MESSAGE TO THE ASTA MEMBERSHIP

On behalf of the ASTA Board of Directors and staff, we are pleased to present to you the ASTA FY 2020-21 Annual Report. Your ongoing support for ASTA and its mission throughout this past year was essential as we sought to deal with the impacts of the global pandemic. We simply can’t thank you enough! We can say with confidence that not only did we survive, we truly thrived – that’s all thanks to you, our valued members, for your strong partnership, engagement and resiliency.

This year showed the world just how vital this great industry is, it really does all start with seed. As an industry, we’ve stepped up to the challenge and adapted, using technology and innovation to continue developing and delivering seed to our customers, while ensuring appropriate protocols were in place to keep employees and customers safe. As an association, we worked to employ new virtual tools and technology to stay in communications with our members, government officials and other stakeholders, to ensure the business of the seed industry moved forward seamlessly during this time.

Through the direction of the ASTA Board, committees and working groups, we chose not to stick with the status quo over the past year and worked to accomplish a great deal. The ASTA Strategic Plan was reviewed and revised, with a new strategic pillar, to guide us over the coming years. The stand-alone sustainability pillar is at the same time integrated throughout the other pillars of our plan. After all, it’s a part of everything we do and it always has been. Going forward, it’s a key piece for us to tell our story about how the seed industry helps feed the world, and does it while protecting, improving and replenishing our resources for future generations.

Looking ahead to the coming year, and hopefully putting this pandemic behind us, we have a great sense of optimism for the future of the seed industry. We will continue to research, innovate and develop new and better ways of solving challenges – for farmers, consumers and the environment. As discussions continue around sustainability, domestically and internationally, we know we have a pivotal – and necessary – role to play. Our story is strong, it’s compelling, and we are excited to tell it alongside you!

Again, we can’t thank you enough for all you do and for your continued strong investment in your association. We look forward to your partnership in the year ahead, and beyond!

Sincerely,

JOHN LATHAM
LATHAM HI-TECH SEEDS
ASTA Chair FY 2020-21

ANDREW LAVIGNE
ASTA
President & CEO
ASTA’S VISION
To contribute to global agriculture and food security by creating an environment where each ASTA member company has the opportunity to create an innovative, sustainable and successful business.

ASTA’S MISSION
To be the leading voice of action in all matters concerning the development, marketing and movement of seed, associated products and services throughout the world. ASTA promotes the development of better seed to produce better crops for a better quality of life.

ASTA’S CORE VALUES
Members drive the ASTA agenda and identify the issues relevant to the seed industry. ASTA’s commitment to one company, one vote ensures that issues affecting the many are identified and result in effective and proactive advocacy and support.

STRATEGIC FOCUS AREAS

Domestic Policy
Be the leading voice on domestic policy issues impacting the seed industry. Implement a comprehensive government affairs program and regularly engage and communicate with ASTA members and stakeholders on federal, state and local issues. Determine action on active issues – identify where ASTA should lead, support or monitor.

International
Improve the opportunities for ASTA member companies to do business in international markets.

Communications
Reinforce ASTA’s role as the authoritative voice and trusted source for the U.S. seed industry. Maintain the association’s position as the go-to source on seed matters for ASTA members, member organizations, state and federal government leaders, commodity groups, and media; while continuing to build its brand with consumers, consumer influencers, students, educators, and other stakeholder groups along the ag and food value chain.

Intellectual Property Rights
Advance the use and respect of intellectual property rights (IPR) for the seed sector globally. Increase awareness for how intellectual property contributes to the success of seed systems and supports sustainability goals.

Innovation
Advocate for a domestic and international environment that facilitates the development and implementation of innovation in breeding of seed crops and in seed associated products.

Membership & Internal Matters
Maintain and grow strong plans for membership retention, engagement and recruitment; meetings structure and management; and human and financial resource management to ensure the key issues of membership are addressed through a sound association foundation.

Sustainability
Recognize the role of seed in sustainable agriculture as policies are developed in the public and private sectors at the local, national, and international levels.
FY 2020-21 LEADERSHIP

CHAIR
John Latham, Latham Hi-Tech Seeds Inc.

FIRST VICE CHAIR
Brad May, BASF

SECOND VICE CHAIR
Jim Schweigert, Gro Alliance

From left to right: John Latham, Brad May, Jim Schweigert.

REGIONAL VICE PRESIDENTS

Crystal Fricker, Pure Seed
(Northwest)

John Romines, Winfield
(North Central)

Dan Foor, La Crosse Seed
(Central)

John Bozeman, Seedway LLC
(Northeast)

John Seymour, Roundstone Seeds
(Southeast)

Coby Kriegshauser, Scott Seed Co.
(South)

Rick Falconer, Rijk Zwaan
(West)

Angel Saavedra, Corteva Agriscience
(Representative to AMSAC)

DIRECTORS-AT-LARGE

Brian Barker, Corteva Agriscience

Dave Treinen, Syngenta/GreenLeaf Genetics

Gwyn Schramm, Bayer

Paul Nselel, AgReliant Genetics, LLC

Kim Alberty, Agassiz Seed

David Armstrong, Sakata America

IMMEDIATE PAST CHAIRS

Wayne Gale, Stokes Seed Limited

Jerry Flint, Acuity Consulting LLC

Tracy Tally, Justin Seed Co., Inc.

DIVISION CHAIRS

Scott Plagman, Soybean, Corteva Agriscience

Kevin Cavanaugh, Corn & Sorghum,
Beck’s Superior Hybrids

Dale Krolikowski, Vegetable & Flower, Germains

Craig Nelson, Associate Member, Eurofins

Lisa Steere, Brokers/Agents, Peterson Genetics, Inc.
This past year, state legislatures adapted to the restraints of COVID and tackled the issues, often in untraditional ways. In many cases, not only were their approaches different, but so were their priorities. ASTA tracked more bills of direct impact on the seed industry than ever before, and they included a broader range of topics. Roughly one-third of the bills introduced related to treated seed, while other topics addressed funding and administration of seed programs, sustainability, weeds and invasive species, and conservation.

Treated seed related bills were designed to: fund research studies; establish regulatory oversight committees; transition the seed treatments to “restricted use” only; limit the use or ban certain pesticides; or allow local rule (repeal preemption). Three states introduced specific legislation to ban the use of treated seed in ethanol production. The bill passed only in Nebraska -- one of the two states with facilities that had previously accepted treated seed for such purpose. In general, a common misunderstanding among policymakers was that treated seed is not regulated. ASTA, along with partners at CropLife America and the Agricultural Retailers Association, engaged in a number of advocacy efforts, including the creation of new educational resources, to help dispel this and other myths around treated seed.

In Vermont, the legislature passed a bill containing language to amend the Seed Review Committee/Agricultural Innovation Board’s authority over new genetically engineered seed. The state’s Seed Review Committee, created in 2019, required that a review board must review and approve new genetically engineered seed traits in Vermont prior to sale in the state. The bill transfers the panel’s powers and duties into a newly created, broader Agricultural Innovation Board, which is now only advisory in nature.

ASTA continues its grassroots approach to state legislation through its member companies and their dedicated personnel, state/regional seed and agribusiness associations, state Farm Bureaus, and other partner associations, both at the state and federal level.
Sustainability
ASTA engaged in a variety of advocacy efforts at the federal level around climate change and sustainability. The association is a Steering Committee member of the Food and Agriculture Climate Alliance, comprised of organizations representing farmers, ranchers, forest owners, agribusiness, manufacturers, the food and innovation sector, state governments, sportsmen and environmental advocates. As part of this coalition, ASTA has worked to support the goal of defining and promoting shared climate policy priorities, particularly as they relate to the role that continued innovation in plant breeding and seed variety development play in ensuring long-term economic, social and environmental sustainability.

Discussions leading up to the UN Food Systems Summit in September 2021 served as a key global forum to highlight the role of the food and agriculture sector in achieving sustainability goals. ASTA participated in national dialogues on this topic convened by USDA, shared its priorities with relevant U.S. government agencies and Hill committees, and coordinated with the International Seed Federation to highlight the importance of quality seed, science-based practices, and innovation for a sustainable food system.

Internally, ASTA has engaged in an in-depth look at the role of sustainability within the seed industry. The updated Strategic Plan for 2021 specifically established a new pillar of Sustainability. A Sustainability Working Group was established with the purpose of developing the association’s sustainability priorities and values, and to communicate the important role of seed in sustainable agriculture practices. This group continues to convene regularly to guide ASTA policy efforts on sustainability.

Trade
At the head of pressing issues facing the seed industry, the implications of Section 301 tariffs continue to be a priority for many of ASTA’s members. The 25-percent tariff placed on vegetable and flower seeds has had a devastating impact on many seed companies. ASTA continues to have conversations with the U.S. Trade Representative (USTR) and key Congressional offices about the need for targeted relief from these tariffs and is exploring all avenues to find a resolution.

Agriculture Research
Agricultural Research funding is a long-standing priority for the association. As Congress deliberated FY 2022 Appropriations, and additional legislative funding packages, ASTA advocated for increased funding for agriculture research and innovation to address future challenges and opportunities within the agriculture sector.

PLDC/Advocacy Day
ASTA navigated an entirely new approach to Advocacy Day in the way of virtual Hill visits. In total, members held 62 Congressional meetings – 32 with Republican offices and 30 with Democratic offices. ASTA members had the opportunity to raise a variety of priorities with Congressional delegations, focusing in particular on trade, sustainability, research, and plant breeding innovation. These discussions have spurred continued conversations and helped to build and strengthen relationships on Capitol Hill.
**PLANT BREEDING INNOVATION POLICY**

**Government Engagement**
In May 2020, the USDA Animal Plant Health Inspection Service (APHIS) published its Final Rule revising the agency’s biotechnology regulations. The Rule established narrow categories of plant modifications that are exempted from regulation, provided a mechanism to further add to these exemptions, and offered the regulatory status review process (RSR) for non-exempted plants to be evaluated for potential plant pest risk. ASTA, through its Plant Breeding Innovation Working Group (PBI WG), met with APHIS and provided comments to several implementation actions taken under the Rule.

In October 2020, EPA published for public comment a proposed rule to exempt from registration certain plant-incorporated protectants derived from newer technologies. ASTA, through the PBI WG, provided comments on the proposed regulations. In its comments, ASTA commended EPA for advancing regulatory action to align policy across the U.S. government, supported the exemption in principle, and recommended improvements to the proposed rule.

ASTA continues to actively engage with the U.S. government to advocate for a science-based and consistent policy for plant breeding innovation across the government.

**Value Chain Collaboration**
ASTA continues to take a leadership role in working with members of the domestic agriculture and food value chain, as well as international partners, toward the goals of international alignment of science-based policies across countries and information-sharing across the value chain. ASTA is actively participating in both the Center for Food Integrity (CFI) and Global Stewardship Group (GSG) initiatives to develop programs in support of information-sharing across the value chain. The association is working to ensure that a diversity of crops and business models are considered and is actively facilitating broad stakeholder outreach to gather feedback for CFI and GSG.

**International Efforts**
ASTA continues to work toward international policy alignment around plant breeding innovation policies and is actively engaged in discussions within the International Seed Federation (ISF) PBI Working Group. In June 2021, ASTA, in collaboration with ISF and the China Seed Association, helped to organize a virtual meeting in China focused on gene editing. ASTA staff presented at several international meetings advocating for global regulatory harmonization, including webinars hosted by the CGIAR, the Asia Pacific Economic Cooperation, the government in Kenya and the Future Food Resources Forum of Korea.
INTERNATIONAL PROGRAMS AND POLICY

Representing U.S. Seed Industry Globally
Collaboration with national and regional seed association partners remains a priority. In Europe, ASTA partnered with Euroseeds to engage members of the European Parliament through a series of webinars highlighting plant breeding innovation research. Through the Institute on Science for Global Policy, ASTA and Euroseeds convened a Transatlantic Dialogue to bring together seed industry, academia, government, and international organizations to discuss the importance of plant breeding in sustainable agriculture. The outcomes and recommendations were published in a book titled “Sustainable Agriculture: the role of Plant Breeding Innovation.”

In China, ASTA collaborated with the International Seed Federation, China Seed Association and China National Seed Trade Association in hosting the fourth virtual roundtable meeting on plant breeding innovation. The roundtable brought together researchers and government authorities from China and around the globe to exchange information on regulatory policies and research in gene editing. Additionally, ASTA was able to participate virtually in other key industry forums, including supplying speakers to the 2021 China Seed Congress.

In Vietnam, ASTA worked with the Vietnamese Seed Association, Vietnam Ministry of Agriculture and Rural Development, Asia and Pacific Seed Association (APSA), and USDA to further strengthen implementation and enforcement of intellectual property rights and UPOV 1991 with the country. ASTA also collaborated with APSA to host a virtual workshop among seed associations and ministries of agriculture in Thailand, Cambodia, Vietnam and Laos to discuss seed policies, regulatory updates, plant variety protection, lab accreditation, adoption of ISPM 38, OECD seed schemes, and pest risk analysis.

In Africa, ASTA partnered with UC Davis to deliver a seed production seminar for government officials and seed production companies in Kenya, Rwanda, Uganda and Tanzania. The seminar was attended by 20 representatives, including the Director General of the Ministry of Agriculture in Rwanda, and various seed production companies. The course covered introductory technical vegetable and maize seed production concepts.

With international borders closed, ASTA strengthened relationships with national seed associations through use of key subject matter experts located strategically in India, Japan and Korea. Local representation was a great benefit to ASTA’s priorities in key markets, despite lack of travel.

ASTA continues to play a leadership role at the International Seed Federation, with members and staff representing ASTA on all committees, section boards and working groups. Additionally, ASTA holds executive committee positions on the Asia and Pacific Seed Association (APSA), Seed Association of the Americas (SAA) and African Seed Trade Association (AFSTA). Members represent ASTA as industry observers at meetings of the OECD Seed Schemes, International Union for the Protection of New Varieties of Plants (UPOV), International Plant Protection Convention, FAO Farmer’s Rights meetings and International Treaty on Plant Genetic Resources for Food and Agriculture.
Representing U.S. Seed Industry to U.S. Government
ASTA advocates for U.S. trade policies that reduce barriers, improve market access, and allow for the movement of seed across borders.

The International Executive Committee met virtually with agricultural attaches at the USDA Foreign Ag Service (FAS) posts in Mexico City, representatives from the Canadian Food Inspection Agency, and FAS staff in D.C. to discuss regional priorities, seed movement and to strengthen key relationships. Additionally, ASTA joined the Aggies for WTO Reform Coalition, a group established to focus on reform and improved opportunities for U.S. engagement at the World Trade Organization (WTO).

At the federal level, ASTA staff serve on advisory committees to the USDA Foreign Agricultural Service (FAS) and USTR including representation by the CEO on the Agriculture Policy Advisory Committee (APAC) for Trade and representation by the Senior Director for International Programs and Policies on the Agricultural Technical Advisory Committee for (ATAC) for Trade in Grains, Feed, Oilseeds, and Planting Seeds.

ASTA continues to share priorities on international trade policies and key seed issues with USDA and USTR, including the development of new materials outlining the association’s priorities for trade agreements, current trade barriers, and conditions for global seed production.
GLOBAL SEED MOVEMENT

The movement of seed internationally continues to pose increasing challenges for ASTA members as more and more countries around the world impose restrictive phytosanitary requirements. These challenges require a strong ASTA commitment to respond and influence policies at the global level.

The global response to tomato brown rugose fruit virus (ToBRFV) exemplifies how quickly trade lanes can be disrupted. At least 23 countries have now imposed new phytosanitary requirements for tomato and pepper seed, most of which were established via emergency regulations without the benefit of risk assessment. In the fall of 2020, the EU, through emergency order, imposed overlapping requirements including seed health testing before an international testing method had been fully developed which immediately resulted in huge testing backlogs at Iowa State University and other labs. ASTA worked diligently with Texas A&M University to increase testing capacity in the short term as well as worked with the USDA’s National Seed Health System (NSHS) to fast track the development and validation of an international method acceptable to the EU. Additionally, ASTA is participating in a NAPPO project with the U.S., Canada and Mexico to reduce the frequency of false positives and avoid the need for re-testing.

ASTA’s phytosanitary program serves members not only by providing expertise and advice to individual companies, but also by representing the U.S. seed industry to the U.S. and other governments. Over the last year, ASTA provided industry comments, often in partnership with ISF, to over 20 WTO notifications impacting many different seed species and covering a multitude of pest issues. By providing science-based information to these countries through the USDA as well as directly, a number of these countries including Morocco and Thailand amended their requirements based on ASTA inputs. In addition, ASTA provided technical information and analyses to USDA APHIS for use in numerous bilateral negotiations to help resolve seed trade disruptions.

On the industry side, ASTA maintains a strong network among other national and regional seed associations and ISF to draw attention to seed industry phytosanitary concerns and influence the development of globally harmonized regulatory approaches.

Steady but significant progress was made this past year with the development of the systems approach as a phytosanitary measure. In the U.S., the ReFreSH initiative was further enhanced through the joint APHIS/ASTA ReFreSH Working Group which completed its work on the development of this concept. Work has continued on the development of pilot projects with Chile, Brazil, and the “Quads” countries (U.S. Canada, Australia, New Zealand). However, the global pandemic has hampered progress. At the ISF level, ASTA has contributed significantly to the development of several briefing papers around the systems approach.

ASTA has continued its coordination with APHIS and the NSHS to enhance the National Seed Health Accreditation Pilot Program (NSHAPP) for eventually eliminating the threat of CGMMV in California. Ongoing surveys in California have confirmed the effectiveness of this pilot in keeping CGMMV from becoming established in the state.

Furthermore, ASTA completed the development of its seed pest database (PEDs) which is now publicly available on its website. ASTA will continue to add information on additional pests to the nearly 500 that are now in PEDs based on its members’ needs.
COMMUNICATIONS

PLANT BREEDING INNOVATION (PBI)

Innovature

The Innovature communications program successfully launched and completed Phase 2, which focused on digital influencer targeting and search engine optimization (SEO). A joint partnership between ASTA and BIO, Innovature is an educational platform designed to facilitate a public dialogue around innovation – particularly gene editing – and its benefits for our planet, health and food.

To help increase target audience traffic to the site, new SEO pages were developed on the following strategic topics: climate change; sustainability; hunger & food; and innovation. We accomplished our objective by securing rankings on the first page of Google search for all four pages.

Digital targeting focused on top online influencers in the categories of: environment and climate; health and wellness; hunger & poverty; innovation and animal welfare. The digital advertising campaign significantly increased visibility of and engagement with Innovature’s content. Nearly 2,000 users followed Innovature on Twitter as a result, including dozens of thought leaders identified for their influence in key fields. It also spurred an uptick in opt-ins for the Innovature email list.

Seasonality and campaign shifts drove a jump in impressions starting in January. The “Innovation” and “Hunger and Poverty” target groups were consistently top performers throughout the duration of the six-month campaign. Thought Leaders yielded the most engagements and followers of all interest groups relative to their audience size (10,000) while their engagement rate and cost per follower rank the lowest.

Additionally, monthly media pitches around timely topics began to see results with several placements in top-tier trade and mainstream outlets. Original content on the site included articles focused on sustainability, soil health, carbon sequestration, holiday themes, favorite fruits and vegetables, and more.

PHASE 2 KEY INSIGHTS

• The “Growing More With Less” theme resonates with our target audiences. Four of the six most engaging ads led with this theme. It’s also a theme that’s adaptable to a variety of audience/topic areas.

• Video ads are crucial for engagement campaigns. They had the highest engagement rate (2.37% vs. 2.10% for static ads), while static ads had slightly higher link click rate (0.28% vs. 0.17% for video ads).

• Our animated ads had a 30.5% completion rate. This indicates that our creatives captured attention and users were interested enough to stop scrolling and consume the entire message.

• The “Growing More with Less” and “Yukon Prevent Food Waste” ads were consistently top performers month over month. One of each made the top two ranked ads every month since the education campaign launched.
ANNUAL REPORT

Safety

Plant breeding safety was a key theme across ASTA PBI communications. In a scientific paper, podcast episodes, web and social content, ASTA explored the safe history of plant breeding, featuring profiles and interviews with plant scientists engaged in gene editing research.

International

An original video from ASTA and CropLife International (CLI), in collaboration with UC Berkeley, explored how researchers are using innovative breeding tools like gene editing to remove the naturally occurring cyanide from cassava – helping ensure this staple crop can remain a safe and widely accessible source of nutrition for the daily diets of hundreds of millions of people. This is the fourth video in the ASTA-CLI series examining the potential of gene editing in solving some of today’s biggest threats to food and agriculture.

SEED TREATMENT STEWARDSHIP

Leading into planting and harvest seasons, ASTA engaged in a coordinated effort to remind growers and other stakeholders about the importance of treated seed stewardship, throughout the entire life cycle of the seed. Efforts included trade media outreach, a social media toolkit, template newsletter articles and updated resources on the guide to seed treatment stewardship site.

ASTA launched a new Joint Treated Seed Working group, in collaboration with CLA and the Agricultural Retailers Association, to develop and implement a coordinated legislative and communications strategy around treated seed at the state and federal levels.
COMMUNICATIONS CONTINUED

UNSOLICITED SEED SHIPMENTS

As U.S. citizens and others around the world reported receiving unsolicited seeds in the mail, ASTA coordinated closely with state and federal government agencies to monitor the situation and provide guidance to members, stakeholders and the public. ASTA worked closely with USDA’s Animal & Plant Health Inspection Service (APHIS) and state departments of agriculture to determine the type and origin of seeds and provided regular updates to its members and other interested stakeholders as new information became available. Working through trade and mainstream media outlets, the National Garden Bureau network, and social media channels, ASTA communicated to the public about what to do in the event they receive(d) unsolicited seeds.

COVER CROPS & SOIL HEALTH

In August 2020, ASTA, along with the Conservation Technology Information Center (CTIC) and the Sustainable Agriculture Research and Education (SARE), released the results of their latest survey about farmers’ use of cover crops. The groups rolled out the results of the survey in a well-attended press conference. Special thanks to the following ASTA member companies whose contributions made this project possible: Agassiz Seed, Ampac Seed Company, Beck’s Hybrids, Grassland Oregon, Green Cover Seed, La Crosse Seeds, Mountain View Seeds, ProHarvest Seeds and Seedway.

VEGETABLE SEED VIRTUAL MEDIA TOUR

In February 2021, ASTA, in collaboration with the Florida Fruit & Vegetable Association, the University of Florida and several ASTA member companies with a presence in Florida, hosted a virtual media tour highlighting innovations in plant breeding in the produce industry. The tour was well-attended by garden writers and members of the ag, science and regional media. Recordings of the program are available on ASTA’s YouTube channel.
SUSTAINABILITY

ASTA is continuing to step-up efforts to communicate the seed industry’s commitment and contributions to sustainability. Key deliverables in 2021 included: developing a new legislative one-pager for use on Capitol Hill; participating and sponsoring the D.C. Agri-Pulse Food & Ag Policy Summit, titled “climate risks, rewards and uncertainties”; and creating a new webpage devoted to sustainability on ASTA’s website.

MEMBERSHIP ENGAGEMENT

Advocacy
To kick off 2021, ASTA hosted a Seed Ambassador Leadership Team (SALT)/Communications conference bridge session, titled “New Year, New You! Leadership in Advocacy for Agriculture in 2021.” Back by popular demand, advocate Kim Bremmer shared stories and tips on refining our message and leading the path of advocacy for agriculture in 2021.

Work-Life
In August 2020, ASTA hosted a member-only webinar titled, “Transitioning Back to the Office During a Pandemic: Seed Industry Perspectives.” Panelists included representatives from Agassiz Seed, SGS, and Beck’s Hybrids, who shared from personal experience about how their companies adjusted – to maintain both continuity of operations and worker and customer safety – during the pandemic.

Policy
During the presidential campaign season, ASTA facilitated member-only webinars with representatives from the Trump and Biden teams. The webinars offered participants an opportunity to hear from each campaign about the candidates’ agriculture, food and trade policy priorities, and to ask questions on key seed industry issues.

Student Membership
ASTA’s student membership has grown to 87 members in its third year, ranging from FFA students to PhD candidates. Partner universities are helping to promote the program to students in relevant programs. ASTA’s Communications Committee and Leadership, Education, and Development (LEAD) Committee worked to develop different ways to engage the association’s student members through events and contests. The monthly student newsletter is another way of delivering benefits to these young members. The newsletter includes industry news and updates, company spotlights, student member spotlights, scholarship programs and internship and full-time career openings.
INTELLECTUAL PROPERTY

Workshop with U.S. Patent and Trademark Office
As part of its Policy & Leadership Development Conference, ASTA held a workshop with the U.S. Patent and Trademark Office (USPTO) to foster collaboration and information exchange between ASTA members and the agency. Supervisory patent examiners for plant patents and plant utility patents shared their experiences as examiners and provided insights related to their structure, review process, and common challenges. The USPTO Office of Policy and International Affairs provided an overview of their international Intellectual Property attaché program, which assists U.S. seed companies with IP protection abroad. Speakers from ASTA discussed new innovations that may be seeking patent protection more frequently in the future.

Continued Engagement with International Union for the Protection of New Varieties of Plants (UPOV)
ASTA utilized the principles outlined in its position statement on EDV System Roles, Accountabilities, and Conditions to effectively advocate for member priorities as UPOV considered revisions to its Explanatory Notes on Essentially Derived Varieties (EDV), at the request of the global seed industry. An ASTA representative served as a member of the industry-based EDV Task Force, which provided input to UPOV’s Working Group – EDV, and coordinated with U.S. government agencies involved in the UPOV discussions. The revision process is ongoing.

New Position Statement on Genetic Data
The ASTA Board of Directors approved a new position statement on the use of genetic data in testing for distinctness, uniformity and stability (DUS) under UPOV. The new statement, which updates and replaces ASTA’s 2009 statement, provides suggestions for how genetic data should be collected and used effectively, and accounts for the continuing technological advances in genetic knowledge.

The 2021 position statement presents new research, including the 2020 publication of the peer-reviewed journal article, “Single nucleotide polymorphisms facilitate distinctness-uniformity-stability testing of soybean cultivars for plant variety protection,” in Crop Science. The work described in this paper, conducted by some ASTA member companies, establishes a threshold using genetic data for augmenting DUS in soybeans and is an illustrative example of an approach that can be considered for other crops.
ASTA AFFILIATES & PARTNERS

SEED SCIENCE FOUNDATION

The mission of the Seed Science Foundation (SSF) is to address seed and plant science challenges and to encourage plant breeding education and seed research in support of the ever-changing needs of the global seed industry.

The foundation seeks to solve scientific challenges while supporting research and identifying funding mechanisms and creating technical information. It fosters networking and external agreements, recognizes professional and student achievement, and supports ASTA student programs.

The SSF has identified six subject matter areas of priority:

1. Breeding Systems
2. Seed Quality
3. Seed Production and Technology
4. Seed Health and Pathology
5. Digital Agriculture
6. Seed Applied Technology

FIRST THE SEED FOUNDATION

The First the Seed Foundation (FTSF) is a not-for-profit organization established by ASTA in 2008 to inform today’s consumers and tomorrow’s workforce about the importance of the seed industry. Its mission is to conduct education, outreach, and communication on the value of crops and food produced from seed.

TOMATOSPHERE™

A partnership with NASA that educates and inspires young students, building their capacity and understanding of scientific inquiry and opening the door to extended space exploration.

5,039 participating classrooms
241,397 students served

GROW A SEED

A free career education program developed to help students explore their talents and become successful in the workplace by providing participants with a career handbook including: career opportunities and profiles; checklists; parent handouts; and other resources.

199 participating classrooms
4,454 students served

PLANTING THE SEED

This curriculum was developed to assist teachers in growing the next generation of seed scientists and environmental innovators by letting students explore how tiny seeds can solve some of the planet’s biggest problems.

161 participating classrooms
5,391 students served
ASTA HONORS SEED INDUSTRY LEADERS

ASTA presented its annual seed industry leadership awards during the 2021 Policy & Leadership Development Conference held in Washington, D.C.

Chet Boruff and Dr. Barb Glenn Receive ASTA’s Distinguished Service Award

Chet Boruff began his career as Chief Executive Officer of the Association of Official Seed Certifying Agencies (AOSCA) in October 2004. AOSCA represents seed certifying agencies across the U.S. and seven other countries that are responsible for applying uniform standards to maintain varietal purity for over 60 major agricultural crops. In his role as AOSCA’s first CEO, Chet has been responsible for serving as its spokesman, managing the Association, providing assistance to its members as they administer AOSCA seed certifying standards, and developing related services for the seed and ag industry. He has been an active liaison with other seed industry stakeholder groups.

Dr. Barbara Glenn joined the National Association of State Departments of Agriculture (NASDA) as CEO in 2014. A scientist with decades of experience as a researcher, policy leader and advocate for agriculture, she previously held leadership positions with CropLife America and the Biotechnology Innovation Organization in Washington, D.C. Earlier in her career, Dr. Glenn led governmental affairs for the Federation of Animal Science Societies. For 17 years, she conducted dairy cattle nutrition research for the U.S. Department of Agriculture, Agricultural Research Service. She was the first woman to serve as president of the American Society of Animal Science.
Tim Johnson and John Schoenecker Honored with the ASTA Lifetime Honorary Member Award

Tim Johnson serves as the President of Field Crops Business Unit and an officer at Illinois Foundation Seeds, Inc. Before becoming President at IFSI, Tim served as President and Chairman of the Board of Directors for Seed Genetics, Inc. which was acquired by Illinois Foundation Seeds, Inc. in 2003.

Tim’s involvement with ASTA began by participating in the Corn, Sorghum and Soybean Conference Planning Committee. He went through the Chairs of the Corn and Sorghum Division which put him on the ASTA Board. He also participated on the Board of the U.S. Grains Council on behalf of ASTA and the Corn and Sorghum Division. From 2005-2008, Tim was Central Region Vice President. At that time, Owen Newlin asked Tim to sit on the American Seed Research Foundation Board, which he did for 10 years.

Intellectual Property Rights is important to Tim for not only innovation, but also for enabling broad access by small and large companies. Since 2006, he has been a part of the representation of ASTA to China and the continuing work by ASTA on improving China’s Intellectual Property Rights for seed.

Tim’s involvement in ASTA's activities in China has played an important role in providing opportunity for access of U.S. seed companies into China as well as U.S. seed companies accessing opportunities from China. Tim currently sits on the International Executive Committee of ASTA and Chairs the China Working Group.

John Schoenecker, who has served for years as Director of Intellectual Property for HM.CLAUSE, retired in 2020 after a long and distinguished career in the seed industry. Alongside his many years of service to HM.CLAUSE, formerly Harris Moran Seed Company, he has served in a variety of ASTA leadership positions, up to and including his year as ASTA Chair from 2014-15.

Schoenecker’s involvement with ASTA first began in 2006 when he was working in legal and regulatory affairs for Harris Moran (before it merged with Clause in 2008 to become HM.CLAUSE). Schoenecker became an incredibly active ASTA member serving in various capacities, including Western Region VP, Chair of the Vegetable and Flower Seed Division, Chair of the ASTA Working Group on Patent Expiration (AgAccord) and on both the Intellectual property Committee and the International Executive Committee. He represented ASTA on the board of the International Seed Federation’s (SF) Vegetable & Ornamental Section. In 2012, he was nominated to the position of 2nd Vice Chair where he helped to create the 2013-2018 ASTA Strategic Plan. In 2014, Schoenecker took over as ASTA Chair where he focused his efforts on advocacy, including continued work toward the ratification of the International Treaty on Plant Genetic Resources for Food and Agriculture by the U.S. Senate.

Throughout his tenure, and indeed since the beginning of his involvement with ASTA, Schoenecker has gone above and beyond in his efforts to promote and advocate for the seed industry, including numerous trips to China with ASTA trade advocacy groups.
2020 FARM AND LAWN SEED VIRTUAL CONFERENCE

With the cancelation of the Western Seed Association Conference typically held in conjunction with ASTA’s Farm & Lawn Seed Conference, ASTA’s 66th Farm and Lawn Seed Conference was held as a stand-alone, two-day virtual event comprised of ASTA educational sessions. The program was abbreviated for the virtual format, consisting of a 90-minute general session on the first day, followed by meetings of the ASTA Cover Crops and Environmental and Conservation Seed Committees on the second day. The general session program began with recorded words of welcome from the Western Seed Association president, Matt Fenske of Millborn Seeds, followed by a service update from the Natural Resources Conservation Service, a grass seed issues update and a special ASTA state and federal policy issues update – on the day of the United States presidential election, November 3, 2020.

CSS & SEED EXPO 2020 VIRTUAL

ASTA’s CSS & Seed Expo 2020 was completely converted to a virtual event, as government restrictions prevented large gatherings throughout the U.S. due to the pandemic. ASTA offered an immersive, 3-D virtual platform environment, built to look like many physical spaces within the Hyatt Regency Chicago, where it is usually held. The conference featured three days of virtual sessions, retaining most of the original topics that had been planned by the CSS Program Planning Committee in March of 2020, but modified for a more efficient virtual schedule. The virtual Seed Expo included 80 virtual exhibits, some of which also had private virtual meeting rooms, and the conference also offered a virtual Big Bar for impromptu networking as well as a digital platform for participants to schedule and conduct video appointments with each other. Exhibitors provided product showcase video presentations, some themed into “Expo Tours” on specific topics such as seed treatment and seed labs. The education program included a robust list of topics, which enjoyed high levels of viewership, including Dan Basse’s Agricultural Economic Forecast, the “Majors’ Crystal Ball” panel discussion, enhancing soybean quality, understanding premium markets, corn research, sustainability, genome editing, reexamining work-life balance, hybrid wheat, and an ASTA Closing Session on the recent policy work of the association. Overall, the conference had 993 registrants. Special “bridge” sessions were offered leading up to the conference as well as between this conference and the subsequent Vegetable & Flower Seed Conference, to keep ASTA topics fresh for members as well as to help streamline virtual conference agendas by offering committee meetings in between, rather than within, conference agendas.
60th Vegetable & Flower Seed Conference

In 2021, ASTA’s Vegetable & Flower Seed Conference was also held virtually, due to the ongoing coronavirus pandemic. The virtual Trading Room included 30 virtual exhibits, and the conference offered a virtual lounge for impromptu networking as well as a digital platform for participants to schedule and conduct video appointments. Approximately 543 registrants enjoyed two general sessions on Supply Chain Sustainability and Maximizing Information Technology, as well as sessions on phytosanitary concerns and women in the seed business. A robust Student Forum program gathered 94 students from 22 universities to virtually attend a special LEAD Committee-hosted session on seed industry career opportunities, a job panorama session hosted by HM.CLAUSE, and a post-conference series of virtual meetings with six ASTA member companies previewing their summer internship opportunities.

Policy & Leadership Development Conference 2021

The 2021 Policy & Leadership Development Conference, after enduring many changes in pandemic-related government restrictions impacting events in the Spring of 2021, was held in-person in Washington, D.C. from June 20-23. The conference was held in a hybrid-virtual format, with approximately 105 in-person attendees and 97 virtual attendees, including several students. A two-day program included several important policy sessions, highlighting priorities for the seed industry as the country transitioned to the new Biden Administration. Sessions included a robust LEAD Committee-hosted series on timely career topics, from the mentor/mentee relationship, to diversity and inclusion, to the “future of work,” to women in seed. The last day featured an ASTA Annual Meeting and Briefing Session, including an update on the new ASTA 2021 Strategic Plan, before 83 “ASTA Advocacy Day” appointments were held virtually between ASTA members and Congressional lawmakers and staff. The conference’s robust health-screening and wellness protocols were featured in the National Journal and Seed Speaks series.
MEMBERSHIP BREAKDOWN

MEMBERSHIP BY TYPE:
- Active Members: 383
- Affiliate Members: 52
- Associate Members: 171
- Broker-Agent Members: 7
- Corresponding International Members: 20
- Reciprocal Members: 31

TOTAL: 664

MEMBERSHIP BY REGION:
- Canada: 30
- Central: 116
- Foreign: 26
- Mexico: 2
- North Central: 175
- Northeast: 37
- Northwest: 63
- South: 46
- Southeast: 50
- West: 119

TOTAL: 664

STUDENTS: 87
TOTAL: 664
ASTA’S BUDGET

ASTA’s budget is based on guidance and approval from the Board of Directors according to determined priorities and the ASTA Strategic Plan. ASTA strives to maintain transparency with the membership regarding the association’s budget and financial status. The Board of Directors approves and reviews the financial status quarterly, which enables ASTA to maintain a strong and focused direction. The annual audit was conducted by ASTA’s auditors, Raffa, Inc, in accordance with generally accepted accounting principles, GAAP. The 2019-20 audit confirmed the financial health of the association. ASTA ended its fiscal year with $5,108,202 in net assets. ASTA has calculated in-kind contributions from member companies related to the international activities of the association of $13,015,197. This includes promotion, travel, research and professional services that the audit firm included in the FY 2019-20 audit.

INVESTMENT AND RESERVE POLICY

The Board of Directors has established guidelines for ASTA’s investment and reserve accounts, striving to maintain a balance of one-and-a-half to two times the annual ASTA operating budget. Of that reserve, 10-percent is maintained in an operating reserve and expenditures are subject to approval of the Executive Committee or the Board of Directors. The remaining balance is divided between 20-percent in a mid-term reserve account and 70-percent in a long-term reserve account. Expenditures from those reserves are vetted through the Finance Committee and approved by the Board of Directors. Under this policy, when authorizing expenditures from the long-term reserves, the Board will approve a plan to replenish the amount expended.

OPERATING REVENUE AND SUPPORT

<table>
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<tr>
<th>Description</th>
<th>Amount</th>
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<tbody>
<tr>
<td>In-kind contributions</td>
<td>$13,015,197</td>
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<tr>
<td>Membership dues</td>
<td>$3,977,933</td>
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<td>Registration fees</td>
<td>$913,160</td>
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<tr>
<td>Government grants and contracts</td>
<td>$1,231,674</td>
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<td>Exhibit fees</td>
<td>$448,619</td>
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<td>Contributions and sponsorships</td>
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<td>Administrative service fees</td>
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<td>Other income</td>
<td>$103,525</td>
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<tr>
<td><strong>Total Operating Revenue and Support</strong></td>
<td><strong>$20,149,539</strong></td>
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OPERATING EXPENSES

**Program Services**
- International initiatives          $14,674,880
- Meetings                           $1,079,992
- Policy                             $1,530,047
- Legislation                        $754,086
- Membership                         $263,502
- Other                              $199,771

**Supporting Service**
- General and administrative          $1,635,435

**Total Operating Expenses**          $20,137,713

Change in Net Assets from Operations $11,826

NON-OPERATING ACTIVITIES

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<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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<td>Investment income, net</td>
<td>$228,878</td>
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<tr>
<td>Change in net assets</td>
<td>$240,704</td>
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<tr>
<td>Net assets, beginning of year</td>
<td>$4,867,498</td>
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<tr>
<td>Net assets, end of year</td>
<td>$5,108,202</td>
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</tbody>
</table>
ASTA STAFF

EXECUTIVE OFFICE
Andrew W. LaVigne
President and CEO
Libby Hogen-Heath
Executive Assistant

DOMESTIC AND INTERNATIONAL POLICY
Fan-Li Chou
Vice President, Scientific Affairs & Policy
Janae Brady
Senior Director, Government Affairs
Ric Dunkle, Ph.D
Senior Director, Seed Health and Trade
Abigail Struxness
Senior Director, International Programs and Policy
Pat Miller
Director, State Government Affairs
Payton Englert
Director, Government Affairs
Lainey Wolf
Coordinator, International Programs

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Ann Jorss
Chief Operating Officer
Ann Ward
Assistant to the COO

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Bethany Shively
Vice President, Strategic Communications
Vacant
Manager, Member Engagement
Kaitlin Crawford
Manager, Marketing and Communications

MEETINGS & SERVICES
Jennifer Crouse
Senior Director, Meetings & Services