornamental types.

Sesame--Twenty-three new and 430 old accessions were grown this year. Fourteen showed promise as breeding material. The Palmetto non-shattering variety developed entirely from introductions was released in 1955. The discovery of sesamol, an excellent synergist which boosts the effectiveness of pyrethrum 30-fold, has opened a new field for this crop.

Okra-- A total of 141 accessions were tested in 1955. It appeared that PIs 171659, 177240, 179158, and 183286 had some nematode resistance and will be subjected to further tests.

Tephrosia vogelii--This species which is a valuable source of rotenone made excellent growth at four locations in South Carolina. Work with this plant will continue.

Tennessee. Project - Evaluation of New Plants.

Fifty PI accessions received during 1954, 12 of which were forage crops and the remainder horticultural material. Fragaria viridis, PI 202740 from France is not promising as a source of root rot resistance in strawberry breeding. Out of 24 ornamental PI accessions, 5 have failed, namely Betula davurica--73057 no germination, Dianthus superba--162481, Buddleia salvifolia--209245, Melicope awaden--223320, Nothophagus procera--210766. Progeny data of Rubus, PI numbers 194478 and 164571, a rogue selection from PI 194477, and Rubus crataegifolius are to be presented at the Southern Agricultural Workers Meeting in February, 1956 and a manuscript is to be in the Proceedings of the American Society for Horticulture Science. Twenty-two PI Rubus numbers died from the low temperatures of last March. Dr. L. M. Josephson increased and evaluated 30 corn introductions he obtained in South Africa. These are to be cataloged by the Southern Regional Plant Introduction Station and made available to other corn breeders.

Texas. Project - Introduction, Multiplication, Preservation, and Determination of Potential Value of New Plants for Industrial and Other Purposes, and for the Preservation of Valuable Germplasm of Economic Value.

Forage and Range Plants: Good forage production is indicated for the following introductions: Bouteloua curtipendula--216221, 216244, 216284, 216253, 216273, Hilaria sp.(near berlangeri)--216444, 216446, Andropogon gerardii--216695, Andropogon intermedius--216701, Panicum antidotale--217151, coloratum--193363, Sorghastrum nutans--217249, Sporobolus asper--217306, Trifolium angustifolium--206758, T. echinatum--170330, T. isthmocarpum--202517, T. isthmocarpum--203664, T. nigrescens--206926, T. pallidum--201213, T. pratense--204926, T. resupinatum--204932, 208117. Panicum coloratum 193363 is being increased for yield tests on the basis of past performance. Lolium multiflorum 193145 and 225726 show promise in their resistance to rust, 193145 being superior also in winter forage production. Trifolium resupinatum PIs 141500-2, 143496-99, 173974, and 180492 are in the breeding program to develop hard-seeded strains of this species. Melilotus alba annua PI 200355 shows unusual promise and has been increased for testing in several locations.

Horticultural Crops: About 10 avocados of the Mexican type showed promise at the Weslaco station as having ability to withstand cold. (PIs not available) Several accessions of Vigna spp. from South Africa are now being used

in a breeding program. They show extreme vigor and tolerance to drought. The non-shattering variety of sesame, Rio, adapted to Texas was released in 1955.

Virginia. No supporting project.
No report.

Technical Committee

The S-9 Technical Committee met on December 12 and 13 at the Southern Utilization Research Branch laboratory in New Orleans. The staff of the laboratory presented a program on the work of the agency in the utilization of agricultural products whereby their use in both agriculture and industry had been increased. Active participation in the industrial phase of this project could not be undertaken at this time, but their assistance in special problems was offered insofar as facilities and staff were available. The activities and principal results in "New Crops" work in the several Southern states were presented by their respective representatives. Their reports are embodied herein under "Activities by States".

Usefulness of Findings

Considering the foreign origin of most of our crops, it is likely that most new varieties have in their parentage selections from one or more introductions. Several varietal releases resulting from introductions and in which the parentage can be traced, have been summarized in a recent Southern regional publication.

Considerable time is required before the value of more recent introductions can be determined. In preliminary tests throughout the region certain introductions appear to have definite value in current breeding programs. A table of these obtained through reports from the cooperating states is appended hereto.

Work Planned for Next Year

The usual evaluation and increase work will be carried out through the coming year. All introductions will be increased and evaluated during the year in which they are received. Accessions in storage will be tested for germination and reincreased if the viability appears to be dropping. If funds permit, disease ratings on muskmelons and watermelons will be completed. In these two crops considerable information regarding disease reactions have already been assembled, but a fairly large number remain before the work can be completed.

A seed-cleaning room addition to the present Plant Introduction building is planned, provided funds can be conserved for this purpose.

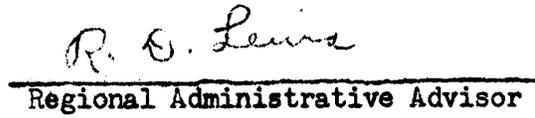
Publications

Southern Cooperative Series Bulletin 27 "Progress and Potentials in Crop Introductions for the South" was published early this year.

The project outline for Regional Research Project S-9 was completed and approved.

Seven catalogs representing new introductions of corn, grasses, and legumes, peanuts, eggplants, muskmelons, watermelons, and peppers were distributed.


Chairman, Technical Committee


Regional Administrative Advisor

PROMISING INTRODUCTIONS REPORTED IN 1955

<u>SPECIES</u>	<u>P. I. NUMBER</u>	<u>STATE REPORTING</u>	<u>CHARACTERISTICS AND USE</u>
<u>Abelmoschus esculentus</u>	171659	South Carolina	Apparent resistance to nematode
<u>Abelmoschus esculentus</u>	177240	South Carolina	Apparent resistance to nematode
<u>Abelmoschus esculentus</u>	179158	South Carolina	Apparent resistance to nematode
<u>Abelmoschus esculentus</u>	183286	South Carolina	Apparent resistance to nematode
<u>Andropogon gerardii</u>	216695	Texas	High yielding strains
<u>Andropogon intermedius</u>	216701	Texas	High yielding strains
<u>Arachis hypogaea</u>	162317	Texas	High yielders, in crosses
<u>Arachis hypogaea</u>	162657	Texas	High yielders, in crosses
<u>Arachis hypogaea</u>	185632	Oklahoma	Appear resistant to leaf spot disease
<u>Arachis hypogaea</u>	210320	Oklahoma	High yield. To go in replicated tests
<u>Arachis hypogaea</u>	210325	Oklahoma	High yield. To go in replicated tests
<u>Arachis hypogaea</u>	210326	Oklahoma	High yield. To go in replicated tests
<u>Arachis hypogaea</u>	212232	Georgia	High yield. Crossed on Va. Bunch & <u>A. pusilla</u> (210553)
<u>Arachis hypogaea</u>	215696	Oklahoma	High yield. To go in replicated tests
<u>Brassica oleracea var. capitata*</u>	194069	Alaska	Frost tolerant

<u>SPECIES</u>	<u>P. I. NUMBER</u>	<u>STATE REPORTING</u>	<u>CHARACTERISTICS AND USE</u>
<u>Brassica oleracea var. capitata*</u>	215513	Alaska	Frost tolerant
<u>Brassica oleracea var. capitata</u>	226070	Alaska	Frost tolerant
<u>Bouteloua curtipendula</u>	216221	Texas	Frost tolerant
<u>Bouteloua curtipendula</u>	216244	Texas	Frost tolerant
<u>Bouteloua curtipendula</u>	216253	Texas	Frost tolerant
<u>Bouteloua curtipendula</u>	216273	Texas	Frost tolerant
<u>Bouteloua curtipendula</u>	216284	Texas	Frost tolerant
<u>Capsicum frutescens</u>	155349	South Carolina	Deciduous calyx. Breeding for ease of harvesting
<u>Capsicum frutescens</u>	159242	South Carolina	Large Placenta. Source of capsaicin
<u>Capsicum frutescens</u>	169121	South Carolina	Deciduous calyx. Breeding for ease of picking
<u>Capsicum frutescens</u>	194260	South Carolina	Deciduous calyx. Breeding for ease of picking
<u>Capsicum frutescens</u>	213918	South Carolina	Deciduous calyx. Breeding for ease of picking
<u>Capsicum frutescens</u>	215740	South Carolina	Purple flowers. Has genetic value
<u>Capsicum frutescens</u>	219869	South Carolina	Good color retention. Breeding lines
<u>Capsicum frutescens</u>	222133-36	South Carolina	Good color retention. Breeding lines
<u>Capsicum frutescens</u>	223551	South Carolina	Good color retention. Breeding lines
<u>Citrullis vulgaris</u>	183217	Georgia	Resistant to Fusarium wilt.

<u>SPECIES</u>	<u>P. I. NUMBER</u>	<u>STATE REPORTING</u>	<u>CHARACTERISTICS AND USE</u>
<u>Cucumis melo</u>	164323	Virginia	Resistant to mildews and altenaria.
<u>Cucumis melo</u>	164723	Virginia	Resistant to mildews and altenaria
<u>Cucumis sativus</u>	179676	North Carolina	Resistant to downy mildew and anthracnose
<u>Hilaria sp.</u>	216444	Texas	High Yielder. Future observation
<u>Hilaria sp.</u>	216446	Texas	High yielder. Future observation
<u>Ipomoea sp.</u>	207691	Louisiana	Resistant to soil rot.
<u>Ipomoea sp.</u>	207700	Louisiana	Resistant to soil rot
<u>Ipomoea sp.</u>	208314	Louisiana	Resistant to soil rot
<u>Ipomoea sp.</u>	208645	Louisiana	Resistant to soil rot
<u>Ipomoea sp.</u>	208792	Louisiana	Resistant to soil rot
<u>Ipomoea sp.</u>	208796	Louisiana	Resistant to soil rot
<u>Ipomoea sp.</u>	208804	Louisiana	Resistant to soil rot
<u>Ipomoea sp.</u>	208805	Louisiana	Resistant to soil rot
<u>Ipomoea sp.</u>	208816	Louisiana	Resistant to soil rot
<u>Ipomoea sp.</u>	209555	Louisiana	Resistant to soil rot
<u>Lolium multiflorum</u>	225726	Texas	Resistant to rust
<u>Melilotus alba annua</u>	200355	Oklahoma	Productive. Increased for extensive tests

<u>SPECIES</u>	<u>P. I. NUMBER</u>	<u>STATE REPORTING</u>	<u>CHARACTERISTICS AND USE</u>
<u>Panicum antidotale</u>	217151	Texas	High yield potential
<u>Panicum coloratum</u>	193363	Texas	Increased for yield tests
<u>Pennisetum ciliare</u> *	202513	Arizona	Very cold hardy. Possible increase.
<u>Pennisetum ciliare</u>	203362	Arizona	Good yielder and hardy. Increased for range tests
<u>Phaseolus aureus</u>	164301	Oklahoma	
<u>Phaseolus aureus</u>	164436	Oklahoma	
<u>Phaseolus aureus</u>	164427	Oklahoma	
<u>Phaseolus aureus</u>	164720	Oklahoma	
<u>Phaseolus aureus</u>	164778	Oklahoma	
<u>Phaseolus aureus</u>	179960	Oklahoma	
<u>Phaseolus aureus</u>	183065	Oklahoma	
<u>Ricinus communis</u>	219768	Texas	Good drought tolerance and seed size
<u>Sesamum indicum</u>	158062	Texas	Moderate resistance to bacterial leafspot
<u>Sesamum indicum</u>	210770	Texas	Moderate resistance to bacterial leafspot
<u>Sorghastrum nutans</u>	217249	Texas	High yield potential
<u>Sporobolus asper</u>	217306	Texas	High yield potential
<u>Trifolium angustifolium</u>	206758	Texas	High yield potential

<u>SPECIES</u>	<u>P. I. NUMBER</u>	<u>STATE REPORTING</u>	<u>CHARACTERISTICS AND USE</u>
<u>Trifolium echinatum</u>	170830	Texas	High yield potential
<u>Trifolium isthmocarpum</u>	202517	Texas	High yield potential
<u>Trifolium isthmocarpum</u>	203664	Texas	High yield potential
<u>Trifolium nigrescens</u>	206926	Texas	High yield potential
<u>Trifolium pallidum</u>	201213	Texas	High yield potential
<u>Trifolium pratense</u>	204932	Texas	High yield potential
<u>Trifolium resupinatum</u>	209117	Texas	High yield potential
<u>Vigna sinensis</u>	170865	Arkansas	Apparent resistance to cercopera leafspot
<u>Vigna sinensis</u>	190191	Arkansas	Apparent resistance to cercopera leafspot

* Reported from Western Region.

DISTRIBUTION OF INTRODUCTIONS, Jan. 1---Dec. 1, 1955

State	Grasses & Legumss		Other Field Crops		Vegetable Crops		Misc. Crops		Totals
	By S. Reg.	By Others	By S. Reg.	By Others	By S. Reg.	By Others	By S. Reg.	By Others	
Alabama	7		130		4		12		153
Arkansas	61					12			73
Florida	329		44		9	153	9	980	1524
Georgia	101	3	71	1	1		6	36	219
Kentucky	14								14
Louisiana	75	30			10	132	9	6	262
Mississippi	6		31			7	1	9	54
North Carolina	22		21		22	1020	1	9	1095
Oklahoma	237	11	18	14	40		39	9	368
Puerto Rico	212	7				28	4	14	265
South Carolina	8				650		16		674
Tennessee	117						15		132
Texas	482		129		104	52	84	165	1016
Virginia	37				6				43
Total by S. Reg.	1708		451		846		196		3201
Total by Others		44		15		1404		1228*	2691
Total by Crops	1752		466		2250		1324		5892
To N. E. Reg.									119
To N. C. Reg.									673
To West Reg.									172
Foreign									1134
Storage									46
Total Shipments by S. Reg. Plant Introd. Sta.									5345

* Approximately 1000 ornamentals from Coconut Grove.