

ALABAMA CROP IMPROVEMENT ASSOCIATION

The Alabama Crop Improvement Association (ACIA) was authorized by state statute in 1945. ACIA was responsible for seed certification and foundation seed production and distribution in Alabama until the responsibility for seed certification was transferred to the Southern Seed Certification Association in 1995. ACIA continues as the official foundation seed organization for Alabama. It is a non-profit (501 (c) (5) organization governed by a Board of Directors elected from its membership. Various agricultural leaders within the state serve in conjunction with the Board of Directors in formulating general policies for the foundation seed program.

ACIA cooperates with public and private Agricultural Experiment Stations and plant breeders across the U.S. in making available to the farmers of Alabama, seed of new and improved cultivars. ACIA's Executive Vice President serves on the Auburn University cultivar release committee. This committee makes decisions regarding release of plant material developed by Auburn University. When decisions are made resulting in the release of a cultivar, the plant breeder supplies breeder seed to ACIA for foundation seed production.

Foundation seed is produced under contract by producers in Alabama or elsewhere depending on method of release. Seed produced in Alabama is stored, conditioned and distributed from ACIA's facilities at Auburn or Headland.

ARIZONA CROP IMPROVEMENT ASSOCIATION

The Arizona Crop Improvement Association, Inc., (ACIA) was organized in 1933 at Yuma by representatives of several county pure seed associations, Chilean alfalfa seed producers, the Farm Bureau and the University Of Arizona College Of Agriculture. The first bylaws were adopted in 1939 and ACIA became a non-profit corporation in 1942.

ACIA operations were supervised by the Arizona Agricultural Extension Service until 1949 when the management of the Arizona certification program was turned over to a board of directors. The board now consists of 22 members including growers from seed producing counties and representatives of the seed industry, the University of Arizona and the Arizona Department of Agriculture (ADA). ADA has designated ACIA as an official seed certifying agency.

ACIA's office is located on the University of Arizona Campus Agricultural Center in Tucson. The building which houses the office was completed in 1982 with substantial financial contribution from ACIA. The facility contains a seed research and teaching laboratory that is available to plant science faculty and graduate students.

ACIA's certification and service activities are conducted by a full-time staff of three employees who are employed through the University of Arizona via memorandum of agreement. The executive vice president manages the association and assists with field and office operations. A certification specialist focuses on certification program compliance, field inspections, assists with tag printing and handles the foundation seed program for Arizona's public varieties. An office manager maintains certification records, keeps the books and assists with tag printing. Operating expenses are financed totally by income from memberships, certification and service activities and foundation seed sales.

Cotton is the primary crop inspected for certification in Arizona with about 80% of the annual acreage. Sudan grass, cereal grains and bermudagrass comprise most of the remaining acreage. Other crops inspected usually include alfalfa, hybrid grain sorghum, canola, safflower and turf grass sod. The main production is in the developed desert areas within 50 miles of Phoenix and in the valleys of the Gila and Colorado Rivers in southwestern Arizona. All seed production is irrigated. Approximately 60,000 - 70,000 acres are inspected annually. Weight of seed certified ranges from 45 - 65 million pounds annually.

Arizona certified seed meets both genetic and mechanical standards. Analysis for laboratory factors may be conducted by independent testing laboratories which employ qualified seed analysts.

ACIA inspectors may perform certain phytosanitary inspections under contract with the Arizona Department of Agriculture.

Upon request, ACIA will also design and conduct service inspections and programs involving Quality Assurance and Identity Preservation as well as other customer-oriented programs.

ACIA also conducts a program to certify forage and mulch for freedom from noxious weeds. Non-certification activities include hosting the central office functions of trade groups in the state.

ARKANSAS SEED CERTIFICATION AGENCY AND FOUNDATION SEED ORGANIZATION

The Arkansas Legislature under Act 73 of Acts of 1931 designated the Arkansas State Plant Board as the Official Seed Certification Agency.

The State Plant Board Directors are empowered to develop the Official Standards for Seed Certification in Arkansas. The Seed Certification Section is under the Seed Division of the State Plant Board and carries out a program of pure seed production by providing inspection and administrative services to farmers and seedsmen in the production, conditioning, testing and labeling seed of known genetic purity, physical composition and germination potential. This section supervises and participates in the inspection of crops, gins, conditioning equipment and storage facilities to insure against contamination of certified seeds. All lots of seed for certification are sampled and tested by the Board, and appropriate tags/labels are issued on lots meeting the high standards.

The State Plant Board in cooperation with the Agricultural Experiment Station of the University of Arkansas functions as a Foundation Seed Organization in approving varieties eligible for certification.

The Arkansas Seed Council is an eleven member advisory group whose sole function is to assist in the allocation of foundation seed produced by the University of Arkansas Agricultural Experiment Station. The Director of the University of Arkansas' Arkansas Crop Variety Improvement Program serves as Chairman and an Extension Agronomist serves as Secretary. The remaining Members of the Council are two seed dealers, two seed growers, two members of the State Plant Board of Directors (not staff members), and one ex officio (nonvoting) member from the Rice, Soybean, and Wheat Commodity Groups. The Seed Council approves requests for foundation seed based on the applicants experience, equipment and known ability as a seed producer. The aim is to get the maximum production from foundation seed of proven varieties and to make seed available to all growers as quickly as possible. It is felt that foundation seed should be placed in the growers' hands

who are most assured of maximum production and who are most likely to maintain the seed within the Seed Certification Program.

Further information can be obtained from our web site at <http://www.plantboard.org>.

CALIFORNIA SEED CERTIFICATION SERVICES

Seed Certification and the Foundation Seed Program began in California in 1930. Fred Briggs, a cereal grain breeder, and Earl Coke, Extension agronomist, ran the programs through county committees organized by County Farm Advisors until 1937 when Frank Parsons was hired from the Kansas certification program to manage both programs. In 1944 the program changed from an Agronomy Department project to the California Crop Improvement Association (CCIA), a non-profit corporation, and became recognized as the official state certification agency under California State Seed Law. In 2003 the Foundation Seed Program became a separate program administered through the UC Davis Department of Plant Sciences. As the acreage in the seed certification program increased, the staff increased to the current 10 full time employees. There have been five Executive Directors to serve in the sixty-six year history of CCIA.

Frank Parsons 1937-1975

Burt Ray 1975-1988

Robert Ball 1988-1994

Fredrick Sundstrom 1994-2004

Robert Stewart 2004-2006

Larry Teuber 2006-present

The Board of Directors of the CCIA is comprised of eight growers, elected by the members in eight geographical districts in the state, plus nine representatives from the UC College of Agricultural and Environmental Sciences, Department of Plant Sciences, Agricultural Extension Service, Foundation Seed Program, Seed Biotechnology Center, County Agricultural Commissioner's Association, California Seed Association, California Department of Food and Agriculture, California Farm Bureau, and two at-large directors elected by the Board. The Board sets standards, fees and policy.

The certification program encompasses all counties in the State of California and consists of approximately 150,000 certified acres annually for some 250 varieties of 26 crops. The major crops certified in California are alfalfa, grain, cotton, rice, sunflowers, beans, clover, sudangrass and watermelon. CCIA staff also provides inspection services in several other countries. In addition to traditional certification services, CCIA offers a Disease Inspection Program, an Identity Preserved Program and Isolation Mapping Program. CCIA participates with the United States Department of Agriculture in the OECD Seed Scheme. The total operating budget is approximately \$1.2 million annually. CCIA is a self-supporting organization funded by fees assessed for services rendered.

The CCIA is closely tied to the Agricultural Experiment Station. Career staff are members of the UC Davis Department of Plant Sciences and as University employees are paid through a grant from the CCIA.

This program is headquartered in the Frank G. Parsons Seed Certification Center which was built with funds provided by the certified seed growers of California, and is located on the University of California, Davis campus.

THE CANADIAN SEED GROWERS ASSOCIATION

The Canadian Seed Growers' Association is designated by the Canada Seeds Act and Regulations (legislation of the parliament of Canada) as the official pedigree agency responsible for prescribing genetic crop standards and issuing crop certificates for Canadian produced pedigreed crops with the exception of potatoes.

The Canadian Seed Growers' Association came into being in 1904. The Regulations and Procedures for Pedigreed Seed Crop Production is the manual prepared by the Association to provide the guidelines for pedigreed crop production in Canada. It represents the coordinated effort of federal, provincial and university research and regulatory specialists of the seed trade assisted by the practical experience of seed growers.

The relationship between the CSGA and Agriculture & Agri-Food Canada (AAFC) and the Canadian Food Inspection Agency (CFIA) is unique and has progressed over the years on an almost partnership basis to improve the usage of pedigreed seed in Canada. The Canada Seeds Act governs the mechanical purity, germination and quality of seed as well as the grading and labeling of seed. Only seed produced from crops covered by a CSGA crop certificate may be graded as pedigreed seed. The inspection staff of the CFIA provides the crop inspection service and reports to the CSGA on the genetic purity, isolation and weed condition of crops. The CSGA makes the decision on the basis of the crop report to grant a pedigreed crop certificate.

The affairs of the Canadian Seed Growers' Association are conducted by a President and a twenty-four member Board of Directors. Twelve are active seed growers elected by the general membership and nine are appointed by the Provincial Ministers of Agriculture. The Head Office of the Association is in Ottawa, Ontario, under the supervision of an Executive Director.

Provision is made for provincial or regional organizations affiliated with the CSGA. These provincial organizations are not authorized to issue crop certificates or in any way act as a crop pedigree agency. They act as a liaison between the grower and the national organization and conduct promotional and extension programs.

The CSGA has been a member of AOSCA and previously the International Crop Improvement Association since inception.

COLORADO SEED GROWERS ASSOCIATION

Seed certification in Colorado is conducted by authority of the Seed Inspection and Registration Law enacted in 1929, and as provided for by Colorado Revised Statutes (CRS), Title 35, and CRS, Title 23. Presently, the Colorado Seed Growers Association (CSGA), in cooperation with the Colorado Experiment Station, Department of Soil and Crop Science, and Colorado State University (under the governance of the Board of Governors of the Colorado State University System) acts as the official certifying agency for all agricultural crops (except potatoes and watermelons) in Colorado. The CSGA is incorporated under the general corporation act of Colorado as a corporation not-for-profit and is governed by a Constitution and By-Laws. Membership in the Association is open to anyone who grows, markets, or distributes high-quality seed.

Members of the Board of Directors are elected for two-year terms by CSGA's general membership in each district. The Board is composed of one or two seed producers from each of nine districts defined by CSGA, a representative from the Colorado Seed Industry Association, and one each

from Colorado State University's Cooperative Extension Service and Department of Soil and Crop Sciences. A president, vice-president, secretary and treasurer are elected from any of the 12 non-Colorado State University board members. Board members are not limited to the number of consecutive terms that may be served. Officers are elected to serve two-year terms; with only the president and vice-president limited to serving two consecutive years. The direction of the seed certification program is largely determined by input from several committees. These committees include key commodity groups (small grains, dry beans, and grasses), education and promotion committee, approved conditioner committee, and the finance committee.

The CSGA's office at Colorado State University consists of a director and an assistant. The director is a non-tenured faculty member of the Department of Soil and Crop Sciences, serving as Extension Seed Certification Specialist, business manager of the association and an ex-officio member of the CSGA board. Six to ten field inspectors are hired on a part-time basis, and consist of undergraduate student interns and graduate students at Colorado State University, Research Station personnel, and private individuals.

The Seed Certification program derives funds through various fees paid by its members. Members must pay an annual membership fee with additional operating income derived from fees for field and conditioning plant inspections, and tag sales. Employees of the association are compensated through a Colorado State University payroll fund, which is reimbursed in part by the association.

COLORADO FOUNDATION SEED PROJECTS

Western Colorado Foundation Seed
Fred M. Judson, Manager
Western Colorado Research Center (WCRC) at Fruita
1910 L Road Fruita, Colorado 81521
970-858-3629 ext. 4
Fred.Judson@colostate.edu

Provide the seed industry with genetically pure and disease free seed stocks of Breeder and Foundation class dry bean, especially those cultivars developed by the Colorado Agricultural Experiment Station. Work cooperatively with Foundation seed projects in other western states in the exchange of Breeder and Foundation dry bean seed.

Agronomy Foundation Seed
Aaron J. Brown, Manager
ARDEC
4616 N.E. Frontage Rd
Fort Collins, Colorado 80524
970-222-4335
Aaron.Brown@colostate.edu

Agronomy Foundation Seed (AFS) of Colorado State University (CSU) serves as the link between CSU plant breeding programs and Colorado growers. AFS is responsible for increasing the Breeder seed and producing Foundation seed to ensure sufficient high quality seed distribution to certified seed growers. In addition to providing Foundation seed of varieties developed by CSU, AFS also performs contract production of Breeder or Foundation class seed for outside parties.

Custom production can range in size from an acre on up. Seed can be conditioned, treated and bagged to meet the customers' needs.

DELAWARE CROP IMPROVEMENT ASSOCIATION

Seed certification in Delaware was the responsibility of the University of Delaware until 1978, when the responsibility was assigned to the Delaware Department of Agriculture. The Delaware Crop Improvement Association acts as an advisory committee to the Seed Certification Program.

The primary crops certified in Delaware are soybeans, small grains and turf. All field inspections, warehouse inspections and laboratory tests are done by the Department of Agriculture. Certification tags are issued by the Department of Agriculture.

GEORGIA CROP IMPROVEMENT ASSOCIATION

The Georgia Crop Improvement Association (GCIA) is a non-profit organization of farmers, seed conditioners and sales organizations who produce seed and propagating material for sale to farmers and others. Growers who produced certified seed and propagating material utilize a certification process that promotes varietal purity and high quality. The certification process is accomplished by documentation of seed sources, field inspections, seed testing and an approved seed conditioners program.

The Georgia Crop Improvement Association was organized in 1946 and made the legal certifying agency when the Governor of Georgia, on February 9, 1956, signed into law House Bill #104, designating the University of Georgia, College of Agriculture as the legal seed certifying agency in Georgia, and named the GCIA as its agent. This bill was superseded by Senate Bill #583 in July of 1997.

GEORGIA SEED DEVELOPMENT COMMISSION

The Georgia Seed Development Commission is the agency responsible for foundation plant material production in Georgia. It was created by legislative action in 1956 and is designated as the "recipient of breeder seed from University of Georgia Agricultural Experiment Stations." The Commission is administratively assigned to the Department of Agriculture with a seven member board and is responsible to the Commissioner of Agriculture as permanent board chair.

The Seed Commission has an active seed production program for most row crops grown in the state including peanuts, soybeans, small grains, cowpeas, bahiagrass, cotton, fescue, lupine, canola, alfalfa and millets. In addition, the Commission maintains foundation material of vegetatively propagated turfgrass and horticultural cultivars developed by the University of Georgia and USDA/ARS. In 1997 the Commission entered into a cooperative agreement with the University of Georgia Research Foundation to manage licensing and royalty collection for University and USDA/ARS developed cultivars. The Commission also establishes and coordinates marketing associations for these University and USDA cultivars.

The Commission is a non-profit, self-supporting organization and derives operating funds from seed, vegetative plant material sales and a percentage of royalty collections. It operates two facilities, one in Athens and the other in Plains. The Athens facility is the administrative office and includes bulk storage, warehousing and a full array of conditioning equipment for soybeans, small grains and other crops. The Plains facility houses the peanut program with equipment for drying,

storage, shelling and treating seed peanuts. An air screen machine with flat bag storage is also located in Plains to condition and store small grains and soybeans.

The Commission staff cooperates with USDA and UGA faculty in supporting and facilitating various research projects. Since 1990, the Commission has directly provided over two million dollars to the University and USDA in support of cultivar development. The GSDC will continue to provide leadership and economic support for new business opportunities in helping to keep agriculture as Georgia's number one industry.

HAWAII DEPARTMENT OF AGRICULTURE

The Hawaii Department of Agriculture (HDOA) is the official agency responsible for the seed certification program in Hawaii. The HDOA regulates and promotes Hawaii's certified seed industry by working cooperatively with the Hawaii Crop Improvement Association, which principally is comprised of seed companies involved with research and production of Foundation and Hybrid seed. Since the early 1960's seed companies have taken advantage of Hawaii's year round growing season to increase parental material and produce new varieties and hybrids in a shorter time frame. Hawaii seed is principally grown in the islands of Kauai, Maui, Molokai and Oahu. The majority of certifications are for small acres of seed corn in the foundation class, which are field inspected and bulk shipped to the U.S. mainland for further conditioning and final certification. Hawaii seed corn is also exported directly to foreign countries following OECD certification standards.

Seed research and production efforts in Hawaii are geared for crops grown widely on the U.S. mainland. As a result, corn accounts for over 95 percent of all the seed acreage. The remaining 5 percent is devoted to such crops as soybeans, cotton, sunflower, wheat, and a few others. Approximately 85 percent of all cornfields in Hawaii are grown strictly for their seed, which will eventually ship out of state.

The availability and recent acquisition of land formerly planted with sugarcane and pineapple has resulted in an increase of acreage applied for certification. Due to the input of new seed investments in Hawaii, the HDOA is reviewing and modifying its certification standards to meet the future needs of Hawaii's seed certification program.

IDAHO CROP IMPROVEMENT ASSOCIATION

The Idaho Crop Improvement Association, Inc. (ICIA) was organized in 1941. Since the enactment of Senate Bill No. 107 the "Seed and Plant Certification Act of 1959", ICIA has acted as the officially designated agent of the University of Idaho Board of Regents to carry out certification of seeds, tubers, plants and plant parts. ICIA also legally acts as an agent of the State of Idaho.

Membership in the organization consists of seed growers and conditioners throughout the state. ICIA has a Board of Directors, elected from the membership that includes seven directors and two ex-officio member from the University of Idaho. All enjoy voting privileges. Offices of the Association include a President, Vice-President, Treasurer and an Executive Vice President. This board responds to actions by advisory committees and members who wish to have a say in the operation of the Association. Advisory Committees are currently available for potato, grain, alfalfa and red clover, dry bean and grass.

ICIA has a non-profit status and is incorporated under the laws of Idaho. The main office is in Meridian with area offices in Post Falls, Twin Falls and Idaho Falls. Fifteen full-time and as many as 40 part-time employees carry out the functions of the Association. While overall control of the Association rests with

the Board of Directors, the day-to-day operation is the responsibility of the Executive Vice President. Field records, accounting procedures and tagging operations are computerized. Applications for certification may also be filed electronically.

Annual acreage certified runs from 120,000 to 150,000 and final certification and tagging is completed for approximately 200 million pounds of true seed and 600 million pounds of seed potatoes annually.

IDAHO FOUNDATION SEED PROGRAM

As part of the Idaho Agricultural Experiment Station, the Idaho Foundation Seed Program (IFSP) maintains Breeder seed in cooperation with the appropriate plant breeder or agency, coordinates the production, certification and allocation of Foundation seed, and provides information on certified seed and supports the certified seed program in Idaho.

The IFSP currently maintains and distributes more than 120 varieties of wheat, barley, oats, beans, potatoes, peas, chickpeas, lentils, rapeseed, mustard, grasses, forbs, and forage legumes. IFSP seed production, storage and distribution takes place at UI Research and Extension centers across the state. These include Tetonia and Aberdeen (southeast), Kimberly (south central), Parma (southwest), and Moscow (north). The program coordinator is located at Kimberly.

ILLINOIS CROP IMPROVEMENT ASSOCIATION

In 1924, **Illinois Crop Improvement Association (ICIA)** became the official seed-certification agency for the state of Illinois. The need for preserving the identity and purity of the better varieties of seed produced by agricultural experiment stations was initially addressed in 1920 when the Crops Committee of the Illinois Farm Advisors Association (University Extension) met with Dr. W. L. Burlison and Professor J. C. Hackleman at the University of Illinois. Since then, our offerings have grown into a full range of laboratory, field and process-based services — for seed development, grain production, grain processing, food manufacturing, and more.

Today, ICIA is recognized as a premier provider of objective, third-party testing services for the international food and agricultural system. We work with organizations on six continents and we've built strong relationships with stakeholders at all levels of the agri-food supply chain.

Our commitment to the success of the world food system requires that we evolve with it. Inside, you'll learn more about how ICIA is using our official certification authority, resources, talents and industry alliances to provide creative new solutions for our clients.

ICIA built its reputation on the breadth and quality of its core services, which are offered through four technical departments:

The Seed Laboratory provides seed analysis using both traditional and newer techniques. Our focus is on seed quality through testing for germination, vigor and purity. Corn and soybeans comprise the majority of test samples, but the lab also tests more than 100 other crop kinds, including wheat, oats, sunflowers, native grasses, flowers and vegetables.

The Field Services Department inspects seed production fields to identify off-type plants. Inspectors also address isolation distances, pollen flow concerns, disease and weed control

problems, and other issues that may affect the quality and purity of the resulting crop. This department also handles the Identity Preserved (IP), Quality Assurance (QA) and other auditing programs.

The Field Services Department has developed new methods to respond to advances in biotechnology and the marketing of genetically modified organisms (GMOs) by seed companies. Testers employ bioassay and immunoassay methods to detect GMOs, verify trait purity and verify the absence of certain traits. One of their tools is GENETRUESM, a suite of adventitious-presence tests developed by ICIA to identify transgenic traits in seed and grain.

The Puerto Rico Winter Farm is a third-party seed research facility on the south coast of the island. In operation since 1986, the 230-acre farm provides a location for “growouts” — small seed plots that are “grown out” for observation of potential varietal purity issues.

The plots, environment and growing methods can be adapted to meet a wide range of research and production needs. The farm’s ideal growing conditions offer year-round production of multiple generations of corn, soybeans, peanuts, sunflowers, sorghum and many other crop kinds.

The Identity Preserved Grain Laboratory (IPG) was founded in 1988 to meet industry demands for third-party testing beyond official grain grade standards. The IPG lab serves the grain and seed industries by assisting international trading companies, end users, seed companies and others who need to identify certain grain characteristics.

The IPG lab offers analysis of physical characteristics and chemical composition, as well as other tests that mimic the industrial process in a laboratory setting. Tests can be performed on a wide range of crop kinds and on many products made from grains and oilseeds, including feeds, milled corn, processed soybeans, flours and rolled oats.

Our expertise in delivering core services provides the foundation for a new, broader scope of programs for the seed and food industries. Although our current service menu is extensive, it represents only a sample of our capabilities. Our unique mix of experience, seed certification authority, state-of-the-art facilities and key industry relationships offers almost limitless possibilities for customizing our services to meet special needs.

Strategic Alliances

ICIA’s capabilities are multiplied through our relationships with providers of complementary services. One of our newest partners is GeneScan USA, which has expanded our technical consulting and auditing services. Our joint program offers benefits to companies interested in upgrading or developing their vendor certification, IP and traceability programs.

Through this alliance, ICIA helped develop the Producer Audited Supply System (PASS), a comprehensive seed/grain stewardship program. PASS is now helping a major seed company assure that the grain produced from a particular variety of seed is channeled through designated market channels.

PASS is a flexible tool that can be adapted for many other types of supply systems. With PASS and ICIA's auditing expertise, any company can take control of its tracking functions and optimize the value of its delivered products.

Customized Consulting and Educational Services

Our industry is becoming increasingly global, and many of our customers are facing challenges that are beyond their current capabilities. That's where ICIA can help. Our experts and industry partners will work together to assess your needs and develop creative, cost-effective solutions.

Here are some ideas on how ICIA can tailor its services to meet your unique needs:

- Provide specialized consulting and certification services.
- Conduct field trials and testing of new crop kinds and varieties.
- Design and carry out pesticide monitoring programs.
- Assist exporting companies with their quality-assurance programs.
- Develop company training programs on the value of QA and IP.
- Provide independent third-party auditing and evaluation of programs.
- Develop risk-management programs to meet insurers' requirements.
- Design systems to efficiently comply with regulatory and contractual requirements.

ICIA at work

Recent services for our clients include:

- Consulting on the development of seed-certification programs in foreign countries.
- Evaluating seed, grain, and ingredient characteristics for end-use suitability.
- Providing third-party audits to certify Fresh Pure GreenTM identity-preserved soybeans.
- Conducting field inspections and record audits for InnovaSureTM identity-preserved corn program.

INDIANA CROP IMPROVEMENT ASSOCIATION

The basic goal of the Indiana Crop Improvement Association (ICIA) is the delivery of unbiased, needed services to customers in the seed, grain, food and related industries. As a non-profit, unbiased, self-supporting organization, ICIA objectively provides many direct field and laboratory services and helps customers plan and execute quality management systems. Auditing at critical points in process management based programs has become a valuable part of ICIA service. Being an ISO 9001-2000 registered organization enables ICIA to effectively design and administer these types of services.

In Indiana, seed certification for agronomic crops was delegated to the Indiana Crop Improvement Association by Purdue University under state law governing seed certification and related programs. Genetic seed certification is carried out under the strict genetic standards maintained by the Association of Official Seed Certifying Agencies (AOSCA) and contained in the U.S. Federal Seed Act. In addition to genetic seed certification, ICIA provides official certification programs for Source Identified species (i.e. native grasses and wild flowers), and offers a Certified Noxious Weed Seed Free program for hay and straw.

ICIA offers two other significant quality services under the AOSCA umbrella. For seed marketed not utilizing official certification, ICIA offers AOSCA's Quality Assurance (QA) program. The AOSCA Identity Preserved (IP) program is also used by many customers in the grain, food and food ingredient industries. Both the QA and IP programs provide unbiased services assisting with tracking and tracing of products from "A to Z" to help assure product integrity. Certificates or labels

are made available to customers whose programs meet the objectives of their quality plans based on unbiased, ICIA audits.

Indiana Crop also offers a wide range of quality control services including many in its laboratories near Lafayette, Indiana. The following list summarizes many of those services:

Field Programs

- Seed Certification
- QA seed inspections
- Breeder Seed inspections
- Identity Preserved inspections
- Other customized inspections
- Facility inspections

Conventional Seed Testing:

- Purity analysis – physical and varietal
- Standard germination
- Sand germination
- Cold germination
- Saturated cold germination
- Accelerated aging
- Seed counts/moisture/hand treatment

Bioassay Herbicide Testing:

- Round UP Ready – corn & soybeans
- STS soybeans
- Liberty Link corn
- IMI corn

Genetics Laboratory Services:

- Trait tests – Bt, Starlink, etc.
- GMO detection – ELISA and PCR
- Soybean Lipoxygenase
- Electrophoresis Isozyme purity – corn
- PAGE for small grain purity
- Fertility/sterility – hybrid corn

Other Services

- Identity Preserved auditing
- Quality plan development
- Quality assurance consultation
- Molecular marker work for breeders
- CystX® soybean testing
- Other customized service programs
- Inspection and audit training

ICIA also carries out educational programs, meetings and seminars to promote the use of high quality seed and to further learning about seed quality, seed testing, quality assurance and process management systems.

The Indiana Crop Improvement Association, Inc. strongly believes in the future of the seed industry. All service programs, including certification, are designed to assist the seed industry in order to provide farmer/consumers with high quality products.

Thirteen full-time employees and seventy-five part-time employees staff the Association to carry out the field and laboratory testing programs. All are highly trained professionals dedicated to achieving the overall objectives of the Association. Laboratory test results are available to customers via the Internet on LabLink© a powerful, spreadsheet-based, custom web browser.

The ICIA ISO Quality Policy states:

“The Indiana Crop Improvement Association is dedicated to providing superior field inspection and laboratory testing services to the customers by continually improving our quality system.”

For more detailed information about the Indiana Crop Improvement Association visit the web site at www.indianacrop.org, call 765-523-2535 or email icia@indianacrop.org.

IOWA CROP IMPROVEMENT ASSOCIATION

In 1950, two organizations in Iowa agreed to be combined into one because they complimented each other as well as having similar purposes and objectives. The new organization was named Iowa Crop Improvement Association.

The Iowa Crop Improvement Association is a self-supported, non-profit corporation composed of persons or concerns who are engaged in agricultural work in Iowa and are actively interested in crop improvement.

The business of the corporation is managed by a board of nine directors and one advisor. One is the Director of the Agriculture and Home Economics Experiment Station at Iowa State University, one the head of the Agronomy Department of Iowa State University, and one the Secretary of Iowa Department of Agriculture and Land Stewardship. The Iowa State University Seed Science Center Director serves as the advisor. Six directors are elected by the members. The Board elects from its own membership, a president and vice-president. The Board also elects a secretary, an assistant secretary, and a treasurer, who are members of the staff of Iowa State University.

The following projects are conducted by the Association:

1. Seed Certification

The Iowa Crop Improvement Association is designated by the Iowa Secretary of Agriculture and Land Stewardship as the official seed certifying agency in Iowa. This action is provided for in Chapter 177, Code of Iowa. The Association establishes and administers standards for certification and inspects the production of certified seed under these standards. The major crops certified are soybeans, oats, hybrid and foundation com.

2. Crop Performance Testing of corn, forages, small grain, and soybean varieties. These varietal testing projects are conducted by I. S. U. project leaders for the Iowa Crop Improvement Association.

3. Education

KANSAS CROP IMPROVEMENT ASSOCIATION

First established in 1902 as the Kansas Seed Corn Breeders, the Associations purpose was to improve the kinds of corn grown in the state of Kansas. After a name change in 1914, the Kansas Crop Improvement Association (KCIA) focused on "promoting the agricultural interests of the state by such means that would be beneficial to all parties interested in progressive agriculture and specifically through the use of improved varieties of farm seeds and plants." Today, KCIA focuses on "creating the opportunity for its' members to participate in integrity based quality assurance programs that provide superior seed and plant products. KCIA utilizes research, education, certification and uniform standards that result in a safe, stable, secure seedstock supply."

Seed certification has always been of primary importance to the Association and field inspections

were begun in 1919. The Kansas Certification Law of 1937 authorizes Kansas State University (KSU) to annually appoint an agency to carry out the necessary functions of seed certification in the state. Each year since then, KCIA has reported its' activities to the university and has been re-appointed as the official state seed certifying agency.

Kansas Crop Improvement Association is a 501(c)5, private, non-profit organization supported by the dues and fees of it's members and customers. It is governed by a board of directors elected by the membership. The head of the KSU Agronomy Department and the KSU Director of Extension serve as ex-officio directors. Another board member is appointed by the Kansas Seed Industry Association (KSIA) as their representative. (The KCIA likewise appoints a representative to the KSIA Board of Directors.) Association offices are located on the KSU Agronomy Farm in Manhattan, Kansas, and include a full-service seed testing lab.

Wheat is the principle crop in the KCIA program and accounts for about 90% of the certification activity. Other crops routinely certified include soybeans, oats, barley, sorghum, alfalfa, triticale, millet, rye, rapeseed and native grasses. Over 2.5 million bushels from 100,000 acres is certified each year by the 310 KCIA members. The seed lab tests approximately 5,000 samples each year.

Both the genetic and mechanical standards are used in Kansas seed certification. To insure that these are met, KCIA performs inspections and tests on the fields and seeds. Additionally, KCIA maintains an approved conditioner program for educating operators and monitoring facilities used to condition certified seed.

KCIA offers Quality Assurance and Identity Preserved programs and cooperates with accredited agencies for certified organic audits. The KCIA Seed Lab is under contract with the Kansas Department of Agriculture to provide regulatory seed testing and other official seed testing services.

KENTUCKY SEED IMPROVEMENT ASSOCIATION

Kentucky Seed Improvement Association (KSIA) was organized in 1929 and later incorporated in 1939. The purpose of seed certification is to provide an orderly means of maintaining and making available to the public high-quality seeds and propagating material of superior plant varieties. Authority for certification is through the Kentucky Seed Law (KRS 250.170 - 250.230) where the Director of the Agricultural Experiment Station, University of Kentucky, has designated KSIA as the official seed certifying agency for Kentucky. Kentucky Seed Improvement Association is a non-profit corporation composed of and directed by seed producers and conditioners.

A Board of Directors consisting of 12 members representing all areas of the state governs the Association. Certification activities are conducted with a staff consisting of a manager, one full-time Administrative Assistant, one part-time Office Manager and part-time field inspectors. The Association's office is located on the University of Kentucky Agronomy Research Farm near Lexington. All operating expenses are financed through membership, inspection and tag fees. All certification activities are conducted in close cooperation with faculty and staff of the Foundation Seed Project and Department of Agronomy, University of Kentucky.

Major crops certified in Kentucky are soybeans, wheat, barley and tobacco. Other crops certified include oats, tall fescue, timothy, hybrid corn, sweet sorghum and lespedeza. Over the past three years the average acreage of certified crops has been approximately 14,500 acres. The volume of certified seed produced from this acreage the past three years has been consistent with the Association issuing over 475,000 tags and labels annually.

Seed certification in Kentucky is based on both genetic and mechanical standards. All Kentucky certified seed must meet minimum standards for genetic purity, germination, mechanical purity and be free from certain diseases and troublesome weed seed. Kentucky Seed Improvement Association also offers seedsmen service inspections for quality control and phytosanitary inspections for the issuance of phytosanitary export certificates.

LOUISIANA SEED CERTIFICATION

Seed certification in Louisiana is administered by the Louisiana Department of Agriculture & Forestry. The certification standards fall under the authority of the Louisiana Seed Commission whose members are comprised of the Commissioner of Agriculture & Forestry, the Director of the Louisiana Agricultural Experiment Station, the Director of the Louisiana Cooperative Extension Service, the President of the Louisiana Farm Bureau and the President of the Louisiana Seedsmen's Association. Within the Department, certification is the responsibility of the Seed Division. The certification office is located within the Louisiana Seed Testing Laboratory where seed testing services are also offered. The primary crops certified in Louisiana include rice, oats, wheat, soybeans, sweet potatoes, sugarcane, turf grass, and pine tree seed.

MAINE DEPARTMENT OF AGRICULTURE DIVISION OF PLANT INDUSTRY

The Division of Plant Industry is the organization responsible for the certification of crops in the state of Maine. The Division is administratively located in the Maine Department of Agriculture.

Purpose:

The Division of Plant Industry was established to protect the public from hazards associated with the sale, transport, or growing of weak, diseased or insect-infested commercial plant stock fruits or seed; and to encourage the keeping of bees. Its current responsibilities are to enforce the statutes relating to the certification of seed potatoes and other crops; to ensure an adequate supply of foundation seed potatoes to the state's commercial seed potato producers; to inspect nurseries, orchards, fields and gardens; and to license beekeepers and inspect their hives.

Organization:

The Division of Plant Industry was established in 1919. In the early years, the Division was greatly involved with insect control having to do with the corn borer, gypsy moth, browntail moth, Japanese beetle, and greenhead fly. As these functions were assumed by others, the emphasis of the Division shifted to work with commercial seed potato and grain producers, nurserymen, orchardists, florists, bee keepers, and small fruit and vegetable growers.

The Division's professional staff is comprised of the director; a state apiarist; an integrated pest management entomologist; a state horticulturist, two assistant horticulturists; seven seed potato inspectors, one of whom is trained to certify other crops; a seed potato inspector supervisor; the manager of the Porter Nuclear Seed Farm and several farm and laboratory staff.

Certification Program

One of the major activities of this Division is the certification of seed potatoes and field crops, a self-supporting service paid through fees charged to seed producers. The Maine Seed Potato Certification Program inspected 10,979 acres of seed potatoes produced by 113 growers in 2006. These total represented a continuing slow decline in numbers over the past five years.

Foundation Seed Potato Production

The Maine Seed Potato Board acts as the foundation and production agency for the State of Maine. Each year the Porter Farm produces over one million pounds of foundation seed potatoes for sale to certified seed growers in the state. No foundation grain is currently being produced at this facility.

MARYLAND SEED CERTIFICATION

Seed certification in Maryland, as authorized by state law, is the responsibility of the Maryland Department of Agriculture (MDA). The Turf and Seed Section of MDA administers this program. Other programs within the Turf and Seed Section are the state seed laboratory, seed regulatory, turfgrass certification, turfgrass regulatory, and supervised seed mixing. Crops certified in Maryland are wheat, barley, oats and soybeans.

Foundation seed is grown and distributed under the direction of the Maryland Crop Improvement Association (MCIA), in cooperation with the University of Maryland and MDA. MCIA is responsible for collecting royalties on all varieties grown in Maryland in which a royalty has been assessed. Royalties collected on Maryland released varieties grown outside of the state should be forwarded to MCIA.

MDA Website: www.mda.state.md.us

MICHIGAN CROP IMPROVEMENT ASSOCIATION

Michigan Crop Improvement Association (MCIA) was incorporated as a nonprofit organization under the General Corporation Law, Act 84 of 1921, of the State of Michigan. The purpose of the association shall be to foster and promote the production and use of improved seed stocks in Michigan, to serve as an official seed certification agency for the State of Michigan, and to engage in such other activities as provided by law as shall best serve its primary purpose. Authority for certification is through Public Act 221 of 1959 as amended, where the Director of the Michigan Department of agriculture has designated MCIA as the official seed certifying agency for Michigan. Michigan Crop Improvement Association is a nonprofit organization composed of and directed by seed producers and conditioners. Current membership is 90.

The Michigan Foundation Seed Association was incorporated as a not for profit organization in 1949 and continued in existence until 1997 when the organization was merged with the Michigan Crop Improvement Association to become one organization. This merger was made because of the very similar organizational structure and membership makeup of both organizations and to help make the management of both organizations more efficient.

An eight-member board of directors governs the Michigan Crop Improvement Association. Six directors are elected by the membership, while two directors representing Michigan State University and the seed industry are appointed by the board. Certification activities (including field inspection and laboratory testing) along with the production of foundation seed stocks are conducted by a staff consisting of six full time, three part time, and twenty seasonal employees.

The association's office is located at Okemos, MI. All operating expenses for certification services are financed through membership, inspection, and tag fees. Foundation seed production is financed through the sale of Foundation seed product. All certification activities are conducted in close cooperation with faculty and staff of the Crops and Soil Science Department, Michigan State

University, and the Michigan Department of Agriculture.

Major crops certified in Michigan are corn, wheat, oats, dry beans, and soybeans. Over the past five years, the average acreage certified has been approximately 65,000 acres.

Seed certification in Michigan is based on both genetic and mechanical standards. All Michigan certified seed must meet minimum standards for genetic purity, germination, mechanical purity, and be free from certain diseases and weed seeds. Michigan Crop Improvement Association also offers seedsmen service inspections for Quality Assurance and Identity Preservation. Michigan Crop Improvement Association has just begun a pilot program for source ID certification of native grasses.

Further information can be obtained from our web site at www.michcrop.com

MINNESOTA CROP IMPROVEMENT ASSOCIATION

Minnesota Crop Improvement Association (MCIA) is one of the oldest agricultural organizations in the state of Minnesota. It was originally organized in 1903 by people interested in the "systematic encouragement for the use of pedigreed seed." Throughout the years MCIA has established itself as a leader in the world of agriculture production. In recent years the association has diversified to offer new and expanded services to help meet members' ever-changing needs.

MCIA is an independent nonprofit organization dedicated to improving the productivity, profitability and competitive position of its members. It is governed by a board of directors, and operates on fees charged for services performed. MCIA offers an array of certification programs and services including: agronomic seed certification, Quality Assurance, Identity Preserved, Organic Certification, parent and Foundation seed production, customized third-party inspection and testing, consulting, auditing, and a host of laboratory services.

MCIA is officially recognized by the Minnesota Department of Agriculture and the Minnesota Agricultural Experiment Station as the state's official seed certifying agency and official noxious weed seed free forage and mulch certifying agency. As a participant in the US OECD program MCIA assists its members in the movement of seed to international markets. MCIA is also a USDA accredited ISO 65 Compliant Organic Certification agency.

The staff at MCIA is dedicated to excellence. With backgrounds ranging from agronomy to marketing, it has a knowledgeable staff that understands modern agribusiness. With four staff members trained as ISO lead auditors, seven trained as organic inspectors, and one trained in HACCP, MCIA has a large investment in the future of agriculture and food safety. MCIA offers a dynamic staff with the ability to serve its members in a multitude of capacities.

Each MCIA program is backed by a century of experience and integrity. MCIA's history combined with the goal of improving members' competitive position will assist in providing a bright future for Upper Midwest production agriculture and food distribution.

MISSISSIPPI CROP IMPROVEMENT ASSOCIATION

The Mississippi Crop Improvement Association (MCIA) is a non-profit, self-supported farmer's cooperative which operates under a charter granted by the Mississippi Secretary of State on October 11, 1940. It is recognized by State Law as the official crop certifying agency of the State of Mississippi.

MCIA is headquartered on the campus of Mississippi State University. The affairs of the Association are under the immediate control of an eight man board of directors. The board consists of the Director of the Mississippi Agricultural and Forestry Experiment Station at Mississippi State University; the President of the Mississippi Seedsmen's Association or a representative selected by the Mississippi Seedsmen's Association; and six other members elected by and from the membership of MCIA as follows: Two members shall represent commercial plant breeding firms, and three members shall represent certified seed growers of a major crop other than plant breeding firms. And one member representing minor crops.

MCIA is totally financed by field, equipment and conditioning plant inspection fees and fees for certification tags. All Mississippi certified seed must be conditioned in plants that have been inspected and approved by the Association inspectors. Custom conditioning plants must also be bonded to handle certified seed. Certified seed lots must be sampled by MCIA inspectors and tested by the State Seed Testing Laboratory at Mississippi State University.

MCIA works in close cooperation with specialists from the Mississippi Agricultural and Forestry Experiment Station, Mississippi Cooperative Extension Service, U. S. Department of Agriculture, Mississippi Department of Agriculture, and specialists from the private sector for advice and recommendation on technical matters pertaining to various crops and seed.

In the early days of MCIA, the primary crop certified in Mississippi was cotton since practically all of the major cotton breeding firms were located in the state. In 2005, there were 13 different crops in the certification program in Mississippi which includes some 94 different varieties and accounted for about 93,628 acres of certified seed production. The major crops in certification in Mississippi today are cotton, rice, wheat, and soybeans, in that order.

In addition to certification work, MCIA has performed phytosanitary inspections on behalf of the Mississippi Department of Agriculture Division of Plant Industry during the past several years.

MCIA is a member of the following organizations: Association of Official Seed Certifying Agencies (AOSCA); Southern Seed Certification Officials; American Seed Trade Association; Southern Seedsmen's Association; Mississippi Seedsmen's Association; American Soybean Association; Mississippi Soybean Association; Mississippi Section, American Society of Agronomy; Mississippi Economic Council; and the Association of Mississippi Agricultural Organizations (AMA).

MISSOURI CROP IMPROVEMENT ASSOCIATION

The Missouri Crop Improvement Association (MCIA) is an incorporated, not-for-profit organization of seed producers, conditioners and other persons affiliated with the agriculture, food and fiber. The association is designated annually by the Director of the Missouri Agricultural Experiment Station as the official agency for conducting seed certification programs in the State of Missouri. This action is provided for in Section 266.092 of the Missouri Seed Law.

The stated purpose of the MCIA is to maintain and make available to the public, through seed certification, high quality seeds and propagating materials or varieties so grown and distributed as to maintain high quality, genetic purity and identity. In response to changes in the ways new cultivars are developed and released, the MCIA has implemented a Quality Assurance program that mirrors the official seed certification program for varieties that are not eligible for certification. MCIA also offers Source Identified programs for pre-variety germplasm and wild land collected seed of native and local eco-type species.

Management of the MCIA is the responsibility of the Executive Director. The MCIA is governed by a nine member Board of Directors elected from the general membership. The by-laws of the MCIA provide for an Executive Committee to conduct routine business matters for the Association. An Advisory Committee exists for the purpose of advising the Board of Directors with reference to the general operations of the Association. The Advisory Committee is composed of the Chairman of the University of Missouri (UM) Department of Agronomy, Director of the Missouri Agricultural Experiment Station, Associate Dean of Agricultural Extension, Director of the Missouri Department of Agriculture and other members of the UM Agronomy Department staff appointed by the Chair. The MCIA is a self-supporting organization funded directly from fees and assessments collected from the membership for services performed. MCIA receives no financial assistance from University, State or Federal sources. The MCIA awards research grants to those institutions and individuals whose projects advance the interests of the MCIA membership and agriculture in the State of Missouri.

Crops that make up the program in Missouri consist primarily of soybeans (maturity group II-VI), winter wheat (soft red and hard red), hybrid com, hybrid grain sorghum, rice, cotton, winter barley, spring oats, cool season grass and warm season (native) grass. Final certification in Missouri is based on both varietal purity and mechanical standards, meaning that in addition to varietal purity, seed must meet minimum standards for pure seed, germination, etc

The MCIA has expanded its programs in recent years to provide programs beyond those for the seed industry. Identity Preserved (IP) programs are gaining in popularity as processors and end users seek to gain efficiencies through the use of standardized inputs. IP systems should become increasingly important as bio-engineered and specialty trait crops become more widely available.

MONTANA SEED GROWERS ASSOCIATION

The Montana Seed Growers Association was founded September 12, 1912. In 1951 the Montana State Legislature officially recognized seed certification by passing a law making Montana State University the institution responsible for crop certification. The University President designated the Montana Seed Growers Association as the University's agent to certify all field crops except potatoes. The first duty in 1912 was the certification of alfalfa seed fields.

The Association is incorporated under the laws of Montana as a non-profit corporation. The Association is governed by a board of six directors. The directors are elected for a three-year term. One director is elected from each of the six Agricultural Research Center Districts. The officers are President, Vice-President, Manager and Secretary-Treasurer. The Department Head for the Plant Sciences & Plant Pathology Department is an ex-officio member of the Board of Directors. The Manager must be an agronomist from either the Extension Service or the Department of Plant Sciences & Plant Pathology. All crop varieties submitted to the Association for certification are reviewed by the Board of Directors, Department Head, Manager and respective plant breeders.

The major crops certified by this agency are as follows:

Winter Wheat	Spring Wheat	Durum Wheat
Barley	Oats/Canola	Triticale
Safflower	Sainfoin/Peas/Lentils	Alfalfa
Grasses	Red Clover	Camelina
Native Grasses & Forbs	Spelt	Lentils

A few species are processed through the Wildland Collected Seed Program. MSGA also does some certification or Noxious Weed Seed Free Straw by agreement with the Montana Department of Agriculture.

NEBRASKA CROP IMPROVEMENT ASSOCIATION

Our Vision: "The NCIA is dedicated to enhancing the economic viability and well-being of the people of Nebraska and the world, through value-added products and processes. We will achieve this goal through an organizational structure which attracts the finest people, fully develops and challenges individual talents, encourages industry-wide collaboration to advance agriculture, and maintains the Association's historic principles of integrity."

The NCIA is a non-profit, educational, and service organization founded in 1902. The Association policies and certified seed standards are determined by a ten-member board of the directors. Seven directors are elected from the membership. The other three directors are ex-officio representing the Nebraska Seed Trade Association; the University of Nebraska Department of Agronomy' and the Institute of Agriculture and Natural Resources. The officers are elected/appointed annually by the Board. The Association office and seed lab are located in the Plant Science Hall on the East Campus of the University of Nebraska-Lincoln. Its operation and activities are fully funded through fees paid by members for service. The agency's name was changed to the Nebraska Crop Improvement Association in 1942.

Specific purposes of the Association are 1.) to carry out all activities associated with certification of crop seeds, 2.) to encourage the production of high quality seed of superior varieties grown and distributed under the most careful conditions so as to assure varietal identity and purity, 3.) to make known to the public the sources of such seed suppliers, 4.) to carry on educational work for improving the agronomic practices and furthering agricultural interests in the states.

Operating as an independent, unbiased organization, the NCIA enhances the value of seed and crops through professional, personalized services that meet seed producer, marketer, and industry needs. NCIA programs contribute to agricultural diversity, productivity, and sustainability while providing quality and innovation to those who feed the world.

Certified seed was first produced in Nebraska during 1920. However, it was not until 1931 that seed approved for certification by the Nebraska Crop Growers Association was given official status by statute. That year, the Nebraska House of Representatives passed H.R. 67 which provided for certification of seeds or plant parts intended for propagation or sale in Nebraska and specified that such certification would be on a self-supporting basis. The Nebraska Crop Growers Association was designated as the official agency for certification of cultivar identity and seed quality factors through an agreement with the University of Nebraska.

Seed certification in Nebraska is based on physiological and physical quality factors. Nebraska certified quality seed must meet minimum standards for varietal purity, germination, mechanical

purity and be free from certain diseases and objectionable weed seeds. NCIA's seed certification program is an important technology transfer channel for making improved, one-of-a-kind varieties of food, feed, forage, and turf crops available.

A full-service seed laboratory was established in 1941. In 1950, the association seed laboratory component was granted full membership status by the Association of Official Seed Analysts (AOSA).

NEBRASKA FOUNDATION SEED DIVISION

The Foundation Seed Division is an integral part of the Agricultural Research Division of the University of Nebraska Institute of Agriculture and Natural Resources.

The Nebraska Foundation Seed Division is a self-supporting non-profit organization. Operation funds are derived directly from sales of foundation seed and services. The main purpose of the Division is to increase small lots of breeder seed of new varieties to amounts that will allow rapid and equitable distribution to certified seed producers and ultimately to farmers. The Division also maintains supplies of pure Foundation seed stocks of established crop varieties and hybrids. Custom seed production services for increasing parent seed stocks are available for Division clientele.

The Foundation Seed Division office is located at Ithaca, Nebraska. The Director who reports to the Director of the Agricultural Research and Division Center (ARDC), University of Nebraska-Lincoln, supervises the division. The Director is responsible for the seed production and conditioning activities at the Foundation Seed farm at the Agricultural Research and Division Center near Ithaca, Nebraska. The staff also includes two Ag Research technicians and a Staff Assistant.

Foundation seed crops are produced at several locations in Nebraska to minimize the risk of crop failure due to climatic conditions and to provide adequate isolation necessary to insure genetic purity. The major production area is at the Agricultural Research and Development Center near Ithaca, Nebraska. Approximately 700 acres of dry land and 300 acres of irrigated land are devoted to Foundation seed production at this site.

The Foundation Seed Division maintains over 100 different varieties and lines of 11 crops. Production of foundation seed involves the following crops:

Winter Wheat	Spring Oats	Millet
Field Beans	Soybeans	Alfalfa
Corn Sorghum	Warm Season Grasses	Sudan Grass
Cool Season Grasses		

Any certified seed producer may purchase foundation seed of available varieties and lines. All farmers of the state may thus be reached through these sales of superior crop seeds.

NEW JERSEY SEED CERTIFICATION

Seed Certification is accomplished by the New Jersey Department of Agriculture. The State Board of Agriculture under the authority of Chapter 298, Laws of 1952, establishes the rules and regulations for the certification program. The Seed Certification and Control unit of the Division of Plant Industry supervises this program. Various personnel in the Division of Plant Industry perform the field inspections, sample collections and laboratory analyses.

The current certification program consists of field crop inspections of soil conservation plant and seed material in cooperation with the USDA Plant Materials Center in Cape May; and interagency certification of turfgrass blends and mixtures for sod growers. The New Jersey Department of Agriculture's Plant Laboratory conducts all of the laboratory testing for certification, and is also responsible for the seed control testing program and other diagnostic support services.

NEW MEXICO STATE UNIVERSITY SEED CERTIFICATION

The NMSU Seed Certification is an incorporated non-profit organization of seed producers and others interested in the production and distribution of high quality planting seed. It is the designated official seed certifying agency of New Mexico in accordance with the New Mexico Seed Law. The affairs of the association are governed by an elected board of directors composed of fourteen members.

The association is responsible for the promulgation of rules, regulations and standards for all certification of seed and other propagating materials in the state. The New Mexico Seed Law includes the structure of a Seed Certification Committee which is responsible for ratifying the rules, regulations and standards set by the NMSUSC.

Office space and utilities are furnished by New Mexico State University and the office personnel are considered employees of the university. All cultivars developed by the Ag Experiment Station plant breeders are released through the NMSUSC. The NMSUSC acts as the representative of the Ag Experiment Station (AES) and serves as the Foundation Seed Agency for the state. The seed laboratory is administered by the New Mexico Department of Agriculture. The association works closely with the AES, Cooperative Extension Service and N.M. Department of Agriculture.

NEW YORK SEED IMPROVEMENT PROJECT

ORIGIN

In 1991, the Commissioner of the NYS Department of Agriculture and Markets designated the NYS College of Agriculture and Life Sciences as the official seed certifying agency for the state of New York. To carry out these responsibilities, the New York Seed Improvement Project (NYSIP) has been established as an activity within the Extension Project in the Department of Plant Breeding & Biometry at Cornell University. Prior to 1991, seed certification and foundation seed production in New York were the responsibility of the New York Seed Improvement Cooperative, Inc. (NYSIC). NYSIC continues to function as a private organization of certified seed producers and distributors, whose responsibilities include the screening of applicants based upon high ethical standards, and providing advice and assistance to Cornell University plant breeders in the development of superior crop varieties for the benefit of New York agriculture.

MISSION

NYSIP's mission is twofold: To produce and distribute genetically pure foundation seedstocks of improved crop varieties developed by Cornell University plant breeders to northeast seed producers and to oversee the production of certified seed for use by northeast farmers. In addition, NYSIP administers the Northeast Foundation Seed Alliance, which has the responsibility for the production and distribution of Foundation Seed of cereal grains developed at The Pennsylvania State University.

OBJECTIVES

NYSIP's objectives are to assist Cornell Plant Breeders by providing a conduit for delivering the results of their research to commercial agriculture; to ensure that certified seed being offered to farmers meets the rigid genetic and quality standards specified in state and federal seed laws; and to provide a mechanism for the receipt and distribution of funds contributed for plant breeding research at Cornell University.

TARGET AUDIENCE

The target audience is New York certified seed producers and the commercial farmer~ who are their clientele.

FINANCIAL SUPPORT

NYSIP's funding is principally derived from the sale of foundation seed and fees charged for services provided to certified seed producers.

STAFF

Twelve-month staffing includes a project manager, administrative assistant, production manager and a part-time bookkeeper. Seasonal employees are hired to assist with field inspection and foundation seed production activities. Central offices are located in Emerson Hall on the Cornell University Campus. Seed conditioning and storage facilities are maintained at Ithaca, NY, near the campus.

RECENT ACTIVITY

During 1997-98, NYSIP produced and/or arranged for the distribution of foundation seed of 37 varieties in 12 crop kinds, plus one vegetatively propagated grass to seedsmen serving northeast agriculture. During the same period, NYSIP administered a seed certification program in New York including 30 varieties in 8 crop kinds. These activities have assisted New York seedsmen in providing consistent supplies of high-yielding, improved crop varieties to northeast farmers.

NORTH CAROLINA CROP IMPROVEMENT ASSOCIATION

The North Carolina Crop Improvement Association (NCCIA) was founded in 1929 and has been recognized by the General Statutes of North Carolina as "the official agency for seed certification." The Association is responsible for the certification of seed, tubers, plants, plant parts, and organic reproduction including livestock and processing.

Membership is open to any person or firm who is involved in seed growing and conditioning and any other persons who are interested in promoting the work of the Association. The Board of Directors consists of eleven - three from the piedmont, three from the coastal plains and five at large, one of which represents the seed trade (not a seed grower or conditioner). The organization includes an Executive Committee (president, vice president, past president and one appointed from the Board), Advisory Committee (makes recommendations on varieties to be certified), Education and Publicity Committee and Commodity Committees (for the major crops certified).

The NCCIA is a nonprofit corporation incorporated under the laws of North Carolina. It has offices on the campus of North Carolina State University in Raleigh and its Director in Charge (Manager) is a staff member of the University's Crop Science Department - administratively under Research.

The management of the Association is the direct responsibility of its elected board of directors; however, the University staff carries out the daily operations. The Association has a staff of five with some additional part-time inspectors. All records are computerized.

The crop improvement activities related to seed are supported by other organizations. The NCSU College of Agriculture and Life Sciences (Research and Extension), the NC Department of Agriculture (Plant Industry Division and Seed Laboratory), and the NC Seedsmen's Association (wholesale and retail seedsmen).

NORTH CAROLINA FOUNDATION SEED PRODUCERS

The North Carolina Foundation Seed Producers, Inc. is an organization incorporated on June 6, 1945, as a non-stock, non-profit corporation. Its function is to cooperate with the North Carolina Agricultural Experiment Station, the U.S. Department of Agriculture and other public agencies in making available to farmers of North Carolina foundation seed and plant materials of new and improved varieties.

The following crops are now being produced and distributed by the corporation: Peanuts, Oats, Barley, Wheat, Soybeans, Sweet potatoes, Strawberry plants, and Peach trees. The corporation also works in conjunction with the North Carolina State University Micropropagation Unit for the distribution of micropropagated strawberry and sweet potato plants.

Seed or plants are available to any individual provided licensing agreements with certain varieties doesn't interfere. When seed or plant allocations are required, the North Carolina growers are considered first based on their past three years purchases and production of certified seed.

NORTH DAKOTA STATE SEED DEPARTMENT

The State Seed Department was established by the State Legislature in 1931. The original legislation named a State Seed Commissioner, responsible for its operation and maintenance. The Seed Department is now governed by a seven-member board called the State Seed Commission, which in turn selects a manager (State Seed Commissioner) in charge of Seed Department operations. The Chairman of the Seed Commission is the Commissioner of Agriculture. Other members include; North Dakota Crop Improvement Association, North Dakota Agricultural Association, North Dakota Certified Seed Potato Growers Association, North Dakota Potato Council, North Dakota Grain Dealers Association and Red River Valley Potato Growers Association. The Dean of the School of Agriculture at North Dakota State University is a non-voting advisory member.

The State Seed Department is a self-supporting service agency for North Dakota agriculture. The Department functions as the official certifying agency both for seed potatoes and field seed crops. The Department is also the official seed testing laboratory (AOSA) and a service laboratory. Furthermore, it is delegated to enforce and carry out the seed regulatory activities in the state. The official Potato Grade Inspection Service (Federal/State), State Commodity Grade Certificates on specialty crops and issuing Phytosanitary Certificates for export are also part of the operation.

The Department is headquartered in Fargo with potato offices in Grafton and Grand Forks. Over twenty different field crops are certified each year with the largest acreage in wheat, durum, barley, soybean and edible beans. The certification program has steadily grown the past decade to over 300,000 acres and volume of seed certified over six million bushels. The seed certification system works with 800 to 1000 seedsmen each year. The industry varies from the large international seed companies to individual seedsmen.

The staff pertaining to field seed certification includes: the Seed Commissioner in charge of the entire Department, the Director of Field Seed Programs in charge of the operation of field seed certification program, the seed lab staff and office staff shared by all divisions of the Department and part-time field inspectors.

The North Dakota farmers purchasing certified seed look to the Certified Seed label for both genetic purity and mechanical purity as well as minimum germination standards and disease requirements in certain crops.

NORTH DAKOTA SEEDSTOCK PROGRAM

The North Dakota Seedstocks program was established as a project of the Agronomy Department at North Dakota State University in 1962. Major objectives of the project are: 1) to rapidly increase Breeder and Foundation grade seed of new and established varieties from North Dakota and other states; 2) maintain pure seed of verified varieties; 3) provide seed at reasonable prices, and 4) maintain seed supply of a variety as long as it is in demand. A revolving fund constitutes the major source of operating support with revenues from a levy on newly released varieties and the sale of foundation seed.

The Seedstock project Director has routine and daily responsibility for the program. The Plant Sciences Department Chairman is immediately responsible to the Director of the Agricultural Experiment Station for policy and administrative matters. A variety release committee represented by the Agricultural Experiment Station, several departments, commodity groups and the North Dakota Crop Improvement Association determine the merit of a potential variety. Allocations and distribution of new varieties are conducted by the Seedstock project.

The project office and laboratory facilities are located within the Plant Science Department on the North Dakota State University campus. Seed production is primarily on the Agronomy Seed Farm at Casselton and Branch Experiment Stations at Carrington, Hettinger, Minot, Langdon and Williston. Contract growers are utilized for additional production.

Average Foundation seed production in North Dakota is 125,000 bushels of HRSW, durum, barley, oats, HRWW, rye, triticale, flax, soybeans and safflower. Dry bean seed is routinely produced in three Western states under contract with Foundation seed organizations or private companies. Winter increase sites are located in AZ, TX, CA, Chile, and Puerto Rico. Sunflower germplasm lines are increased in cooperation with the USDA Sunflower Breeding and Development Program and distributed by Seedstock.

OHIO SEED IMPROVEMENT ASSOCIATION

The Ohio Seed Improvement Association (OSIA) evolved from the Ohio Corn Improvement Association which was organized in 1908. OSIA is designated by the Ohio Legislature as the Official Seed Certifying Agency for the State of Ohio and is ultimately responsible to the Director of the Ohio Department of Agriculture. The purpose of this non-profit association is to maintain and make available to the farmers of Ohio and other states, and the public in general, high quality seed of genetically pure varieties.

OSIA is governed by twelve Board of Directors consisting of eight producer members, three Ohio State University representatives, and one representative from the Ohio Department of Agriculture.

The staff consists of seven full-time employees and over forty part-time field inspectors. The association office is located at Dublin, Ohio, close to the State Capital, Columbus. The association is an educational and non-profit organization which is supported by fees and levies paid by the membership. A modern seed laboratory provides seed testing services for both members and farmers. Seed crops certified in Ohio include soybeans, wheat, barley, oats, spelt, native species and forestry reproductive materials.

Active membership at OSIA is somewhat restrictive and limited. In order to produce certified seed, only qualified applicants who meet specific criteria and who are willing to make a significant financial research fee commitment for active membership privileges are accepted for membership. Research fees are levied annually for bushels of certified seed sold and certified acres passing field inspection. A portion of these OSIA research funds are annually donated as a gift to the Ohio State University plant breeding projects at OSU/OARDC. This funding program generates new certified and branded varieties. Emphasis is also placed upon educational programs to promote certified seed.

The Ohio seed certification program is based on genetic purity standards. OSIA also provides quality control inspection services for non-certified seed crops and identity preserved grain produced by members.

OHIO FOUNDATION SEEDS

Ohio Foundation Seeds, Inc. (OFSI) was organized in 1937 under the name of Ohio Hybrid Seed Com Producers Association. Its primary purpose was to increase inbred lines and single crosses of com for producers of hybrid seed corn, to conduct corn test plots and to provide information for its members.

With the establishment of the limited generation system of certified seed, OFSI agreed to grow and sell foundation seed for members of the Ohio Seed Improvement Association. Thus, in 1960 the name was changed to Ohio Foundation Seeds, Inc. Currently, OFSI grows and sells foundation seed of wheat, oats, barley, and soybeans. The seed corn business was eliminated in 1990.

OFSI is a non-profit corporation with no connection to Ohio State University, but they work very closely with Ohio State University plant breeders. The membership consists of companies or individuals that grow certified seed and/or hybrid seed com. There are seven trustees elected from the membership to act as the governing board. The day to day activities are overseen by a manager. OFSI employs five full-time people and farms about 640 acres with 250 acres being ground they own. Another 600 acres is with area farmers.

OKLAHOMA PEDIGREED SEED SERVICES

The Oklahoma Pedigreed Seed Services (OPSS) is composed of Oklahoma Foundation Seed Stocks, Inc. (OFSS, <http://www.ofssinc.com>) and Oklahoma Crop Improvement Assoc. (OCIA, <http://www.okcrop.com>). The Director of OPSS is a faculty member of the Department of Plant and Soil Sciences, Division of Agricultural Sciences and Natural Resources, Oklahoma State University (OSU), Stillwater, OK.

The primary role of OFSS is to conduct an effective seed increase program; to make foundation seed and seed stocks of commercial crop varieties available to qualified seed producers and distributors in Oklahoma. The leadership of OFSS includes a manager (Coordinator of Production and Operations), assistant manager (Field Foreman I), and an office manager (Sr. Secretary). All are

OSU staff members. However, all funds (salary, benefits, operations) of OFSS are generated by OFSS.

OKLAHOMA CROP IMPROVEMENT ASSOCIATION

The OCIA is the official seed certifying agency for Oklahoma. The association works under Memorandums of Understanding and Agreement with the Division of Agricultural Sciences and Natural Resources at Oklahoma State University. It is governed by a board of directors consisting of nine Oklahoma seedsmen and two ex-officio members (the Head, Department of Plant and Soil Sciences, OSU, and the Director, Plant Industry and Consumer Services, Oklahoma State Department of Agriculture). The leadership of OCIA includes an Executive Director (Secretary/Treasurer), a laboratory manager (Coordinator of Laboratory Resources), and an office manager (Staff Assistant). All are OSU staff members. All operational funds (except the manager's salary) are generated by OCIA. The Director of OPSS currently conducts the managerial duties of OCIA.

Major crops certified in Oklahoma are wheat, peanuts, rye, soybeans, and grasses. Other crops certified include sorghum, okra, alfalfa, barley, oats, triticale, cotton, millet, mungbeans, and cowpeas. Seed certification in Oklahoma is based on both genetic and mechanical standards. Minimum standards are established for genetic purity, germination, mechanical purity, noxious weed seed, and certain diseases. The OCIA also issues certificates for approved seed conditioners and various identity preserved/quality assurance programs.

OREGON SEED CERTIFICATION SERVICE

Oregon entered the crop improvement program in 1916 to provide for the growing demand for seed potatoes true to varietal name and free of diseases. At that time, George Hyslop, then head of the Farms Crops Department, felt strongly that "certification" was something Oregon State Agricultural College could help with. The College became actively engaged in the small grain certification program in 1918, a year after the U.S. Grain Grades came into effect.

In 1937, Oregon State College received the legal obligation to do the seed certification for the state. By law the Dean of the College of Agricultural Sciences is given the responsibility. He in turn places this responsibility with the Extension Service as a Seed Certification Project. As such, the Seed Certification office is located on the Oregon State University campus and the members are a part of the Department of Crop and Soil Science Extension staff.

The county Extension offices are the contact points within the state, and accept applications, acreage fees, and answer growers' questions. We certify grasses, legumes, cereals, mint, potatoes, and tree seeds. In 2005, we certified 252,849 acres of crops. The Oregon Seed Certification Service is based on both varietal and mechanical quality. Ninety-two percent of this acreage represents the grasses with about 2% legumes and 5% cereals.

Oregon joined in the OECD Program in 1962. These crops included not only the usual grasses and legumes, but kale and sugar beets.

OREGON FOUNDATION SEED AND PLANT MATERIALS PROJECT

The Oregon Foundation Seed and Plant Materials Project is organized under the Department of Crop and Soil Science at Oregon State University. Started in 1968 as an outgrowth of the Oregon Seed Certification Service, the Project continued to develop until a separate office and warehouse

facility, program leader, and budget were required to meet the needs of the Oregon seed industry.

The Project produces foundation seed or early generation plant material of cereals, grasses, legumes, meadowfoam, native species, potatoes, and mint through contracts with specialized seed growers. The Project also exchanges seed with similar organizations in other states. In 1993, OSU established an MOU with the Foundation seed programs of Idaho and Washington to produce, inventory, and market foundation seed of Oregon cereal cultivars.

PENNSYLVANIA - DEPARTMENT OF AGRICULTURE

The State Legislature passed the Pennsylvania Certification Act in 1929. It designated the Pennsylvania Department of Agriculture to enforce the act. The seed certification program is the responsibility of the Seed Division in the Bureau of Plant Industry located in Harrisburg.

Pennsylvania began certifying seed potatoes in the 1920's and small grains in the 1940's. They were one of the early members of the then International Crop Improvement Association. At the present, small grains, such as spring oats, winter barley, and winter wheat comprise the largest acreage inspected in the program. The remaining crops are potatoes, crownvetch, winter rye, and turfgrass sod. The total acreage has been between 3000-4000 acres since 2002.

The certification program is funded by the General Fund. Nominal fees are charged for services and any resident of the Commonwealth can apply. Most of the acreage is inspected by Agronomic Products Inspectors located in seven regional offices throughout the state.

The Pennsylvania Foundation Seed Cooperative, organized in 1956 is no longer in existence. Foundation seed is maintained through the Northeast Seed Alliance located at Cornell University in New York.

CLEMSON UNIVERSITY - SOUTH CAROLINA DEPARTMENT OF FERTILIZER & SEED CERTIFICATION SERVICES

The Clemson University Department of Fertilizer and Seed Certification Services is a part of the University's Regulatory and Public Service Programs and has been the official agency for certifying seeds and plants in South Carolina since the programs began in 1947. Authority to carry out the program was delegated by Clemson University to the South Carolina Crop Improvement Association until 1972, at which time the University assumed full authority and responsibility for the program. The department head administers the program with assistance from a seed certification supervisor. Professional staff includes a seed certification specialist, two administrative assistants and five field inspectors. The field staff also serves as inspectors for the fertilizer inspection program administered by the department.

Major acreage crops certified in South Carolina are soybeans and small grains. Acreage of these crops certified during the 10-year period from 1989-98 averaged approximately 14,800 acres of soybeans and 10,400 acres of small grains. Other crops certified during this period include forage and turf grasses, peanuts, sweet potatoes, forest tree seed and peach nursery stock. The largest acreage of crops certified in South Carolina during the past ten years was 42,026 acres in 1990. The smallest acreage was 16,206 acres in 1998.

SOUTH DAKOTA CROP IMPROVEMENT & SEED CERTIFICATION SERVICE

The South Dakota Crop Improvement Association, Inc. (SDCIA) was founded in 1925 and has been designated in SDCL 38-12 as the official certification agency for seed and propagating materials of all crops (except potatoes) in the state. The certification of potatoes in South Dakota has been officially delegated to the South Dakota Potato Growers Association. The SDCIA is a non-profit, educational and public service organization with a close working relation among seed growers, agricultural research, extension and regulatory agencies.

Headquarters for the Association is on the South Dakota State University campus in Brookings. The secretary-manager is on the university staff with research appointment from the SD Agricultural Experiment Station through the Plant Science Department in the College of Agricultural and Biological Sciences.

Management of the SDCIA is the direct responsibility of its elected board of directors, however, daily operations are carried out by three university staff directed by the manager. Part-time field inspectors are hired during, inspection season. Extension agents are the local contact in the county for certification and CIA activities. Seed certified in South Dakota is based on both genetic and mechanical standards. The CIA Certification Committee forwards recommendations to the State Seed Certification Board who in turn sets the standards for the state. The program is funded by fees paid by the participants.

Membership is open to any person, firm, or corporation who has an interest in promoting the work of the SDCIA. Two directors are elected for a three year term from each of three crop reporting regions and four are elected to serve at large, non voting directors are the executive director of the crop improvement and the Dean of the College of Agricultural and Biological Sciences creating a 12 member board of directors. The board elects officers each year and has a number of standing committees in place.

SOUTH DAKOTA FOUNDATION SEED

The South Dakota Foundation Seed Stocks Division, Inc. (SD FSSD) was organized in 1944 and incorporated in 1945 as a non-profit corporation. The purpose of SD FSSD is to increase and distribute agronomically superior varieties of seed and propagating materials released by the South Dakota Agricultural Experiment Station, ARS/USDA and other agricultural experiment stations for the benefit of South Dakota agriculture and the citizens of this state. In addition, storage is provided for a reserve of pure seed stock materials. The entire operation is financed through the sale of seed. An eleven person board directs the organization. Six directors hold positions on the board by virtue of their administrative position at the university. Five members are nominated by the SDCIA and a manager is hired who also serves as secretary-treasurer and is a staff member of the Plant Science Department. The SD FSSD operates under a Memorandum of Understanding with the SD Agricultural Experiment Station, SD Crop Improvement Association and the SD Seed Trade Association.

Breeder seed developed and supplied to the FSSD is increased by FSSD, inspected by the SDCIA and distributed as Foundation seed to SDCIA members and Seed Trade members on an established priority basis. Annual production of approximately 1,000 acres of small grains, flax, millet, soybeans, grasses and alfalfa are increased by FSSD with up to an additional 100-200 acres under contract with private seed producers. Financial support in the form of grants are made to the university for varietal research and development. A close working relationship is maintained

between FSSD and public research programs.

The office, conditioning plant and warehouses are located on the SDSU campus in Brookings and are operated by two full-time employees and a part time bookkeeper in addition to the manager. All the production of Foundation Seed is conditioned at the FSSD Seed Plant in Brookings.

SOUTHERN SEED CERTIFICATION ASSOCIATION

The Southern Seed Certification Association, Inc. (SSCA) is a nonprofit (501(c)(3)) organization organized in July, 1995 at Greenwood, Florida and incorporated in September, 1995 in the State of Alabama . It is designated as the official seed certifying agency for Alabama and Florida pursuant to applicable state laws. By-laws were approved at the first annual meeting in March 1996. The by-laws placed the operation of the SSCA under the supervision of an elected Board of Directors.

Various agricultural leaders within Alabama and Florida serve in conjunction with the Board of Directors in formulating general and specific policies for the certification program. The SSCA Board develops and adopts regulations and standards based on recommendations from plant breeders, commodity advisory groups and AOSCA guidelines.

SSCA works closely with seed growers, seed conditioners, breeders, seed trade associations, agricultural commodity and professional groups, agricultural research and extension organizations and state and federal seed regulatory agencies.

TENNESSEE CROP IMPROVEMENT ASSOCIATION

Organization:

The Tennessee Crop Improvement Association is an incorporated, non-profit organization of seed growers. State Legislation designates the Association as the official seed certifying agency in Tennessee. Our requirements for certification of seeds conform to the Federal Seed Certification Regulations and the Association of Official Seed Certifying Agencies. The association works in cooperation with seed growers, seedsmen, the State Department of Agriculture, University of Tennessee Institute of Agriculture, Agricultural Extension Service and Agricultural Experiment Station.

Management:

The management of the Association is vested in a board of directors of six members who become active members at time of election. The Vice-President of Agriculture, University of Tennessee; Dean of Agricultural Extension Service, Dean of Agricultural Experiment Station and the Commissioner of Agriculture are also ex-officio members of the Board of Directors.

Officers:

The board of directors is organized by the election of a President and Vice-President and appoints a Secretary-Treasurer, also a Manager to perform such functions as assigned by the Board.

Maintenance:

The operating costs of the Association are financed by charging fees for its services including field inspections and tag fees. The association is self supporting and not subsidized by tax revenues.

TEXAS CERTIFICATION AGENCY & FOUNDATION SEED SERVICE

The Texas Department of Agriculture is the official seed certifying agency for the state. The responsibility is assigned to the Seed Quality Program with Texas Department of Agriculture. The programmatic responsibilities also include enforcement of Texas Seed Law and Seed Arbitration Law. The program is exclusively financed by legislative appropriation.

The State Seed and Plant Board is composed of six members, appointed by the Governor, with the advice and consent of the Senate. This board has purview over approving varieties to be certified, commodity standards and licenses. The board also has appellate functions based on TDA decisions.

The Texas Foundation Seed Service is a special unit of the Texas Agricultural Experiment Station (TAES), Texas A&M University System. It is a self-supporting organization whose purpose is to increase and distribute seed or plants of improved varieties or lines developed by TAES and other public plant improvement programs. TFSS handles more than 100 varieties or strains of 25 Texas-adapted crops. These include grains, oilseed, forages and horticultural crops. Production is primarily through supervised contracts with growers in selected areas. Seed conditioning is done at the Units facilities in Vernon, Texas or by supplemental services provided through contractual arrangements.

UTAH CROP IMPROVEMENT ASSOCIATION

Seed Certification has been a viable program in Utah since the 1920's. The Utah State Department of Agriculture and Food (UDAF) has basic responsibility for seed certification in Utah and administered it directly until 1937, when the Utah Crop Improvement Association (UCIA) was organized and designated as the official state certification agency. The UDAF provided oversight for the UCIA until 1947, when the Utah Agricultural Experiment Station (UAES) at Utah State University was given that responsibility. The UAES retained the UCIA as the official certifying agency for Utah, and provided a "Seed Certification Specialist" through the Department of Plants, Soils, and Biometeorology to act as Secretary Manager of the Association. Presently the UCIA governing board consists of seven directors elected by the membership (primarily seed growers and conditioners) and five ex-officio Directors representing the UAES, UDAF, USU Extension, and the Utah seed industry.

Over the years, alfalfa can be considered the major seed crop in Utah, with over 16,000 acres in 1955 applied for certification. Since that time, acreage has decreased and the balance has shifted to small grains (wheat, barley, oats and triticale). More recently, grass varieties (primarily native and introduced wheatgrasses, and other drought tolerant species developed by the USDA-ARS, USDA-FS, USDANRCS, and state agencies in Utah) have become a significant portion of certified acreage. Other crops the UCIA has certified include varieties of asparagus, beans, clover, com, mint, onions, potatoes, safflower, and various shrubs and forbs. Utah is the center of the Intermountain West reclamation seed industry, and in addition to released varieties, the UCIA is currently certifying significant amounts of wild collected and field grown source identified, selected, and tested class seed utilizing AOSCA Pre-Variety Germplasm protocols.

The UCIA also has responsibility for production and distribution of stock seed. Most of the seed is produced in cooperation with growers and conditioners, though new releases are initially produced by the sponsoring agency. Stock seed is also distributed from foundation seed organizations in other states and agencies such as the NRCS Plant Material Centers.

Though never involving huge cultivated acreages (in keeping with the relatively small amount of arable land in the state), seed certification in Utah has played an extremely important role in providing high quality seed of the newest and most productive varieties and germplasms available for Utah agriculture and reclamation.

VIRGINIA CERTIFICATION & FOUNDATION SEED PROGRAMS

The Virginia Crop Improvement Association is an incorporated, nonprofit organization of seed growers and conditioners. The Association has been designated as the official seed certifying agency in Virginia by the State Certified Seed Board, which is composed of representatives of the State Department of Agriculture, Land Grant University, The Seedsmen's Association, and the Crop Improvement Association.

The VCIA Foundation Seed Division is a part of the Virginia Crop Improvement Association, and both are governed by a ten-member board of directors. The directors are elected by the association membership for three-year rotating terms, with the tenth director appointed by the Head of Virginia Tech Crop and Soil Environmental Sciences Department.

Financial support of the VCIA and the Foundation Seed Farm is received from membership dues, certification fees, Foundation seed sales, and support from the College of Agriculture.

The VCIA membership consists of 134 producers and conditioners. We have 24 approved seed conditioning plants. This past year, the VCIA certified 11 different crops, with small grains, soybeans, and peanuts making up the bulk of the acreage. The acres certified in the state have ranged from 30,000 to 40,000 over the past ten years, with tags issued ranging from 500,000 to 750,000 per year.

The Association owns a 470-acre farm and seed plant where private and public seed stocks of small grains and soybeans are grown and processed. Foundation peanuts are grown and processed under contract by farmers and seedsmen in the peanut belt.

One of the primary goals of the Virginia Seed Programs is to provide educational resources for the production, conditioning, and marketing of quality seed. One of the ways this is being accomplished is through our website www.virginiacrop.org that lists information of university variety test data, seed sources, and seed testing, along with links to USDA, AOSCA, and other seed organizations.

The VCIA supports the University and USDA breeders through a check off on foundation seed sales and has organized the VCI Research Foundation to support breeding work. Currently, fifty cents per unit on soybeans and small grains, and one-cent per pound on peanuts, is returned to the respective breeding programs. For the past ten years, two cents from each certified tag issued has been designated toward the VCI Research Foundation. Other services the Association provides include Identity Preserved inspections, Quality Assurance inspections, and supervising the mixing and labeling of all seed used by the Virginia Department of Transportation.

WASHINGTON STATE CROP IMPROVEMENT ASSOCIATION & FOUNDATION SEED SERVICE

The Washington State Crop Improvement Association is a non-profit organization working with Washington State University, Washington State Department of Agriculture, and Washington seed growers and conditioners to develop, produce and distribute certified seed.

Working through education, instruction, and promotion, Washington State Crop Improvement Association is the official Washington state agency for foundation seed and for seed certification. The Association is designated as the official seed certifying agency by the Washington State Department of Agriculture for buckwheat, chickpeas, field peas, lentils, millet, small grains, sorghum, and forest reproductive material. Seed certification of all other crops is conducted by the Washington State Department of Agriculture.

The Washington State Crop Improvement Association's Foundation Seed Service Division operates under a Memorandum of Agreement with Washington State University and acts as the University's agent. The Foundation Seed Service produces and distributes breeder and foundation seed of public varieties of cereal grains (wheat, barley, oats), grasses, legumes (peas, lentils, chickpeas, alfalfa, red clover, and dry beans), and miscellaneous crops. Seed is purchased from, produced for, and distributed to other seed stock programs for the benefit of growers in Washington and other states. The Foundation Seed Service also provides early generation seed production services to private industry. Approximately 950,000 pounds of 70 varieties are distributed each year.

WSCIA has been in existence since 1953. It is governed by a board of directors and executive committee. Directors are elected by twelve county crop improvement associations. The officers of WSCIA (Executive Committee): President, Vice-President, and Secretary/Treasurer are selected by the Board of Directors. The officers, as well as the directors, act without compensation. Directors employ a manager and a full-time staff of eight to oversee the day-to-day affairs.

The Association has an active membership of 1,000 members. Anyone (person or organization), interested in quality seed in general can become a member of the Association. Funding of WSCIA is provided by seed certification fees and foundation seed sales. The Association does not receive any state appropriations.

WASHINGTON STATE DEPARTMENT OF AGRICULTURE

The Seed Program operates the certification program for agricultural seeds and is the only official seed testing lab in Washington State. The principal areas of responsibility include seed certification, seed testing, phytosanitary certification, seed regulatory inspection and the issuing of state and federal phytosanitary certificates, all of which are funded entirely by industry-paid fees. In addition to the certification program, the Seed Program conducts phytosanitary inspections each year on vegetable seeds, field peas, and wheat to meet overseas market requirements.

By Memorandum of Agreement, seed certification duties are divided between the Seed Program and Washington State Crop Improvement Association.

The Seed Program is responsible for field inspection, seed testing, record keeping and documentation of crops such as grass, alfalfa, clover, beans, corn and other miscellaneous species while the Washington State Crop Improvement Association handles the certification responsibilities

for small grains, peas, lentils, sorghum and forest tree seeds as well as the Foundation Seed Service for Washington State.

The Washington State Seed Laboratory offers purity, germination and special tests for a wide variety of agricultural, vegetable and flower seeds. The tests are used by growers and seed companies to comply with certification and labeling requirements for seed. The Seed Program is also responsible for ensuring compliance with Washington State and U.S. seed law. This includes education, random check sampling, labeling checks and complaint investigations.

The certification service in Washington State is provided to insure varietal purity and seed quality through review and retention of crop protection records and a series of field and laboratory evaluations.

WISCONSIN CROP IMPROVEMENT ASSOCIATION

The Wisconsin Crop Improvement Association (WCIA) was organized at the University of Wisconsin-Madison under the name Wisconsin Experiment Association in 1901. Among its initial objectives were the production/dissemination of new agronomic plant varieties and the conducting of cooperative experiments. Its initial membership consisted of UW staff and UW Agriculture short course students. WCIA current membership includes companies/individuals involved in the seed, forage/mulch and grain industries.

WCIA is designated, by Wisconsin state seed law, as the official Seed and Forage/Mulch Certifying Agency in Wisconsin. As such, it provides third-party certification services throughout Wisconsin in cooperation with the University of Wisconsin-Madison College of Agricultural and Life Sciences and the Wisconsin Department of Agriculture, Trade and Consumer Protection.

The Association's office/laboratory facilities are located in the University of Wisconsin-Madison Agronomy Department. The WCIA seed analysis laboratory provides germination, purity and tetrazolium testing for seed of all domestic and native plant species. In addition, the lab performs seed vigor, genetic (ELISA) and herbicide trait testing. A Registered Seed Technologist manages the WCIA seed laboratory.

Along with certification services, WCIA provides other field inspection and seed laboratory third party verification services. In addition, WCIA is involved in the licensing of plant varieties/genetics developed by University of Wisconsin-Madison plant breeders.

UNIVERSITY OF WYOMING SEED CERTIFICATION SERVICE & FOUNDATION SEED

Seed certification and Foundation seed production of public varieties in Wyoming are conducted under the direction of the University Of Wyoming College Of Agriculture, Department of Plant Science, and the Cooperative Extension Service. The Wyoming Crop Improvement Association acts as an advisory board to the seed Certification Service and Foundation seed program.

The University of Wyoming Seed Certification Service is responsible for certification in Wyoming. The operating budget for the program is generated by fees, with the Coordinator's position funded by the Wyoming Cooperative Extension Service. The Wyoming Seed Certification Service

determines certification fees and the standards for the crops inspected, receives applications, collects fees, conducts field inspections, and issues seed tags or bulk sale certificates for seed lots meeting standards. The Wyoming Seed Certification Service also performs Quality Assurance inspections, as well as field phytosanitary inspections on behalf of the Wyoming Department of Agriculture. The primary crops inspected by the program are alfalfa, dry beans, small grains, and reclamation grasses.

The University of Wyoming Foundation Seed Program produces seed of public varieties. Varieties produced by the program are selected with the needs of Wyoming seed producers as a priority, but production is available to purchasers outside the state. Dry beans and small grains are the focus of the program.

The Wyoming Crop Improvement Association (WCIA) is an organization of certified seed producers and individuals with an interest in the production and marketing, through certification, of high quality seed of new and improved varieties of known identity. Each certified seed producer is assessed WCIA dues and is a voting member in the association.

The WCIA assists the University of Wyoming Seed Certification Service in formulating seed certification policies and standards. The association is responsible for disseminating information that might assist producers of certified seed and the promotion of Wyoming certified seed. The WCIA is governed by a board of directors. Directors are elected from bona fide seed producers in the seed producing districts of the state. Ex-officio Directors are designated by the University of Wyoming and the Wyoming Grain, Feed and Seed Dealers Association. The WCIA Board of Directors is the mechanism by which appeals to certification decisions are made.