

Agricultural Marketing Service U.S. DEPARTMENT OF AGRICULTURE



# About This Report

Each year, pursuant to the U.S. Grain Standards Act (USGSA), section 17B (7 U.S.C. § 87f-2), the USDA, Agricultural Marketing Service (AMS), Federal Grain Inspection Service (FGIS) respectfully submits an annual report to the U.S. Congress. Activities described in this report cover Fiscal Year (FY) 2023 (October 1, 2022, through September 30, 2023).

Any mention of firm names or trade products does not imply that they are endorsed or recommended directly or indirectly by the U.S. Department of Agriculture (USDA).

FY 2023 inspection and weighing program data and financial information is available at: www.ams.usda.gov/reports/fgis-annual-reports

The 508 Compliant version of this report is available on our website at: www.ams.usda.gov/reports/fgis-annual-reports

# Table of Contents

Section I Overview	
The Federal Grain Inspection Service	4
Program Mission	4
Key Activities	5
Employees and Locations	6
Grain Inspection Advisory Committee	8
FGIS Master Scale Depot	10
Congressional Report on the Review of Geographic Boundaries	11
Section II Quality Assurance and Compliance	
Rulemaking to Amend Exceptions to Official Agency Geographic Boundaries	12
Enforcement Activities	13
Section III Standards Development and Industry Guidance	
Soybeans of Other Colors (SBOC)	15
Section IV Quality Assessments and Evaluation of Technology	
Board of Appeals and Review (BAR)	17
Online Wheat Variety Classification Guide	18
Inspection Technology Evaluation	19
Research and Development of Technology to Support Grain Inspection	20
Standardizing Commercial Grain Inspection Equipment	21
Mycotoxin Test Kit Evaluation	22
National Falling Number Quality Assurance Program	23
Export Surveys – Pesticides and Heavy Metals	23
Expanded Analytical Testing Services	24
Identification of Gene Editing Techniques as Clustered Regularly Interspaced Short Palindromic Repeats	
(CRISPR)	24

#### Section V International Engagement

FY 23 Country Briefings	25
Asia Outreach	25
Providing Support to Honduran Port	
Complaints From U.S. Grain Importers	

# **SECTION I OVERVIEW**

#### The Federal Grain Inspection Service

FGIS facilitates the marketing of grains, oilseeds, and related product by establishing quality standards; providing impartial inspection and weighing services through a network of Federal, State, and private entities; and monitoring/enforcing compliance with the USGSA, as amended. FGIS administers uniform national grain inspection and weighing programs established by the USGSA. Services under the USGSA are performed on a fee basis for both export and domestic grain shipments. The USGSA requires that export grain be inspected and weighed, prohibits deceptive practices with respect to the inspection and weighing of grain, and provides penalties for violations. The USGSA also requires that all corn exported from the United States be tested for aflatoxin, prior to shipment, unless the contract stipulates that the testing is not required.

#### **Program Mission**

FGIS's primary mission is twofold: (1) promote the marketing of high-quality grain to domestic and international buyers and (2) maintain objective standards to certify as accurately as practicable. These standards define uniform and descriptive terms to facilitate the grain trade, help determine grain storability, offer users the best possible information to determine endproduct yield and quality, provide market incentive frameworks, reflect the economic value-based characteristics to end-users, and accommodate scientific advances in testing.



### **Key Activities**

In administering and enforcing the United States Grain Standards Act (USGSA), FGIS:

- Establishes and maintains official U.S. grain standards for barley, canola, corn, flaxseed, oats, rye, sorghum, soybeans, sunflower seed, triticale, wheat, and mixed grain.
- Promotes the uniform application of official U.S. grain standards by official inspection personnel.
- Establishes methods and procedures and approves equipment for the official inspection and weighing of grain.
- Provides official inspection and weighing services at certain U.S. export port locations.
- Delegates qualified State agencies to inspect and weigh grain at certain U.S. export port locations.
- Designates and licenses qualified State and private agencies to inspect and weigh grain, as well as perform other official services, at interior locations.
- Provides Federal oversight of the official inspection and weighing of grain by delegated States and designated agencies.

- Monitors the quality and weight of U.S. grain as received at destination ports and investigates complaints or discrepancies reported by international buyers.
- Investigates, in cooperation with the USDA's Office of the Inspector General, alleged violations of the USGSA and initiates appropriate corrective action.
- Helps U.S. trading partners develop and improve their grain inspection and weighing programs through education and outreach to international buyers.



## **Employees and Locations**

FGIS is composed of 379 permanent employees, 15 intermittent employees, and 54 temporary employees. FGIS is headquartered in Washington, D.C., with the bulk of employees located at the National Grain Center (NGC) in Kansas City, Missouri. There are six field offices: Domestic Inspection Operations Office (DIOO), Kansas City, Missouri; League City, Texas; New Orleans, Louisiana; Portland, Oregon; Stuttgart, Arkansas; and Toledo, Ohio.



## **379 Permanent Employees**

## **15 Intermittent Employees**

## 54 Temporary Employees





#### **Grain Inspection Advisory Committee**

The Grain Inspection Advisory Committee (Committee) is authorized, under the USGSA, to provide recommendations on official inspection and weighing services to the Secretary of Agriculture. The Committee consists of 15 members that serve a 3-year term and represents a wide range of segments throughout the grain industry. They include grain producers, processors, merchandisers, handlers, exporters, consumers, grain inspection agencies, and scientists. The Committee convenes twice a year, and the meetings are open to the public.

In FY 23, the Committee held two meetings to make recommendations that could help improve the inspection and weighing of U.S. grain exports. On December 14-15, 2022, a hybrid meeting was held at the National Grain Center (NGC) in Kansas City, Missouri. The Committee discussed two primary issues: (1) the potential reasons that customers receive different grain grades at destination than what was rendered at the originating shipping point and (2) the need to begin evaluating new technology/innovations that could improve the inspection and weighing of grain.

One potential reason why customers see different grain grades at destination than what was rendered at the originating shipping point is that the originating grades or test results were provided/conducted using unofficially approved service providers or testing methods, as origin grades or test results are not required under the USGSA. As a result, the Committee recommended that FGIS gather inspection data to evaluate the results (between origin and destination) and educate domestic handlers on their rights to request reinspections and appeals under FGIS regulations.

The other main topic discussed at the December meeting was how FGIS should begin evaluating new technology to improve the inspection and weighing of grain. FGIS shared with the Committee that the Program must begin to identify and evaluate technology that can grade soybeans, wheat, and corn, which comprise 97 percent of U.S. grains inspected for export. Reasons offered for such need revolved around greater efficiency, accuracy, consistency, flexibility, capacity, and opportunity for sustainability. The Committee agreed that FGIS should pursue this course and recommended that FGIS continue to collaborate with official agencies and industry stakeholders and engage other industries to learn how technology is being deployed in their respective fields.





On August 30-31, 2023, another hybrid meeting was held at the NGC in Kansas City, Missouri. During this meeting the Committee discussed the following issues: (1) standardizing how FGIS collects and shares data, (2) addressing potential differences between FGIS and the National Institute for Science and Technology (NIST) standards regarding lab scales, (3) updating the FGIS vessel fumigation policy; and (4) adjusting FGIS user fees. To summarize the actions regarding each topic, the Committee recommended that FGIS: (1) continue gathering and evaluating information that will better inform data standardization efforts; (2) do the same for better aligning FGIS and NIST standards regarding the use of lab scales; (3) update the FGIS vessel fumigation policy to reflect research and input from the Agricultural Research Service; and (4) educate grain industry stakeholders regarding the need to adjust grain inspection and weighing fees. All activity regarding the Committee, including agenda, meeting minutes, recommendations, membership, and more can be found on the Committee's Website.

To recruit new members and expand the diversity of the Committee, FGIS conducted nominee recruitment at 3 small farm field days and 4 industry conferences, as well as organized outreach to 50 organizations that serve underrepresented communities. Also, for the first time, FGIS marketed and hosted a national webinar to educate potential candidates about the Committee including background information membership requirements, and the nomination process. 35 individuals, many of whom were unfamiliar with the committee. As a direct result of this outreach, FGIS received 55 percent more applications compared to FY22 from a more diverse group of individuals than observed in the past. The appointments began on April 1, 2024.

### **FGIS Master Scale Depot**

The FGIS Master Scale Depot in Chicago, IL, calibrates bulk scales used for shipping along the United States Class I railroad system. The FGIS Master Scale Depot is the hub of a program established and built by the National Bureau of Standards, now the National Institute of Standards and Testing (NIST), in 1928. The program was entrusted to FGIS in 1980 and is still operating to maintain the integrity of U.S. railroad weights, via the Master Scale Depot building, FGIS scale equipment, as well as personnel who operate the program.

The Master Scale Depot is a precision weighing laboratory and repair/maintenance facility for the five test cars owned by FGIS. NIST encouraged FGIS to repair and renovate the Master Scale Depot, given the age of the building and the importance of the metrological accuracy work performed. FGIS completed the multi-year renovation project in FY-23 including improved lighting, asbestos and lead paint abatement, modern plumbing and air conditioning, functional office space, and modern equipment for moving railcars. Also, as part of the renovation, FGIS replaced a 60-year-old truck used for moving test cars around Master Scale Depot with a battery-operated railcar mover.

In addition to the FGIS Master Scale Depot, there are five active railroad-owned master scales located throughout the United States which provide weighing services for the U.S. rail transportation industry. The accuracy of these scales is essential to determine weight certificates and ultimately freight costs. Because of this, each railroad-owned master scale is annually calibrated by FGIS.



## **Congressional Report on the Review of Geographic Boundaries**

On February 10, 2023, FGIS published the Congressional Report on the Review of Geographic Boundaries, within which designated State and private entities provide FGIS official grain inspection and weighing services. FGIS also released a new Grain Inspection Data Visualization tool, which displays geographic boundaries, approved exceptions (from the USGSA geographic boundary provisions), as well as information about delegated states, designated Official Agencies (OA), and FGIS offices that provide official services.

The review of geographic boundaries was required by the USGSA, which was reauthorized on December 11, 2020 (P.L. 116-216). As a part of this review, Congress requested the FGIS consider the following factors:



In carrying out this review of geographic boundaries, FGIS recognized that improvements can be made by: (1) assessing and revising current data collection forms and processes so that more relevant information sharing can be facilitated; (2) leveraging data visualization tools to support independent analysis regarding performance of the official system; (3) displaying geographical boundaries on website along with official designated area descriptions to aid analysis and understanding of the local and national service areas; (4) updating geographic area historical descriptions to account for landmarks that no longer exist and to provide for updated use of technology to clarify boundary lines; (5) posting geographical boundaries to detail available points of exception to those boundaries; and (6) listing OA fee schedules on the website.

# Section II Quality Assurance and Compliance

FGIS, through its Quality Assurance and Compliance Division (QACD), administers numerous monitoring and enforcement programs to promote the integrity and effectiveness of the official inspection and weighing system. QACD ensures that requirements defined within the USGSA are met by FGIS personnel and OAs. QACD regularly engages with field office personnel and OA staff to provide support, field questions and deliver guidance that upholds the quality and efficiency of the official system. This includes investigating areas of concern and implementing new regulations.

#### **Rulemaking to Amend Exceptions to Official Agency Geographic Boundaries**

On May 3, 2023, AMS issued a final rule, in the Federal Register, that provided more systematic and transparent criteria for customers to request, under certain conditions, an exception to use an OA, other than the one that has been delegated or designated to serve the customer's geographic area. The new rule establishes a three-tiered system under which applicants can request a one-time, 90-day, or long-term timely service exception due to untimely service issues. It also reinstates the exception criteria for the nonuse of service provision should applicants go 90 days without service from their assigned (initially designated) OA. Furthermore, the rule institutes a 14-day challenge window in which assigned OAs may challenge timely service and nonuse of service requests.

To facilitate implementation of the new regulations, FGIS published an "exceptions" webpage (on the AMS website) to provide: (1) instructions on how to submit requests for an exception, (2) a list of approved/active exception requests, and (3) educational resources, such as a public webinar, hosted on July 11, 2023, that provides a public overview of the new rule and a walkthrough of the new webpage.

"to promote the integrity and effectiveness of the official inspection and weighing system."

### **Enforcement Activities**

In FY 23, USDA revoked the Northeast Indiana Grain Inspection Inc.'s (NEI) USGSA designation as an OA, due to its failure to comply with requirements of the USGSA. Under the USGSA, when a designated OA fails to comply with provisions of the Act, regulations, or instructions, the Secretary may seek to suspend and/or revoke a designation. FGIS concluded its investigation into NEI's designation performance in FY 23 and determined that USDA needed to file a complaint against this designated agency.

Following receipt of complaints from NEI's customers, FGIS conducted multiple onsite visits to NEI's headquarters. Due to the inability for NEI to comply with the Act and Regulations, FGIS issued a letter of jeopardy to the OA Manager at NEI outlining the tasks and requirements needed to establish compliance with the regulations. FGIS offered support and assistance in an attempt to help cure the areas of need. However, NEI failed to bring its operation into compliance with the Act, regulations, and FGIS instructions, policies, and procedures.

FGIS suspended the Northeast Indiana Grain Inspection Inc. designation on May 15th, 2023. Official services were then provided to the industry via the FGIS Toledo Field Office, the DIOO, and service agreements with surrounding official agencies. Finally, following appeal procedures, NEI's designation as an OA to conduct grain inspection and weighing services on behalf of the Secretary of Agriculture was revoked, effective August 21, 2023. FGIS posted a notice in the Federal Register soliciting designation applications from parties interested in serving this geographic area. The applications for this opportunity are currently under review.



2023 Annual Report to Congress | 14

#### **Designated Private Agencies**

AB	Aberdeen	FS	Farwell Southwest	MH	Michigan
AM	Amarillo	FE	Fremont	CR	Mid-Iowa
JB	Barton	HA	Hastings	MM	Midsouth
CI	Cairo	ID	Idaho Grain	MP	Minot
CG	California Agri	JA	Jamestown	NR	North Dakota
CD	Champaign	KA	Kankakee	NP	Northern Plains
DB	Detroit	KS	Kansas	EV	Ohio Valley
EI	Eastern Iowa	KE	Keokuk	OM	Omaha
EN	Enid	LN	Lincoln	PL	Plainview

SH	Schaal
SI	Sioux City
SG	State Grain
TS	Tri-State

#### **Designated State Agencies** LA

Louisiana MT Montana Maryland NC North Carolina Missouri UT Utah

**Delegated State Agencies** 

Wisconsin WI

MD

MO



Toledo

#### **Delegated and Designated State Agencies**

- Alabama AL
- Virginia VA
- WA Washington

FGIS Field Office

Official Agency Boundary

# Section III Standards Development and Industry Guidance

FGIS maintains the U.S. Grain Standards and, periodically, publishes requests for the public to advise on whether such standards need amending to ensure they remain relevant for facilitating trade. Along with maintaining the Standards, FGIS crafts inspection policies and instructions for the official inspection and weighing system.

## Soybeans of Other Colors (SBOC)

In recent years, an increased prevalence of seed coat discoloration due to some genetically engineered yellow soybean varieties has caused some lots to be downgraded due to an increased percentage of kernels categorized as soybeans of other colors (SBOC). At the end of FY 22, the Grain Inspection Advisory Committee requested that FGIS conduct a study to evaluate if the discoloration had an impact on the quality of Soybeans. The study concluded that the SBOC containing yellow soybean lots collected in 2022 near the end of the 2021 crop year did not have protein and oil results that were significantly different than non-SBOC lots. The study can be found on the AMS public website.

In response to the study results, FGIS was approached by a variety of stakeholders requesting that the United States Standards for Soybeans such that SBOC would no longer be a grade determining factor in the class Yellow Soybeans. Industry interaction (with producer groups, exporters, grain elevators, and grain processors) suggested that these hybrid soybeans were rapidly gaining popularity with soybean growers and likely would be present in the value chain for the foreseeable future. The increased SBOC content made it more difficult for shippers of U.S. soybeans to meet contract grade requirements, based solely on the factor of SBOC.A potential outcome was that U.S. soybean producers would be financially harmed (penalized) at the first point of sale, and the U.S. would lose market share to competitors, nearly all of whom did not have a similar factor in their grading standards.

FGIS published a proposed rule on March 31, 2023, to amend the soybean standards by removing SBOC as a grade determining factor while retaining SBOC as an informational factor available upon request. Fourteen comments were received during the comment period with no comments averse to the rule as proposed. Subsequently, FGIS published a final rule on July 14, 2023, implementing the rule as proposed, with an effective date of September 1, 2023, to coincide with the beginning of the 2023 soybean harvest.



## SECTION IV QUALITY ASSESSMENTS AND EVALUATION OF TECHNOLOGY

The Technology and Science Division (TSD) manages, conducts, and coordinates FGIS' research, methods development, reference standards, technical training, and technical support programs. It also provides direct services for commodity inspection and other specialized functions.



#### **Board of Appeals and Review (BAR)**



An essential role of the BAR is to promote inspection alignment between Quality Assurance Specialists (QAS) and the BAR so grain grading across the US is consistent and accurate. In FY 23, the BAR created training samples, called referees, for corn, soybean and wheat. The samples were created with common damages typically found in corn, soybean and wheat, and were sent to all Federal and Agency QAS. A total 267 referees were issued to 89 QAS. The data collected from the referees are used to determine the QAS' ability to identify damage in these grains and recognize opportunities for improvement to ensure alignment across the official inspection system.

#### **Online Wheat Variety Classification Guide**

Proper identification of Wheat of Other Class (WOCL) is important as it can be difficult to assess and can impact the numerical grade assigned to wheat. The BAR updated the Upper Midwest Wheat Classification guide with new varieties that are grown and inspected in the Upper Midwest region. The library is a collection of multiple varieties for three different wheat classes. The update includes varieties for Hard Red Winter and Hard Red Spring. Each variety has been photographed from multiple angles and are supported with descriptive terms to assist inspectors with identification. The library is a valuable resource in assisting FGIS inspectors in identifying WOCL.





#### **Inspection Technology Evaluation**

Inspection Technology Evaluation (ITE), a new process to evaluate and approve technology for official grain inspection, was developed in FY 21 and FY 22 and published in the Federal Register for public comment near the end of FY 22. To finalize the new ITE process, FGIS needed to respond to the public comments, finalize the process documentation, develop webpage content, and announce the process to stakeholders. FGIS responded to the public comments by revising the User Guide document and presented the final ITE process to the Grain Inspection Advisory Committee in December of 2022. The ITE webpage content, including the User Guide, was published in early January 2023 and a Notice to Trade on February 14.



#### **Research and Development of Technology to Support Grain Inspection**

#### **Exploration of Imaging Technology**

FGIS is exploring options to replace an outdated and obsolete imaging instrument used to determine milling yield for medium grain rice in California. Milling yield requires the determination of whole and broken kernels by mass in a 40-gram sample of milled rice. In FY 22, FGIS issued a Federal Register notice to solicit proposals from imaging system manufacturers.

In FY 23, FGIS entered a cooperative research and development (CRADA) with the manufacturer C-Grain to explore the feasibility of utilizing a commercially available instrument to support the California rice industry.

FGIS and C-grain collaborated to develop an artificial neural network calibration for use in determining milling yield in medium grain rice. A series of experiments to evaluate repeatability and reproducibility of results was conducted to compare the output of the C-Grain instrument against milling yield determined by the Board of Appeals and Review.

At the end of FY 23, FGIS granted conditional approval of this instrument to support the California rice industry for the upcoming fall harvest. Ongoing monitoring and data collection to assess the performance of the instrument will be a priority for FY 24. FGIS hopes to learn from this effort and identify possible technology to augment grain grading processes for the future.



### **Standardizing Commercial Grain Inspection Equipment**

In FY 23, FGIS continued the cooperative effort with the National Conference on Weights and Measures (NCWM) and the National Institute for Standards and Technology (NIST) to standardize commercial inspection equipment. Commercial inspection equipment includes moisture meters and any test weight modules contained within moisture meters, as well as near-infrared analyzers for protein, oil, and starch. FGIS served as the sole evaluation laboratory for grain inspection equipment under the NCWM National Type Evaluation Program (NTEP) to determine if the equipment meets the requirements as legal for trade for States that regulate commercial grain transactions. In FY 20, FGIS and NIST entered into its sixth 5-year Interagency Agreement to support the ongoing calibration program that is funded primarily by the participating manufacturers in addition to funding from FGIS and NIST as specified in the Interagency Agreement.

In 2023, FGIS collected grain moisture meter calibration data for eight instrument models as part of the NTEP ongoing calibration program. Calibrations developed in this program provide traceability throughout the official FGIS moisture program, including the air oven reference method, and they are used by the majority of moisture meters used for commercial grain transactions throughout the United States. The NTEP ongoing calibration program certified moisture calibrations for hard red winter wheat, hard red spring wheat, hard white wheat, soft red winter wheat, soft white wheat, durum wheat, corn, soybeans, six-row barley, two-row barley, long grain rough rice, medium grain rough rice, oats, sorghum, and sunflower seeds (oil-type) grain types. Over the past 6 years, NTEP has maintained an accuracy level among all participating instrument models that agrees with the USDA air oven method (American Association of Cereal Chemists (AACC) standard reference method) by no more than 0.31 percent moisture (on average) over all grain types covering the primary market moisture ranges. In FY 23, FGIS will collect grain moisture meter calibration data for eight NTEP models and will conduct NTEP testing for new grain inspection equipment models upon request.

In FY 23, FGIS' NTEP laboratory coordinated its issuance of Certificates of Conformance with FGIS' implementation of calibrations for the official moisture meter models for use with the major grains. This close coordination ensured that State-regulated commercial moisture meter users could use the same meters and calibrations as those used in official inspection.



#### **Mycotoxin Test Kit Evaluation**



Mycotoxins are toxic chemicals produced by certain fungal species under favorable environmental conditions. Many countries have set maximum allowable concentration levels for specific mycotoxins in food and feed to ensure the safety of consumers. Mycotoxin levels are a critical factor in the trade of grain and quantitative mycotoxin testing is an integral part of buyer-seller contract specifications. AMS provides official mycotoxin testing services throughout the United States for domestic and export grains, oilseeds, and processedgrain commodities. Official testing services are provided for aflatoxins, deoxynivalenol, fumonisins, ochratoxin A, and zearalenone. Testing at field locations requires rapid, inexpensive, and accurate methods to effectively assess US grain quality. An essential part of ensuring the quality of official mycotoxin testing is the AMS test kit evaluation program, through which test kits are evaluated and certified for conformance to specific criteria. Only test kits having AMS certification are approved for official mycotoxin testing. AMS establishes the test kit performance criteria and periodically updates them to improve testing accuracy and to meet the official mycotoxin testing program's operational needs.

In FY 23, AMS evaluated 16 test kits, and 15 of these were approved for use in the official inspection system. AMS also incorporated two improvements to its test kit evaluation program. To promote transparency in the verification process, AMS announced the option for representatives from the test kit manufacturer to participate in the verification studies alongside AMS personnel at the AMS laboratory. To improve the robustness of test kit evaluations, AMS now requires the verification study to use three separate instruments to account for variation between instruments of the same model.

#### **National Falling Number Quality Assurance Program**



The Falling Number (FN) test is an important measure of the effect of sprout damage on wheat and an indicator of the performance of wheat during the processing of flour for making various food products. FGIS administers a national quality assurance and control program for official FN testing. In FY 23, FGIS evaluated the performance of official FN testing for 53 instruments located across 5 FGIS field offices and 13 official agencies. Two thousand seventy-eight samples were tested to determine alignment with the reference laboratory. In addition, two rounds of check sample distributions were completed to determine the consistency among all official service providers. These interlaboratory activities help assure consistency and reliability of official FN testing.

#### **Export Surveys – Pesticides and Heavy Metals**



FGIS provides pesticide residue and heavy metal testing services to facilitate marketing of US grain. The amount of these substances in grain is regulated to ensure consumer safety. The testing of these substances is an important part of the grain trade. In FY 23, FGIS analyzed 100 export soybean samples for 156 pesticide residues using 6 analytical methods in collaboration with the US Soybean Export Council (USSEC).

## **Expanded Analytical Testing Services**

The US Agency for International Development (USAID) administers an international food aid program and established an interagency agreement with FGIS to expand testing capability and reliability. Under the agreement, FGIS was contracted to stand up a suite of analytical testing services for grain-based commodities included in the program. In 2023, FGIS developed and validated 16 analytical methods for the determination of endogenous quality factors, contaminants, and nutritional fortifications. These testing services are now available to USAID and producers for ensuring the food aid products meet the commodity specifications established by the USDA. Some of the new test methods established by FGIS could be applied to grains under the USGSA and serve as new market opportunities for fee-for-service testing.



#### Identification of Gene Editing Techniques Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR)

CRISPR, short for "clustered regularly interspaced short palindromic repeats," is a technology that scientists use to selectively modify the DNA of living organisms. CRISPR was adapted for use in the laboratory and is a precision tool that may benefit the agriculture community by facilitating crop improvement through working with native characteristics of the plant. Agricultural products of CRISPR are less costly and more precise than traditional breeding methods. Plant products from CRISPR are undetectable by traditional detection methods for genetically engineered (GE) organisms. FGIS' biotechnology laboratory conducted analyses in FY 23 to determine if CRISPR DNA sequencing technology can be incorporated into the GE detection program to identify these novel GE events. Further exploration of this technology in FY 24 will continue to focus on detection capabilities.



# SECTION V INTERNATIONAL ENGAGEMENT

FGIS collaborates with USDA's Foreign Agricultural Service (FAS) and USDA cooperator organizations to educate international groups on the U.S. grain marketing system. FGIS works closely with USDA agencies by providing grain quality expertise for trade complaints and disruptions. FGIS' International Affairs Division (IAD) conducts and coordinates all international activities for the Program.

### **FY 23 Country Briefings**

In FY 23, IAD gave 14 briefings to visiting trade teams from Brazil, Bosnia, Colombia, El Salvador, Guatemala, Herzegovina, Honduras, Jamaica, Kenya, Panama, Peru, Tanzania, and Venezuela. Through such briefings, FGIS provided detailed overviews of the U.S. grain inspection and weighing system, appeals and complaint processes, as well as the benefits of buying high-quality U.S. Grain.

#### Asia Outreach

In FY 23, USDA, FAS and USDA cooperators requested that FGIS travel through Asia to promote the U.S. official system to help differentiate U.S. grain quality from the rest of the world and build trust with potential customers. During a month-long trip, FGIS traveled to Japan, South Korea, Vietnam, Singapore, China, and the Philippines to conduct grading seminars and meet with individuals and groups involved in the grain and milling industry, including USDA Attaches from USDA, FAS and USDA, Animal and Plant Health Inspection Service. FGIS also met with foreign importers that have requested to understand protein determinations generated through the official methods.

#### **Providing Support to Honduran Port**

The United States is the primary exporter of grain to the Honduran Port of Cortez. Vessels from multiple U.S. ports and export elevators have been recorded as arriving light by a large percentage. USDA, FAS sent a delegation including FGIS and the private sector to review port operations and grain flow security within the grain terminal.

The delegation witnessed a vessel discharging into the grain terminal storage facility and inspected the grain handling systems. The delegation met with Customs and Border Protection staff at the port who monitor exports to the United States, Honduran customs officials, grain terminal operators, port police and grain importers. Through interviews with involved parties the delegation group was able to identify areas of interest and form a more complete picture of the grain movement from the holds of the ship, through the grain terminal, and to the many Honduran buyers. The recommendations from the visit are expected to result in a reduction of losses and aid the Honduran Customs office in securing the port's grain terminal.

#### **Complaints From U.S. Grain Importers**

In FY 23, FGIS received six quality complaints from importers on grains inspected under the USGSA.

COMPLAINANT	GRAIN/ COMMODITY	NUMBER OF COMPLAINTS	NATURE OF COMPLAINT
Algeria	Wheat	1	Ergot
China	Corn	3	Mold Damage
	Soybeans	1	Mold Damage
Vietnam	Wheat	1	Protein
	TOTAL COMPLAINTS	6	

#### SUMMARY OF COMPLAINTS REPORTED BY IMPORTERS ON INSPECTION AND WEIGHING 2023

In accordance with Federal civil rights law and U.S. Department of Agriculture (USDA) civil rights regulations and policies, the USDA, its Agencies, offices, and employees, and institutions participating in or administering USDA programs are prohibited from discriminating based on race, color, national origin, religion, sex, disability, age, marital status, family/parental status, income derived from a public assistance program, political beliefs, or reprisal or retaliation for prior civil rights activity, in any program or activity conducted or funded by USDA (not all bases apply to all programs). Remedies and complaint filing deadlines vary by program or incident.

Persons with disabilities who require alternative means of communication for program information (e.g., Braille, large print, audiotape, American Sign Language, etc.) should contact the State or local Agency that administers the program or contact USDA through the Telecommunications Relay Service at 711 (voice and TTY). Additionally, program information may be made available in languages other than English.

To file a program discrimination complaint, complete the USDA Program Discrimination Complaint Form, AD-3027, found online at <u>How to File a Program Discrimination Complaint</u> and at any USDA office or write a letter addressed to USDA and provide in the letter all of the information requested in the form. To request a copy of the complaint form, call (866) 632-9992. Submit your completed form or letter to USDA by: (1) mail: U.S. Department of Agriculture, Office of the Assistant Secretary for Civil Rights, 1400 Independence Avenue, SW, Mail Stop 9410, Washington, D.C. 20250-9410; (2) fax: (202) 690-7442; or (3) email: <u>program.intake@usda.gov.</u>

USDA is an equal opportunity provider, employer, and lender.

Learn more about the Federal Grain Inspection Service at www.ams.usda.gov