

HIGHLIGHTS REPORT





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Sunday 3 June 2018

OPENING CEREMONY SPEECHES

MR. JEAN-CHRISTOPHE GOUACHE

ISF President

Welcome to the 69th ISF World Seed Congress. It is an honour and a pleasure to open the flagship event of the global seed industry here in Brisbane.

What brings us together this week is seed and the potential it has to change lives. We all know the growing demand for food in the context of climate change and under increasing societal and environmental pressure from all stakeholders. So if how to feed a growing global population is the question, then what is the answer? In a nutshell it's 'produce more with less'. Sounds simple, doesn't it?

Well, it is. Like any system, agricultural production can be seen in terms of input and output. The inputs are manpower, energy, water, fertilizers and chemicals. And the output is crop production. And like any system, more output requires more inputs.

The best – if not the only – way to increase output while potentially reducing inputs, is to improve efficiency. So how do we do that? Well, how we do this is down to the 'Power of Genetics'. In other words, these tiny building blocks of life, these small pieces of DNA, are helping us to produce more with less. It is thanks to innovations in plant breeding that we are able to develop plants that meet the needs of a changing world.

This is the fantastic mission of the seed industry for the coming decades: to produce more with less by unlocking the 'Power of Genetics'.

With change, nothing stays the same. We cannot ignore that many stakeholders are raising questions about the role and the impact of such innovations on agriculture.

With power comes responsibility. And we have to face up to our collective responsibility, as an industry, for the role and the impact of our technology on society at large. Increasingly, companies are recognizing their responsibility to citizens, to communities and to society at large. Now it's time for us to consider this part of our Corporate Social Responsibility.

In previous decades, it was enough to use genetic power to boost efficiency, and we could say "job done" as we handed over the bags of seeds to farmers. Now we have to look at the bigger picture and go beyond this. Now we need to analyse and anticipate the impact of our products, to ensure that agricultural production systems are more resilient and more sustainable than ever before. We are in it for the long-term and it is our responsibility to do so.

Rather than fear this responsibility and consider it as a new constraint, we should face up to it. The power of genetics is in our hands. It is a great opportunity. Yes, the 'Power of Genetics' can deliver on both efficiency and sustainability.

Your Federation, the International Seed Federation, has been very active during the last 12 months. On your behalf and in line with its strategic objectives, ISF is helping to create the best conditions for the seed industry to deliver the 'Power of Genetics'.

Two areas where ISF has been at the forefront of the debate are plant genetic resources and plant breeding innovation.

Last October, I addressed the opening session of the Governing Body of the International Treaty for Plant Genetic Resources for Food and Agriculture in Kigali, Rwanda.

For the third year running, ISF has succeeded in bringing diverse stakeholder groups together in the name of plant breeding innovation. Our aim is to create the conditions for consistent policies worldwide so that scientists and breeders can tap into the full potential of the "Power of Genetics". And ultimately, we can "produce more with less" to meet the challenges of a changing world.

And what better place to be than Brisbane, 'Where Innovation Shines' to underline the importance of innovation in our field?

The International Seed Federation, together with you, its members, will continue to be guided by its strategic objectives so that we deliver to farmers all over the world, through our seeds, the 'Power of Genetics'.

HONORABLE SENATOR MR JAMES MCGRATH

Assistant to the Australian Prime Minister

Thank you and good evening everyone, it is a great pleasure to join you here this evening. On behalf of the Prime Minister of Australia, Malcolm Turnbull, and the Minister for Agriculture and Water Resources, David Littleproud, I am delighted to welcome you all to Brisbane, Australia and to formally declare the 2018 World Seed Congress open.

Minister Littleproud has provided a brief message for this evening:

"It is great to see the World Seed Congress meeting in Brisbane, Queensland. I wish the deliberations all the best. Clearly, the world needs to maintain plant biodiversity if we are to have enough food for the future. I am also delighted that this year Australia has lodged more seed varieties in the Svalbard Global Seed Vault under the Crop Trust. My best wishes for the Congress."

Here in Australia we have a fine history of producing high quality, clean and green fresh produce – and it all starts with a seed.

Australia produces only around 1% of global seed production. For example, Australia is the global leader in Alfalfa (Lucerne) seed exports. However, we are a major exporter of the products that are produced from seed

Australian agriculture is a pillar of the Australian economy and an industry Australians are proud of. Australian farmers are feeding people the world over—and our premium produce is well sought after.

It is a sector that continues to perform year on year and is one of the cornerstones of the Australian economy. In 2016-17 the value of Australian agricultural production exceeded \$60 billion for the first time. The total value of Australian farm exports has increased from \$38 billion in 2012-13 to \$49 billion in 2016-17. It is also the lifeblood of many rural and regional communities.

Agriculture employs more than 300,000 Australians directly and supports many more jobs in related industries. Agriculture supports other related industries—such as transport companies, rural supplies businesses, stock and station agents and the food processing sector. Agriculture provides the employment opportunities and supports the small businesses that keep our country towns ticking. It is for these reasons and more that the government has been such a strong supporter of the sector. For our part, the government wants to drive innovation in agriculture.

The attendees here tonight are the seed professionals from plant breeding organisations large and small from all parts of the globe. Your organisations support the entire food chain, globally and are driving innovation in food and fodder production. You all well know the challenge and opportunity for the global

seed industry the growing world population presents. Global food demand will require a 75 per cent increase in global food production by 2050, compared with 2007 levels. The responsibility for delivering higher yields and more nutritious food rests on the innovation you bring to world food production.

Australia has been a world leader in plant breeding and in particular, innovation in plant breeding. The Australian Government has a robust regulatory environment that supports plant breeding innovations through the Plant Breeders Rights legislation. This framework is aligned with the 1991 Convention of the International Union for the Protection of New Varieties of Plants and offers a pragmatic approach to biotechnology via the Office of Gene Technology Regulator.

I would like to recognise a couple of Australian plant breeding initiatives that are meeting the challenge of global food demand and assisting the global community.

This first is the cereal rust disease breeding innovations at the University of Sydney, Plant Breeding Institute based in Cobbitty, New South Wales. This institute is the world leader in disease strain identification and plant variety development to produce resistant varieties.

The second is an initiative called Plant Breeders without Borders first conceived by its founder Anthony Leddin back in 2003. This programme has now been supported by the International Seed Federation and Bayer and with this support Plant Breeders without Borders is set to become a major new NGO (non-government organisation) assisting third world and developing countries.

I look forward to hearing about the work of these initiatives and the contributions to food security, health and nutrition they will make to the communities they work in.

Here in Australia the government is encouraging innovation and supporting business to invest in world leading research and development including through:

- Providing funding to the Australia's agricultural research and development corporations to match grower levy contributions;
- Our strong biosecurity framework;
- Providing grants for new export initiatives under the Export Market Development Grants Scheme;
- Our membership of Plant Health Australia the national coordinator of the government-industry partnership for plant biosecurity in Australia; and
- Red tape reduction for business and incentives such as the research and development (R&D) tax offset.

I would like to briefly focus on our biosecurity framework and recognise that your industry works closely with our government regulator to support the efficient and clean trade of seed. Global trade in seed is increasing and will need to grow to meet demand over time but it does bring risk of spreading disease. Our regulator will continue to work with you to harmonise the international production and movement of seed as part of the International Plant Protection Convention. I acknowledge the effort taken by the industry to ensure the quality of the seed it produces and that you do recognise the imperative to work more closely with regulators around the world to facilitate the safe movement of clean seed. This action will not only ensure more profitable and productive agricultural production it complements and will enable the 'plant breeders without borders' program.

I am pleased to note that the Australian Government Department of Agriculture and Water Resources is convening a companion workshop to the Congress titled, 'The International Clean Seed Pathway' on 7-8 June 2018 here in Brisbane. The objectives of the workshop are to provide a forum for seed producers and users, importers, exporters, researchers and regulators to discuss the concept of an integrated system pathway approach for regulating the phytosanitary health of seed, and to promote and enhance global movement of clean seed pathways to assist in the reduction of disease transmission.

The workshop will enable the sharing of experiences, expertise and perceptions among all areas of the seed industry, and aims to assist in providing a more predictable supply chain that is free of disruptive trade barriers. I look forward to hearing of the outcomes.

But before that there is a lot of discussion, learning and networking to be done here at the Congress over the next few days. I congratulate the organising committee for the development of a great program. I wish you a very productive and successful World Seed Congress 2018. Thank you and good evening. **

MR. DONALD COLES

Chair of Australian National Organizing Committee

It with great pleasure that I welcome you to the 2018 World Seed Congress. Most of you have travelled a very long way to come to this event, and we would like to thank you for making the effort to attend.

Australia produces approximately 1% of world's seed. At most World Seed Congresses about 1% of attendees come from Australia. At this Congress, over 10% of registered attendees come from Australia. This is our seed professionals' way of providing you with the welcome you deserve.

All peoples of the world have their own way of welcoming you into their country. You may well have already been welcomed by an Australian. They will almost certainly said "hello friend" but that is not what you would have heard. What you heard was something quite different. Instead of "hello friend" you would have heard "q'day mate".

While you are here you may also hear a number of other words preceding the word 'mate' such as 'good on ya mate', "ripper mate", "beauty mate", "take it easy mate", and "have a good one mate". For 90% of you who have no idea what I just said, don't be concerned. At this Congress you have over 100 new 'mates' who are here and ready to help interpret. The task of the Australian delegates is to make your time in Australia as enjoyable as possible.

Another important tip for your time in Australia is how to order coffee. Apart from our wine, coffee is our most important beverage. If you want coffee with milk you ask for a "flat white". If you want a white coffee with extra froth on top order a "latte". If you want coffee with some chocolate on top you order a cappuccino. If you want a black coffee order a "black coffee". If you are lucky you will get some coffee art as well.

I wish to thank all those that have put so much effort into making this congress a success. Firstly, the members of the National Organizing Committee: Brenda Dossey, John Brown, Nick Gardner, Steve Brill, Robert Hedge, Michael Leader, Bill Fuller and especially Alysha Lockley. Others that gave their time were Tamara Hedge, Elizabeth Coles and Rowena Petrie.

Thank you all and welcome to Australia! "

MR FRANCK BERGER

Chair of French National Organizing Committee

On behalf of the French National Organizing Committee, may I express our appreciation for the opportunity to host the next ISF World Seed Congress in Nice.

May I also assure you that there is nowhere else in France that is better suited to a springtime conference than Nice.

Situated on the world-famous French Riviera, Nice is a colourful city that has inspired artists and writers for centuries. Nestled between the Mediterranean Sea and gentle mountains, Nice enjoys 300 days of sunshine a year. Master painters like Matisse have captured its special light and atmosphere in their artwork. You will also discover a surprising mix of architecture – including Roman remains, baroque buildings and Russian influence.

The Congress will be hosted in Palais des Expositions – Acropolis, a world-class venue just minutes from the old town, where all events will be under one roof.

We invite you to join us in this inspirational setting "Where Knowledge Flows". You will feel the passion of French seed makers for creating, applying and sharing knowledge when you come to Nice.

With over € 3 billion of global turnover generated each year by the French seed industry, half of it exported, our country ranks among the world leaders. More than 70 national and international companies are actively breeding on French soil, investing 13% of their turnover in R&D activities.

The French seed sector employs over 15,000 people in more than 250 locations scattered all over the country. Close to 20,000 farmers are engaged in seed multiplication: maize, wheat, barley, sugarbeet, rapeseed, forage crops, potatoes, and a host of vegetable seed crops are grown on over 400,000 hectares.

To find out more, visit the World Seed Congress booth and say "Bonjour" to us this week. There is a little gift waiting for you that is sure to brighten up your day. We can even help you make your plans for a fabulous trip to France next June.

We are counting on you to bring your passion for seeds, your desire to share and your thirst for knowledge to Nice. And your sunglasses. Trust me, you will be truly dazzled! **

MR. MICHAEL KELLER

ISF Secretary General

G'day dear delegates! Welcome to wonderful Australia and the great city of Brisbane. What a pleasure to welcome so many of you 'Down Under'. I would particularly like to emphasize the high level of participation of the Australian seed sector. Donald (Coles, Chair of the Australian National Organizing Committee) just mentioned that Australia is a small market. But seeing so many new delegates from your country, not only shows the interest in engaging internationally, but also the dynamics of your seed sector. I would like to ask all Australian participants to stand up so we can give them a big round of applause for welcoming us here in their country, and at the same, on behalf of ISF, to say thank you to the National Organizing Committee for the great cooperation!

As we have gathered here in Australia under the banner 'Where Innovation Shines', I would like to mention the outstanding Aboriginal proverb "Those who lose dreaming are lost" to underline the spirit of our industry. Since the beginning when farmers started to specialize themselves into breeders several centuries ago, we are not only permanently innovating, no, we are continuously pursuing our dream to make best seed solutions accessible to farmers.

It was easy to choose this year's theme for Brisbane as many important agriculture innovations originated here, from the world's first mechanical grain harvester in the late 18th century, to more recently, the first gene shears. Yes "Made in Australia" is well known.

Therefore, perhaps it is not a surprise to have over 1250 participants, 49 booths, 20 meeting rooms, over 200 reserved trading tables and 16 international organizations. I would like to thank Australia by using one of your local sayings: "Oh Australia, you little ripper, ay" (non-verbal translation – "Australia you are so wonderful"). I added an 'ay' as in Queensland very often you will notice that this is added to any sentence... don't be surprised! "Hope she'll be apples" – means hope everything is clear for you!

Our sector is an innovative sector and we will not stop. At the same time I would like to dedicate my talk today to the importance of the work of seed associations at all levels: national, regional and international. Yes, indeed an innovative sector needs powerful associations to maintain our freedom to operate. But how can 'we' and 'you' know that an association is powerful? I would like to use a well-known framework in the business world, developed by consultants to assess the efficiency and alignment of a company's activities.

Let's call it 'the 5S's' – **s**hared values and vision, a common **s**tory, a well-functioning **s**tructure, **s**trategic objectives and **s**takeholder engagement.

Let us start with our shared values. In 2014 we all agreed that they are based on innovation, sustainability, integrity and collaboration. These 4 pillars are equally important to build not only trust between us, but also to show our partners how we function to move forward together! But there is one thing we are dreaming together. Our will expressed in our joint vision: "A world where quality seed is accessible to all, to support sustainable agriculture and food security". How can we dream without a vision?

Without a story, vision and values are weak. At the international level, the seed sector has a long story to tell. For almost 100 hundred years we have promoted the movement of seed around the world and you know, I know how much our industry has changed since then. Nevertheless, we are continuing to work together and we will celebrate our hundred year anniversary in 2024 when we will tell our story, the wonderful story of the seed sector, again.

Our story is also flagged by persons who have not only developed their business by creating seed markets and promoting innovation, but also by people who have supported the work of associations at national and international level. These people always found the time besides doing business to actively participate in association life, those who recognized the added value of working together. In the presence of their children, who are continuing the work of their fathers, I would like to pay tribute to two honorary life members who paved the way our way and who left us recently.

Manmohan Attavar and Badrinarayan Barwale are two Indian leaders I would like us to honour with a round of applause.

However, we need more S's, and this one is crucial for me: Structure. Our association needs a clear structure, allowing all of you to participate to give ISF the right to be your voice of the seed industry at international level. The national seed associations more than ever in these times of changes are vital, they are not only the bottleneck for ISF when it comes to nominations in committees and sections, no they are much more as they promote your interests as your voice at the national level. ISF structure is very representative with national seed associations from 58 countries who are represented by 250 representatives in our committees, sections and working groups. ISF organizes over 200 physical and non-physical meetings to build our common positions! However there are gaps in some regions and there are changes in the sector and I would like to urge you all to take into account the importance of these associations for your business. Please continue to support them. Because when it comes to the outreach on our strategic objectives, we need national and regional associations joining forces to be powerful at each level. Let us continue to coordinate and cooperate together.

All this is fine but if you have no strategic objectives and priorities you can easily get lost. This is why ISF has set its sights key clear topics: Plant Breeding Innovation, Movement of Seed, Genetic Resources, and Intellectual Property Rights. I remind also our guests, without the possibility of incentives no innovation is possible.

Our World Seed Congress here in Brisbane is another step forward as we will aim to adopt eight position papers.

- 'Consistent science-based criteria for plant breeding innovation'
- 'Illegal seed practices a threat to farmer livelihoods, food security and sustainable agriculture'
- 'Global Multilateral Benefit Sharing Mechanism'
- 'Digital Sequence Information'

- 'Supporting seed choice for farmers'
- 'Clarification: Farmers' Rights and farmers' exemption'
- 'The seed industry engages to combat child labour'
- 'Movement of treated seed'

To be able to bring the best quality seed for sustainable agriculture and climate change, as ISF President JC Gouache previously mentioned, our sector needs to make the power of genetics accessible. Therefore we need consistent science-based regulation using the criteria developed by ISF. I will not mention all the work accomplished by ISF as I hope you will all read the Outcome report in the Congress program, however, I would like to insist on the importance of communication efforts at the national level like the American Seed Trade Association (ASTA), or the regional level like the European Seed Association (ESA), and all our joint efforts in contributing to explain what we are doing, why are doing it and for whom we are doing it. We are coordinating our efforts with partners around the world to speak with one voice. We continue to engage with grain traders and stakeholders across the value chain. Partnering is key pillar for success! This engagement is a priority for the coming months. In addition, our continued engagement at the national level between members, regulators and partners is of paramount importance.

We are here in Brisbane to trade, and I know that most of you are here to conduct a crucial component of your annual business. Here, I would like here to address the importance of ISF engagement against illegal seed practices which is a threat for our whole industry and your businesses.

Our shared goal is quality seed for farmers. We are not looking to sell crap to farmers which could risk their livelihood or our whole business model.

I am more than happy to welcome the World Farmers Organisation here and I was very pleased to participate earlier this week in Moscow at their General Assembly where I presented our objectives to support seed choice for farmers. It's up to them to decide what they think is best, but at least they know the options.

To allow choice, seed is increasingly moving around the globe. Yes, a variety needs to be locally adapted, but seed movement around the globe from research to commercialization is a reality. This is why we need to implement the international standard of phytosanitary measures. Science-based regulations are key. ISF is supporting with training manuals and explanatory notes the efforts of your national seed associations in the discussions on implementation which have to happen at a national level – this will occupy our attention during the coming months. Additionally, I would like to mention in the presence of the honourable Senator McGrath that ISF welcomes the initiative of the Australian government to organize a workshop on clean seed corridor which is in line with ISF work on a system approach for a harmonized pest risk management after our ISF World Seed Congress. Let's continue to join forces and continue our industry's endeavours to provide healthy seed to farmers, and to prevent pests from coming into countries.

In the presence of the Crop Trust executive board Chair, Tim Fischer and the Secretary of the International Treaty on Plant Genetic Resources for Food and Agriculture, Kent Nnadozie, I would like to re-emphasize the importance of conservation, as well as the access and use of genetic resources. We need to be able to access and use genetic resources to continue to unlock the potential of genetic resources. In 2017 the seed sector demonstrated an important commitment to "To build an Access and Benefit Sharing (ABS) system for genetic resources under fair and business friendly conditions". More than 40 seed companies are ready to subscribe to the multilateral system under fair conditions, which the seed sector continues to discuss and debate. Nevertheless, we were still not able to make significant progress, but count on us that the sector will be supporting and contributing in future!

We are not only engaging as a stakeholder at international level with the Crop Trust or the International Treaty for Plant Genetic Resources for Food and Agriculture. No, we are also your voice at UPOV, OECD, World Bank, FAO, IPPC, CBD, WIPO, international chambers of commerce and ISTA. We are spending a lot

of energy preparing seed positions and in attending the many meetings taking place every year in the different regions of the world. I urge all of you to continue to coordinate so that we can be united in our outreach. We cannot do it alone!

I would like to end my speech on the work of the World Seed Partnership composed of UPOV, ISTA and OECD with the World Farmers Organization as an advisor. It is great to see all of you present here. Together we are aiming to be the focal point for the harmonization of seed systems to make improved quality seed accessible for farmers. But one point is more important when you look at this map showing where all four partners are present, and overlay it with the world hunger map of 2015. You can see that something is wrong. With some exceptions, where seed systems exist or are emerging, hunger is not a major issue. Elsewhere, in other countries hunger is an issue. For sure we are not the only solution in the battle against hunger, but we would like to make a contribution to global food security. Therefore ISF will continue its multi-stranded engagement on food security and sustainable agriculture.

Seed is Life. "

O HIGHLIGHTS OF OPEN MEETINGS

Monday 4 June 2018

BREEDERS COMMITTEE

Attendance: 147 participants

Chair: Usha Zehr

Update: ISF Plant Breeding Innovation Working Group

Presenter: Bernice Slutsky, Chair, ISF Plant Breeding Innovation Working Group

Bernice presented the strategy on policy, communications and engagement with other organizations including the International Grain Trade Coalition and Crop Life International. In term of policy, the focus is still on trying to find clarity in national regulations around plant breeding innovation. The ISF concept paper 'Consistent, science-based policies for plant breeding innovation' was the basis of the discussions at the third brainstorming meeting in December 2017 in China attended by officials from 13 countries. The concept paper has been developed into a position paper, which is proposed for adoption during the World Seed Congress 2018. The position paper will form the basis of outreach by national seed associations alongside existing communication materials including a Discussion Guide, PowerPoint presentation and infographics.

Update: ISF Sustainable Agriculture Committee

Presenter: Anke van den Hurk, Chair, ISF Sustainable Agriculture Committee

Anke outlined the diversity and complexity of biodiversity legislation. Discussions around the enhancement of the multi-lateral system are ongoing, as no agreement has been reached by the Governing Body of the International Treaty on Plant Genetic Resources (ITPGFRA) for Food and Agriculture. The hardest part is managing the expectations of the different parties around the negotiation table. Increasingly, people are calling for the scope of material under Access and Benefit Sharing (ABS) obligations to extend beyond the genetic resources themselves, to include Digital Sequence Information (DSI).

Anke announced the development of a new online tool to help breeders in the first steps of ABS regulations when accessing genetic resources.

Update: Intellectual Property Committee

Presenter: Stephen Smith, Past Chair, ISF Intellectual Property Committee

Stephen highlighted the outcome of the survey, conducted in 2017 to allow ISF members to report their level of satisfaction with the current IP system and identify future needs. It appears that there was no call for a major change in the IP system, but rather a need for the full implementation and enforcement of the UPOV 1991 Act within individual countries. ISF will drive initiatives to promote the UPOV system and IP protection in general.

Stephen provided an update on the current IP discussions within UPOV, including EDV (Essentially Derived Varieties), and the interrelationship between UPOV Convention and the ITPGRFA. The PRISMA tool (PBR online application tool) was launched in 2017 and is available for free until the end of the year thanks to a donation from ISF.

The ISF Illegal Seed Practices Working Group is focusing on obtaining more information on some key countries to help build an adapted regulatory framework, awareness on relevant case law, better enforcement policies and tool boxes for their members facing illegal seed practices. A poster was displayed around the trading floor of the Congress to raise traders' awareness of the impact of illegal seed practices.

Panel discussion: 'The future face of the seed industry'

Moderator: Shawn Brook, President, Issues Ink

Panellists:

• Tim Fischer, Excecutive Board Chair, Crop Trust

Tim, who has been involved in both the Svalbard Genebank and the Australia Grains Genebank, said his passion lay in the survival of planet earth and seeds for the future. He truly believes that the future of agriculture is about a template of precision in almost every facet possible: from plant and seed production, to livestock, and beyond. His message toward the seed industry is to get more precise and smarter especially in plant breeding activities.

• **Ruaraidh Sackville Hamilton,** Head of the Genetic Resources Center at IRRI (International Rice Research Institute)

Ruaraidh highlighted that challenges such as population growth and climate change require us to be more flexible, inventive and agile than ever. Fortunately, advances in genomics, and robotics give us new technological opportunities to do so. We – genebanks, breeders and the seed industry, in the public and private sectors – need to change our way of working with the raw material conserved in gene banks. We need to forge closer alliances to unearth the variants conserved in the genebanks that will help address the challenges ahead. At the same time, new technologies and opportunities bring new policy and regulatory environments which may hinder progress if we get it wrong.

• Sayed Azam Ali, CEO of Crops for Future

Professor Ali explained that Crops for the Future is a research organization looking at how expertise and technologies can be leveraged to accelerate improvements in the many promising but currently underused crops that have the potential to feed humanity in future climates. He underlined the importance of engaging the whole value chain around seeds to find the right solutions for tomorrow. Special attention should be given to use all types of land on a more substantial scale, especially those which are not normally used to increase food production. Thanks to new technologies and innovation this will be possible in the near future.

• Marc Cool, Seed industry representative

Marc emphasized the role of information in the coming decade, both on a macro and micro level. This is already visible today with the multiplication of data sharing and discussions around the new opportunities that blockchain will bring, still to be discovered. This is an exciting new era where the roles will be redefined. Thus it is important to mentor and train today future generations who will take the lead with new tools. This is an important step to a successful future in agriculture.

Tuesday 5 June 2018

PHYTOSANITARY COMMITTEE

Attendance: 113 participants

Chair: Rob Keene

Systems approach – an innovative option to facilitate the safe international movement of seed

Presenters: Merel Langens, Tom Moore, Luigi Paglia

• Merel Langens, Global Manager Industry Affairs, Bayer

Merel described the complexity surrounding the movement of seed prior to sharing the benefits for both seed providers and governments to rethink the current process of consignment by consignment phytosanitary certification. ISF Systems Approach Working Group (WG) has been pursuing the ISF vision of "one globally-accepted systems approach that serves as an alternative to existing pest risk management options to secure phytosanitary certification for the international movement of seed". The key to success will be to collaborate and coordinate across NPPO initiatives taking place in various countries and regions. Following a successful meeting with country experts in Rome, the WG is planning to raise awareness among NPPOs and seed associations, develop a five-year strategic plan, and plan for a second country expert meeting.

• Tom Moore, Small Seed Production Manager, HM Clause

Tom provided an update on the systems approach activity in the US (ReFreSH). APHIS looks to further the development of the program with an accreditation standard by mid-2018 and a pilot by the 3rd quarter. ASTA plans to attend the second ISF country expert meeting along with their country expert.

• Luigi Paglia, Assistant Director of Plant Import Operations, DAWR Australia

Luigi spoke of the Australian activities relating to systems approach from an NPPO perspective. Luigi highlighted the key concepts and assumptions that are being discussed. Luigi presented the goals of the Australian Systems Approach workshop: to agree on the concept, map out next steps for development, and determine a strategy for international adoption and program governance.

Panel discussion: 'ISPM 38 implementation – progress at the national level'

Moderator: **Gerard Meijerink,** Director, GAAM Meijerink Consultancy

Panellists: Michael Leader (Australia), Isabel Bezuidenhout (South Africa), Gabriela Andrade (Brazil)

Gerard gave an overview of ISPM 38 and emphasized the importance for countries to implement the standard. Gerard urged national seed associations to take action and collaborate with their National Plant Protection Office (NPPO) on implementation.

Panellists provided information on the national activities taking place. A common theme was the important relationship between an NPPO and the seed association. Examples highlighted illustrated the benefits experienced by both parties through fruitful collaboration. When asked for advice for NSAs, panellists emphasized the need to establish routine meetings with the NPPO, and to view the new standard as an opportunity to meet with their NPPO and build a relationship.

The International Year of Plant Health 2020

Presenter: Viliami Kami, Ministry of Agriculture, Food and Forestry of Tonga

Viliami introduced the International Plant Protection Convention's (IPPC) efforts to promote 2020 as the International Year of Plant Health (IYPH). Viliami expressed the goal of IYPH to "raise awareness of the importance and impacts of plant health in addressing issues of global importance, including hunger, poverty, threats to the environment, climate change and economic development." Expressing gratitude for ISF's contributions to the IYPH Steering Committee and for raising awareness of this event, Viliami concluded with the ISF vision statement and the shared goal of the IPPC and the seed industry to promote plant health.

ISF view on indirect seed health tests

Presenter: Frank Claessens, Managing Director Operations, Bayer CropScience Vegetable Seeds

Frank provided background on the paper as well as a clear description of the difference between direct and indirect seed health test methods. He then followed with industry recommendations on how to interpret the results of both direct and indirect test methods, which has significant impact on both seed lots and seed movement. Frank concluded with the new guidance of the paper on how to use polymerase chain reaction as a pre-screen, as well as on development criteria to ensure method accuracy.

TRADE AND ARBITRATION RULES COMMITTEE

Attendance: 87 participants Chair: **Hamdi Ciftciler**

Latest trends and keys to arbitration

Presenter: Michael Keller, ISF Secretary General

Michael reminded the audience that ISF has supported the harmonisation of terms of commercial procedures and followed Procedures for Dispute Settlement for 90 years. Both provide the sector with sound guidelines and standards for preparing a contract that can handle the steps of a commercial transaction, or discrepancies in the characteristics of seed being traded. Michael emphasized that arbitration is the last resort, and that all actors should take into account mediation and consultation opportunities. But if it comes to arbitration, arbitration is not a simple formality. All parties need to take an active role and contribute to the arbitration process. Arbitration is binding and enforceable and cannot be challenged if a case is lost. ISF guarantees the neutrality and efficiency of its arbitration system which has a proven track record.

Illegal seed practices: A priority issue for ISF

Presenter: Antonio Villarroel, Chair, ISF Illegal Seed Practices Working Group, Secretary General of ANOVE

Antonio informed delegates about the ongoing collection and exchange of data and information, and the work on better understanding the reasons behind the malfunctioning of intellectual property (and certification) systems. He emphasized the importance of sharing experiences and success stories –

namely, writing and promoting best practices amongst members and education efforts in terms of raising awareness. Highlighting reasons for infringements related to cultural and social factors (e.g. traditional practices, a lack of awareness or appreciation of plant breeders' rights), Antonio also attributed illegal seed practices to economic recession in some low-risk countries for infringers.

Based on the outcome of the survey showing the variety and scale of infringements worldwide, country-specific task forces will be appointed to check existing infringements catalogues, relevant case law and enforcement loopholes. This will inform the development of good practice guides, including recommendation and preventive measures, to support the development of communication tools for ISF members. Final measures to facilitate future enforcement are also on the task force agenda.

How to build engagement in the fight against illegal seed practices

Presenter: Antonio Villarroel, Chair, ISF Illegal Seed Practices Working Group, Senatory General of ANOVE

The infringement of plant breeders' rights (PBR) is widespread in Spain, particularly in cereals. Antonio presented the action taken in Spain by Geslive a subsidiary of ANOVE towards the protection and defence of PBRs by organising inspections, enforcement and legal proceedings. Antonio described the police training delivered by Geslive to increase awareness and knowledge of the industry. As a result, over 530 law proceedings were launched by Geslive and hundreds of administrative denouncements followed. The first workshop was organized in collaboration with EU IP Office and the University of Alicante with more than 50 judges. This resulted in new collaboration agreements with farmers unions and growers, as well as exporters, associations, and universities. A key focus is placed on communication via open field days to politicians, authorities and media.

Outreach and communication efforts in Argentina on illegal seed practices

Presenter: Maria Anon, Secretary General, Cámara de Semilleristas de la Bolsa de Cereales (CSBC)

Maria described the communication campaign launched by CSBC in 2018 (Pasture Sowing 2018), targeting beef cattle farmers and dairy farmers to illustrate how the seed industry adds value to production and meets their challenges and needs. With a slogan "Sow Legal Seed" and hashtag #SowLegalSeed that were used as part of an awareness-raising campaign on the benefits of plant breeding, informative messages were transmitted in all CSBC's public presentations. CSBC also increased engagement with the ministry of Agro-Industry and the National Seeds Institute (INASE) to improve the legal systems and enforcement.

The spread of illegal seed practices in vegetables in Asia and rights holders' responsibilities

Presenter: Casper van Kempen, General Director of the Anti-Infringement Bureau

Casper highlighted the work of the Anti-Infringement Bureau in raising awareness of intellectual property and illegal seeds through an expert network providing training and enforcement services to help members address suspected illegalities.

Focusing on Asia, he pointed out that parental lines stolen worldwide end up in Asia for seed production, and there are dozens of cases reported each year of sales of 'unauthorized reproduced hybrids'. There are also a few cases of blockbuster varieties being 'hijacked', resulting in major market disruption. Referring to the study by the Global IP Center, he raised awareness of the weakness of IP laws, the lack of enforceable framework of IP laws and regulations, noting that the protection of trade secrets is weak in many countries.

He urged companies to take proactive measures to prevent rampant trade secret misappropriation by a supply chain security, and the use of the APSA-ISF 'Good practices vegetable seed production'. Overall, there is a need for technical training of enforcement agents and public prosecutors and judges, and breeders should support their employees in following up infringements, and building internal reporting structures to increase internal capacity when illegality is suspected.

VEGETABLE & ORNAMENTAL SECTION

Attendance: 99 participants Chair: **Vicente Navarro**

Bee pollination of vegetables hybrid seed production: ISF Guide

Presenter: Amit Einav, Deputy CEO, Hazera Seeds

Amit reminded participants that pollinators are vital to agricultural production. Approximately 30 percent of the food and fibre crops grown worldwide depends on pollinators for reproduction. The fruits and seeds from these crop species provide 15 to 30 percent of the foods and beverages consumed by humans.

In cooperation with international pollination scientists, the ISF Working Group Vegetable Seed Production has developed a practical protocol to improve pollinator management practices for the seed industry and farmers worldwide. The paper introduces common terminology to assist farmers and beekeepers with clear and transparent communication. Additional content for the guide could include bees and the pollination environment protection, chemical hazards to bees and/or pollination, and innovations such as bee breeding and bee affinity.

International Seed Testing Association: An update

Presenter: Craig McGill, President of the Executive Committee, ISTA

Craig provided an overview of the history, structure and decision making process of International Seed Testing Association (ISTA), which was founded in 1924, the same year as ISF (formerly FIS). At ISF's request, ISTA adopted the first 'International Rules for Seed Testing', as well as establishing the ISTA Certificates Scheme.

More recently ISTA has developed an International Seed Sampling Template. This document may be used when Accredited Laboratory and Accredited Sampling Entity are not the same, or when the sampling location is far from the laboratory. ISTA is conducting a study to determine the feasibility of electronic certificates, which will be beneficial for the seed industry.

Craig highlighted the achievements of the joint Working Group Vegetable Seed Industry that was established to identify the challenges for the vegetable seed industry in terms of ISTA sampling and testing rules, and to develop possible solutions.

Guide for Maintaining Plant Genetic Integrity of Conventional Vegetables

Presenter: Franck Berger, President of UFS, French Seed Association

The recent GM Petunia case was a reminder for the vegetable seed sector of the importance of implementing quality management measures to avoid adventitious presence (AP) of GM traits in conventional seed lots. Franck gave an overview of existing ISF tools (GM Database and the Guide) that can provide ISF members with useful information to establish their quality management systems.

Frank illustrated how the Guide can help identify where resources need to be deployed to better control the risks, for example, prioritizing the vegetable crops that are at higher risk of AP and the measures needed to mitigate high risk level.

Innovation with a purpose

Presenter: Vicente Navarro, Chair of the Vegetable & Ornamental Section

People who work in the seed industry are very well aware of what to do and how to do it. However, the question of the purpose of our work is usually more difficult to answer. Vicente used the UN Sustainable Goals study to demonstrate the purpose of the seed industry. The food system (and seeds) are integral to the health of people and the sustainability of the planet, therefore our noble purpose is to provide sustainable and nutritious food to the global population. This is only possible if the industry have access to the latest innovation and can maintain its licence to operate.

Australia: Punching above its weight

Presenter: Steven Roberts, Business Manager Oceania, Rijk Zwaan

Steven outlined the diverse features of the Australian vegetable seed markets, highlighting the multiclimate zones and the coastal location of seed and vegetable production areas. The value of the vegetable seed industry is \$150m, but 75% of the seeds are imported. There is huge growth potential as the population is predicted to double by 2050 and only 7% of the population eat enough vegetables. As regards the future of the seed industry, there are opportunities, such as the counter season production, but also threats, including biosecurity challenges.

Pressures and emerging food market trends and what that means for seed supply chains

Presenter: Martin Kneebone, Managing Director, Freshlogic Pty Ltd

In his eye-opening presentation Martin highlighted the challenges of the seed sector from the food market perspective. Nowadays, consumers assess value in more complex ways. They have a desire to understand where food is coming from and how it is produced and are willing to pay for convenience. As a consequence, there is a growing pressure on conventional retailers. Martin listed the challenges that he thought would reshape the retail industry and impact its suppliers, including the seed industry. More new food distribution channels are gaining momentum, which is challenging to service, but can provide ways to acknowledge new product attributes. There is acute pressure to find packaging solutions that make better use of what is currently produced to reduce waste.

Wednesday 6 June 2018

FORAGE & TURF SECTION

Attendance: 93 participants Chair: **Darrell Dziver**

Overview of the Australian forage and turf market / The role and initiatives of the Australian Seed Federation

Presenter: Bill Fuller, Chief Executive Officer of the Australian Seed Federation

Bill described the Australian agricultural context where there are 134,000 farm business which are 99% family-owned. The most important seed value lies in vegetable and temperate seed pasture. Amongst the pasture seed, half of the production volume is represented by perennial ryegrass and annual ryegrass. Seed production mainly takes place in the south of the country with the exception of tropical grass and legumes in the north.

Bill presented the Pasture Trial Network and other initiatives put in place by the Australian Seed Federation: Code of Practice, 'Know Before you Sow' (training and education on using certified seeds), and the 'Smart from the Start' checklist (for farmers to use certified seeds).

Forage and turf latest breeding methods in Australia: Commercialization and regulatory status

Presenter: **David Hudson,** Managing Director SGA Solutions Pty. Ltd.

David explained the role of innovative technologies in accelerating productivity gains in grassland based livestock production systems in Australia. After providing an overview of the Australian grassland based livestock production systems, David presented the challenges of the coming years due to climate change and resource pressure.

Innovation will be the key to addressing some of these challenges. However, regulations do not always encourage innovation. In Australia, new draft regulations on indicate that organisms modified using site-directed nucleases without templates to guide genome repair (i.e. an SND-1 approach) would not be regulated. Oligo-directed mutagenesis and SDN-2 and SDN-3 would, however, be regulated. Moreover, some RNAi use is to be exempt from regulation as well but would require a licence to undertake any dealings that use gene drives.

Nothing is impossible

Presenter: Corné van Beers, Project Manager Breeders Trust

Corné, Project Manager, Breeders Trust, introduced its mission to contribute to the reduction of illegalities and infringements of Plant Breeders' Rights in the potato seed and grass seed sector. The organization aims to stop crooks in the grass seed chain worldwide. By establishing a global network and regular contact with national authorities such as phytosanitary services, seed inspection agencies, anti-fraud agency, Breeders Trust is analyzing statistics and seed flows to target illegal practices. It is also conducting testing programs to bring evidence before the national authorities. Corné encouraged participants to share information with the Breeders Trust about illegal activities.

Latest developments in UPOV

Presenter: **Peter Button,** Vice Secretary General, UPOV

Peter presented the latest UPOV statistics. Currently 75 countries are members of UPOV with Bosnia-Herzegovina as the newest member. Brunei Darussalam, Myanmar, and Guatemala are under review.

Peter highlighted a study on the impact of the Plant Variety Protection (PVP) system in Vietnam since 2006 which shows an annual land productivity increase due to plant breeding (rice 1.7%, corn 2.1%, and sweet potatoes 3.1%). For more examples, videos are regularly posted on UPOV website providing data on the benefits of UPOV.

Peter also presented PRISMA, the new tool that UPOV developed for breeders to apply for PVP protection online in various countries.

FIELD CROPS SECTION

Attendance: 96 participants Chair: **Nigel Moore**

Australian Grains Industry

Presenter: Neil Comben, Business Manager, Advanta Seeds

Neil provided an overview of major crops cultivated in Australia, trends in yields and the main drivers of production. The weather has a major impact on Australian crop production causing significant fluctuations in the volume of harvest. It is not by chance that the golden rule of Australian cropping is: "Be prepared! If the ideal is not possible, move quickly to the next best option". As regards the breeding sector there's a continuous transition from public to private breeding in certain crops especially since the end point of royalty collection was established.

How the seed sector can contribute to food security, farmers' livelihoods and resource conservation

Presenter: Jonathan Brooks, Head of Agro-Food Trade and Markets Division, OECD

Jonathan started his presentation with a statement: "Productivity growth and innovation will be essential in future agriculture – plant breeding has an important role to play". Historically, yield growth was mainly achieved through the increased use of inputs, such as fertilisers. However, nowadays in many areas, additional yield gain is increasingly the result of better varieties. Successful plant breeding requires both private and public efforts. He stressed that the key is ensuring access to quality seeds for all, but acknowledging that any source of productivity growth (including high quality certified seeds) will create adjustment challenges for low income resource poor farmers. The seed sector can underpin agricultural productivity growth. This in itself will contribute to the more sustainable use of natural resources.

COMESA Seed Harmonization Program (COMSHIP) Status

Presenter: John Mukuka, Seed Development Expert, COMESA

John introduced the COMESA organisation to the audience and gave a short update on the status of country implementation of a harmonised seed system, since dialogue started in 2010. After the adoption of the common set of rules, the Seed Harmonisation Implementation Plan (COMSHIP) was put in place. Since the COMESA variety catalogue was established, six companies have registered 40 varieties.

There is still a lot to do since not every country implemented the regulation fully. John Mukuka highlighted the need for further seed sector support to improve the COMESA members institutional and infrastructure capacities.

End Point Royalties in Australia

Presenter: Nik Hulse, Chief of the Plant Breeders Rights Office, IP Australian

Nik summarized the legal aspects of the End Point Royalties (EPR) and gave an insight into how the system works. An EPR is an industry-driven royalty payment system that occurs later in the production cycle. The royalty payment is based on production, and established by a contract. The Plant Breeder Rights (PBR) Act provides the legal basis that makes EPR possible.

EPRs are generally accepted by major growers as an equitable and economically viable PBR value capture mechanism. This is an alternative to seed royalties which cannot capture sufficient resources to adequately sustain plant breeding activities. Australian major field crop breeding programs, including wheat, barley, canola (open pollinated) are now reliant on EPR income for survival. Farmers benefit by sharing the risk with breeders.

SEED APPLIED TECHNOLOGIES COMMITTEE

Attendance: 106 participants Chair: **Klaus Schluender**

Update on regional restriction on active ingredients

Presenter: Meike Fischer, Global Strategy Lead SeedGrowth, Bayer

Meike highlighted the impact of neonicotinoid restrictions due to the increasing trend of zero risk mentality. An overview of the EU decision on 27 April to further restrict neonics was provided along with the timing for implementation. This EU decision followed a very conservative and cautionary approach that does not consider the benefits of the productions in question.

Meike also informed participants of the US review of neonics that is anticipated to be completed by 2019, as well as the reviews in Canada that are expected to be completed by 2020. Meanwhile, Brazil is working to re-evaluate neonics throughout 2018 and 2019. Throughout APAC, authorities are closely following developments in the EU and North America.

Meike underlined the importance of active engagement with regulators and key stakeholders to drive science based decisions. To counter emotional statements against the use of neonics that are currently influencing the decision-making process, Meike urged that existing, effective product stewardship be made more visible to regulators, as well as increased efforts to generate data and develop simple, clear messaging to support it.

Status of bee health in Australia in the absence of the varroa mite

Presenter: Dr. John Roberts, Research Scientist, CSIRO

John provided an overview of the beekeeping industry in Australia and the multiple factors influencing bee health, including environmental stressors, pests and pathogens, as well as genetic diversity and vitality. As high colony losses are not experienced across all countries, John presented a unique view of Australia as a country where neonics are present, but the varroa mite and deformed wing virus (DWV) are not. Under these conditions, bee health is comparatively good despite exposure to plant protection products and poor nutrition during pollination. To reduce stress and promote resilience, John emphasized that honey bees and agricultural landscapes need to be effectively managed.

O LIST OF PRESENTATIONS

Available on http://www.worldseedcongress2018.com/download/ until 15 August 2018

Open Meeting of the Breeders Committee

Bernice Slutsky: PBI Update
Stephen Smith: IPC Update
Anke van den Hurk: SAC Update
Usha Zehr: Open BC Update

Open Meeting of the Phytosanitary Committee

Frank Claessens: ISF View on Indirect Seed Health Tests
Viliami Kami: The International Year of Plant Health 2020

• Rob Keene: Phytosanitary Committee Update

• Merel Langens: How ISF is promoting a systems approach

• **Tom Moore:** Update on ReFreSH (US terminology for systems approach)

• Luigi Paglia: Update on Systems Approach Activity in Australia

Open Meeting of the Trade and Arbitration Rules Committee

• Maria Anon: Outreach and communication efforts in Argentina on illegal seed practices

• Michael Keller: Latest trends and keys to arbitration

• Casper van Kampen: The spread of illegal seed practices in vegetables

• Antonio Villarroel: Illegal seed practices: A priority for ISF

Vegetable & Ornamental Section

Franck Berger: AP Guide
Amit Einav: Pollination
Martin Kneebone: Freshlogic
Craig McGill: ISTA Update

Vicente Navarro: VO Section Update
Vicente Navarro: Keynote speech
Steven Roberts: Australian market

Forage & Turf Section

• Peter Button: UPOV developments

Darell Dziver: FT Update Bill Fuller: Australian market

David Hudson: Innovation in Australia
 Corne van Beers: Breeders Trust

Field Crops Section

• Jonathan Brooks: OECD

Neil Comben: Australian Market
Nik Hulse: Royalty collection
Nigel Moore: FC Update
John Mukuka: COMESA

Open Meeting of the Seed Applied Technologies Committee

• Meike Fischer: Global political and environment of neonicotinoids

John Roberts: Bee health in Australia
Klaus Schluender: SAT-Com Update

Wednesday 6 June 2018

ISF GENERAL ASSEMBLY

Attendance: 146 participants

Chair: Jean-Christophe Gouache, ISF President

1. Call to order, ISF Anti-trust Guidelines and roll call

Chair Jean-Christophe Gouache called the General Assembly to order at 16:00 and reminded the audience that the meeting would be conducted in accordance with the ISF Anti-trust Guidelines.

Roll call:

ISF Secretary General Michael Keller took the roll call. The following members were present or represented by proxy:

- Ordinary members: Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, China, China Taiwan, Denmark, France, Germany, Hungary, India, Italy, Japan, Kenya, Korea, Mexico, Netherlands, Pakistan, Philippines, Slovenia, South Africa, Spain, Sweden, Switzerland, Tunisia, Turkey, United Kingdom, United States, Uruquay.
- Associate members: France: Bayer Crop Science, Groupe Limagrain, SICASOV; India: Doctor Seeds; Netherlands: Monsanto Holland BV; Spain: Geslive AIE; Switzerland: Monsanto International; United States: DuPont Pioneer, Monsanto.

The number of votes represented was 223 for Ordinary members and 29 for Associate members, making a total of 253 (or 69.2 %) as the total of votes for the Federation was 371, with a required quorum of one third. The General Assembly (GA) was therefore validly constituted.

2. Adoption of agenda

The amended agenda was circulated with the ISF World Seed Congress (Congress) documents including an additional point 7.3 on the election of the new Treasurer. The General Assembly adopted the agenda without any additional comments.

3. Financial matters

3.1 Adoption of the 2017 accounts

The Chair gave the floor to the Treasurer Vincent Vuille, who presented the 2017 closed accounts as circulated, page 27 in the Congress documents and as shown on screen.

The results showed a slight profit for the year and the results are above budget thanks to a very successful ISF World Seed Congress in Budapest. The Treasurer highlighted the reserves percentage remaining within the guidelines fixed by the Board of Directors.

There were no questions or comments on the 2017 accounts.

3.2 Auditor's Report

Vincent referred to the Congress document (p. 28 of the Congress Program) which was the review report made by the auditor CTR Audit and Conseil SA who had reviewed the financial statements of ISF and found that the operating results were in accordance with the law and the company's articles of incorporation and with the laws of Switzerland.

3.3 Nomination of Auditor

The Treasurer indicated that the cooperation with CTR Audit was very good, but after six years it is important to change auditor. Out of many firms in the vicinity of the ISF office in Nyon, several had been selected for a quotation. Out of the selection, two were selected for an interview. The Treasurer and Michael Keller agreed based on previously established criteria to propose Fidacor for nomination. The Board of Directors had been informed of this choice the previous Sunday and had no further comments. There were no further questions from the audience. There were no votes against and no abstentions.

The General Assembly unanimously agreed to give mandate to Fidacor, Lausanne.

3.4 Discharge to the ISF Board of Directors and ISF Secretary General

The Chair asked the members if they agreed to give quitus to the ISF Board of Directors and the ISF Secretary General. There was no opposition, no abstention.

The General Assembly unanimously approved the 2017 accounts and discharge was given to the ISF Board of Directors and the ISF Secretary General accordingly.

3.5 Approval of the 2018 budget and presentation of the 2019 provisional budget

The Treasurer commented on document p.28 circulated with the Congress documents. The 2018 budget had already been approved by the Board of Directors at the mid-term meeting in October 2017. It was now up for approval by the ISF membership.

He explained that the 2018 budget took into account the need for further implementation of the strategic objectives 2016-2020. The proposed budget will allow to continue to respect the guidelines for ISF reserves and be within the set thresholds by regard to the fixed expenditures.

Vincent expressed his thanks to the General Assembly for their trust during the six years of his mandate, and said he was honoured to have been ISF Treasurer. He thanked Secretary General Michael Keller and Finance Account Manager Marie Tahmazian for the excellent relationship and the very good financial house-keeping. Today's finances are in a good shape and Vincent is confident for the future.

The General Assembly unanimously adopted the 2018 budget.

4. Reports from the Sections/Committees on priorities and action plans 2017-2018

The President asked the respective Chairs of the Committees and Section for a brief report on the meetings held during the Congress.

BREEDERS COMMITTEE

Chair of the Breeders Committee (BC) Usha Zehr said that the Breeders Committee (BC) had continued to support key ISF strategic objectives. She thanked BC members for their contribution and highlighted current vacancies, calling for nominees from African or South American countries.

Usha highlighted the continued work of the ISF Plant Breeding Innovation Working Group to drive international consistency of policies for plant breeding methods, such as gene editing. The strategy is based on a political outreach campaign, communications activities and cooperation with allies. The adoption of the position paper will allow a next level of engagement, at the international level (OECD, APEC) as well as at national levels. Several meetings were organised by ISF in 2017: one in London and another in cooperation with the Chinese national seed trade association and the Chinese national seed association on gene editing and regulatory oversight. ISF also strengthened dialogue with the International Grain Trade Coalition and in cooperation with national seed associations, is looking for further engagement with the value chain.

Following the 7th meeting of the Governing Body of the International Treaty for Plant Genetic Resources in 2017, Usha raised concerns that no agreement was reached to put in place a new multilateral system and a new standard material transfer agreement. As a follow up and to further promote a business-friendly system, the ISF Sustainable Agriculture Committee put in place an outreach strategy for the next

two years. On top of the traditional friendly countries (e.g. Canada, US, Japan, Australia, European Union) more governments from Asian, African and South American countries are targeted and specific outreach programs are under preparation in full coordination with regional seed associations.

Usha provide an update on the ISF Illegal Seed Practices Working Group which finalized a frame for outreach activities at international and national level based on the position paper. Furthermore, the group decided to structure activities on some key countries and with specific tasks in coordination with national regional seed associations of key countries, and partner organisations like AIB, Breeders Trust, CIOPORA, CLI and SIPA. The objective is to further assess regulatory framework, existing infringements' catalogues, relevant case law and enforcement loopholes. Usha thanked Michael Keller and Hélène Guillot for their support, and members of the General Assembly and BC for their trust in her leadership, as this was her last intervention as Chair.

PHYTOSANITARY COMMITTEE

Chair of the Phytosanitary Committee Rob Keene informed the General Assembly of the increased activity with the International Plant Protection Convention (IPPC) – including chairing the Industry Advisory Group for ePhyto, and membership of the International Year of Plant Health (IYPH) 2020 Steering Committee. IPPC invited ISF to provide ISPM 38 training materials and a short training session on ISPM 38 during the IPPC regional workshops.

Rob updated the General Assembly on the activities of the ISF Systems Approach Working Group towards a globally-accepted Systems Approach that serves as an alternative to existing pest risk management options to secure phytosanitary certification for the international movement of seed. To achieve this and coordinate alignment across government and industry activity on this topic, ISF organised a Country Expert Workshop in Rome in mid-April with experts from five countries under Chatham House Rules. The meeting obtained feedback from country experts on the feasibility of a Systems Approach for seed and achieved agreement on a multi-lateral approach to development and acceptance.

SEED APPLIED TECHNOLOGIES COMMITTEE

Vice-Chair of the Seed Applied Technologies Committee (SAT-Com) Martin Gruss reminded the General Assembly that all seats within the SAT-Com are now filled. The SAT-Com will continue to inform about relevant topics in its newsletter and asks the members of ISF to actively distribute this further. At the same time, the promotion of seed treatment stewardship beyond ISF membership is key.

Martin presented the position paper on the international movement of treated seed, which he said would help to create awareness on the factors affecting the movement of treated seed and to develop a unified view. The next steps will be to develop outreach activities for this.

TRADE AND ARBITRATION RULES COMMITTEE

Chair of the Trade and Arbitration Rules Committee (TARC) Hamdi Ciftciler, emphasized the importance of the use of trade and arbitration rules. Further efforts will be put in place to raise awareness of the system and the rules to follow. No major changes of the Rules are foreseen. The Russian translation is now complete and a Chinese translation is underway. Several training sessions have been held (e.g. Turkey), and more are planned (e.g. France, Germany and China). TARC will continue to work on the preparation of a good practice guide. The open meeting during the Congress was dedicated to illegal seed practices with presentations on actions led by the industry in Argentina and Spain, and the current situation of illegal seed practices in South East Asia.

VEGETABLE & ORNAMENTAL SECTION

Chair of the Vegetable & Ornamental Crop Section Vicente Navarro pointed out that the Section's top priorities are in line with ISF's mission, vision and strategic objectives. He briefed the participants on the Section's main agenda to promote and foster harmonization of Disease Resistance Terminology. The

Chair further introduced two new initiatives by the section: Working with ISTA to address the vegetable industry needs as regards seed testing methods and accreditation; and a Systems Approach to monitor and align the activities around the development of different quality management systems aiming to satisfy phytosanitary requirements.

FIELD CROPS SECTION

Vice-Chair of the Field Crops Section Nigel Moore reported on the OECD presentation on seed schemes activities and the first outcomes of a study on seed sector concentration. A presentation on COMESA provided further information on the seed systems work underway in Africa. Nigel highlighted the Section's efforts to finally bring the maize pest list initiative to fruition, and noted its contribution to the ISF working groups on illegal seed practices and plant breeding innovation. Nigel informed the General Assembly about the creation of an ad-hoc working group to evaluate the current seed statistics collection process and to further develop the system.

FORAGE & TURF SECTION

Chair of the Forage & Turf Crop Sections Darrell Dziver set out the Section's main priorities: the international movement of seed and the development of a pest list for alfalfa. Darrell mentioned the ongoing collaboration with ISTA for the development of a test to detect annual ray grass in perennial ray grass seed bags. He further highlighted the importance of the cover crops, noting the end of a survey on national regulations and hinted at negotiations and possible collaborations with FIFA to promote natural grass in football pitches.

5. Adoption of Position Papers

The Chair opened the adoption of the eight position papers, reminding the delegates that the documents were put on the ISF Members' Area along with the Congress program six weeks ahead of the meeting. Following this, an amended version of the program which included the amendments of the position papers proposed by members, was put on the Members' Area three weeks ahead of the Congress. The Chair explained that each document would be put first on screen with the received amendments visible on a marked-up version. These amended versions were extensively discussed in the relevant Section or Committee meeting, and the outcome of the discussions will be presented on screen for adoption. He informed those members who presented amendments which were not retained after the Committee/ Section working sessions and which will not show on screen, will be asked by the Chair if they wish to withdraw or maintain these amendments for discussion by the General Assembly. Afterwards, the General Assembly will have to vote on the documents as shown on screen in the 'to be adopted' version.

5.1 Position paper 'Plant breeding innovation: Consistent criteria for the scope of regulatory oversight'

The Chair explained that ISF has used for three years the title 'Consistent criteria for the scope of regulatory oversight', therefore the BC agreed on the Chair's proposal to use the initial title.

The Chair asked for the amended version to be put on screen, Plantum withdrew its amendments. The version after the BC meeting was put on the screen, and no further questions were raised.

The General Assembly unanimously adopted the position paper with a show of hands.

5.2 Position paper 'Illegal Seed Practices – a threat to farmer livelihoods, food security and sustainable agriculture'

The Chair asked for the amended version to be put on screen and then the version resulting from the open BC meeting. This version was submitted for adoption.

The General Assembly unanimously adopted the position paper with a show of hands.

5.3 Position paper 'Global Multilateral Benefit Sharing Mechanism'

No amendment was received, the Chair asked to put on screen the version sent to the delegates six weeks ahead of the General Assembly.

The General Assembly unanimously adopted the position paper with a show of hands.

5.4 Position paper 'Digital Sequence Information'

The Chair asked for the amended version to be put on screen. An amendment for additional argumentation was submitted by Plantum. Following a request from the Chair if Plantum would like the keep the amendment, Plantum withdrew the amendment. The Chairman emphasized the importance to further develop documents on this topic. He informed the General Assembly that a FAQ was finalized and will be sent to members for additional support.

The General Assembly unanimously adopted the position paper with a show of hands.

5.5 Position paper 'Supporting seed choice for farmers'

The Chair asked for the amended version to be put on screen, followed by the version resulting from the discussion in the open Breeders Committee meeting. The Chair asked BDP if they would like to keep their amendments, but BDP withdrew them. The Chair thanked BDP.

The General Assembly unanimously adopted the position paper with a show of hands.

5.6 Position paper 'Farmers' Rights and farmers' exemption: a clarification':

As for previous position papers, the version with amendments was put on screen. The Chair asked if Plantum would like to keep its amendments, Plantum said that they would withdraw the amendments, providing that further in depth work on this topic is done in the coming months. The Chair supported this request.

The General Assembly unanimously adopted the position paper with a show of hands.

5.7 Position paper 'The seed industry engages to combat child labour'

Before starting the discussion on the position paper, the Chair informed the General Assembly that until the discussion in the open meetings and even during the General Assembly, grammatical improvements were possible, therefore the title was slightly changed from the amended version.

The General Assembly unanimously adopted the position paper with a show of hands.

5.8 Position paper 'Movement of treated seed'

The position paper received several amendments from Plantum and one from UFS. Following preparatory work by Plantum and the ISF Secretariat a revised version was proposed to the Seed Applied Technologies Committee. The Chair thanked Plantum for their important contribution to the final document.

The General Assembly unanimously adopted the position paper with a show of hands.

6. ISF membership

6.1 Election of new ISF members

The Chair referred to the list of applications in the amended Congress documents and shown on screen.

There were no additional comments. No opposition was voiced.

- Ordinary members: ANSEME, Portugal; Egyptian Seeds Industry Association (ESIA), Egypt.
- Associate members: Mosta Benamar import/export (Algeria), Arman Sabz Adineh (Iran), Iran Bazr Co (Iran)
- Affiliate members: Breeders Trust (Belgium), Croonwolter&dros B.V. (Netherland), Japan Tobacco International (Switzerland), Petkus Technologie GmbH (Germany), RealTIme I.T Pty Ltd (Australia), Seed Testing Lab, Plant bank, Iranian Biological Resource Center (IBRC) (Iran)
- Mushroom Group member: Mycelia (Belgium)
- Tree and Shrub Seed Group members: Royston Petrie Seeds Pty Ltd (Australia)

The General Assembly unanimously elected the above members with warm applause.

6.2 Discontinuation of ISF membership

The Chair expressed his satisfaction at the new members welcomed on board, but expressed his regret that some members had to be discontinued, as per the Congress program, for reasons of resignation or non-payment. Nonetheless, he clearly highlighted ISF's ongoing efforts to keep and maintain members.

- Associate Members: Agrimatco Vamco (Iran), Hammoon Corporation (Iran), Zagirt Seed (Libya), Zemes (Lithuania), Agronegocios Genesis (Peru), Fertiprado (Portugal), Ekoniva Semana (Russia), Agromatco Jeddha (Saudi Arabia), Ailitia (Russia)
- Affiliate Members: Data Detection Technologies (Israel), Anthony D Compson (Resignation) (United Kingdom), Delair Tech (Resignation) (France)
- Tree & Shrub Seed Group Members: China National Tree Seed Corporation (China), Siemen Forelia OY (Resignation) (Finland)

The General Assembly took note, did not add any comments, and unanimously voted the membership discontinuation.

7. Elections

7.1 Members of the Board of Directors

The Chair referred to the amended Congress document (p.29) which was shown on screen: four members at large were proposed for re-nomination this year: Roberto Guarnieri (Italy), Mary Ann Sayoc (Philippines), Riadh Gabsi (Tunisia) and Mike Gumina (United States). Five new nominations of members at large or permanent members were proposed for election: Miguel Alvarez Arancedo (Argentina), Frank Berger (France), Santosh Attavar (India), Osamu Sugimura (Japan) and David Malan (South Africa). The Chair asked the newly to-be-elected members to present themselves. Then he asked for the vote.

The General Assembly unanimously elected the proposed members with warm applause.

7.2 Section/Committee Chairpersons

The Chair referred to amended Congress documents and proposed the following chairs for re-nomination:

Darrell Dziver, Chair Forage & Turf Section, Rob Keene, Chair Phytosanitary Committee, Klaus Schluender, Chair Seed Applied Technologies Committee.

The General Assembly unanimously elected the proposed members with warm applause.

The Chair proposed the following chairs for nomination:

Marc Cool as Chair of the Breeders Committee, and Ellen Sparry as Chair of the Field Crops Section. Both candidates presented themselves to the General Assembly.

The General Assembly unanimously elected the proposed members with warm applause.

7.3 ISF Treasurer

The Chair proposed Christoph Betschart, as ISF Treasurer. Christoph presented himself to the General Assembly.

The General Assembly unanimously elected Christoph Betschart as ISF Treasurer with warm applause.

7.4 ISF First Vice-President:

The ISF President referred to the Board of Directors' proposal to the General Assembly for the election of Donald Coles, currently Second Vice President, as First Vice President.

The General Assembly unanimously elected Donald Coles as ISF First Vice-President with warm applause.

7.5 ISF President:

The President referred to the Board of Directors' proposal to the General Assembly for the election of Eduard Fito, currently First Vice-President, as ISF President.

The General Assembly unanimously elected Eduard Fito ISF President with warm applause.

8. Future Congress

The Board of Directors proposes Mexico as the host of the ISF World Seed Congress 2022.

The General Assembly unanimously adopted the proposal.

The ISF President congratulated the representatives of Mexico present in the room. Mario Puente, thanked in the name of AMSAC, the General Assembly for the trust in the Mexican candidature and promised to organise together with ISF a great Congress, and welcomed all delegates to his wonderful country.

9. Any other business

There was no other business to be discussed.

Before closing with the last two agenda items, ISF President Jean-Christophe Gouache wanted in the name of all delegates and ISF members to thank the entire ISF team for the work done to prepare and manage the Congress in a very efficient and professional way. Special thanks also to Mariette Perey, from the ISF Secretariat, who after so many years was attending her last Congress.

The General Assembly joined him to thank the entire ISF Secretariat team with warm applause.

10. Closing speech by the outgoing ISF President, Jean-Christophe Gouache

As my term as ISF President comes to an end, I would like to take a moment to look back.

During the last few years your Federation has changed. These changes were needed. It all started five years ago in Greece when President Tim Johnson and I realized that significant changes were to be implemented for your Federation. I absolutely want to take this last opportunity, which I do have now, to thank you, Tim, in the name of the ISF members for the work that you have done during the transition period which followed our decisions, and to prepare the Beijing Congress in 2014. This was a heavy burden that you took directly on your shoulders, as ISF President. Thanks Tim.

(Warm applause from the General Assembly).

As soon as I was elected First Vice-President in 2014, I asked President Alvaro Eyzaguirre to take the lead of a Board working group to prepare a new strategic plan for ISF. This led to the ISF 2016-2020 strategic plan in which we expressed the Vision, Mission and Strategic objectives of the Federation for the years to come. Since then, all ISF actions were driven towards achieve our strategic goals. The evolution of the structure of the team was also guided, and it was decided to give the ISF Secretariat the means and competencies that it deserves. In that regard, I must underline how much wok has been done by the ISF Secretariat. It has changed tremendously. As for anybody else, there is still more progress to be made. But I can tell you that the team has grown in maturity over the past two years. It has been my pleasure, and to some extend a certain pride, to accompany this young team and help them all to grow in becoming a better and more efficient team to serve you, the ISF members. I want to thank you all, ISF team members for the work done. And thank you, Michael, for your leadership since you became ISF Secretary General: you have made a difference, and it has been a pleasure to work with you during these years.

(Warm applause from the General Assembly).

And to conclude, let me look forward. With its strategic plan well in place, and with a strong and young team to implement it, I am confident that ISF will continue to be a driving force for the seed sector to deliver the full potential of genetics to farmers through quality seed to meet the challenges of a changing world.

Thank you. "

11. Acceptance speech by the incoming President, Eduard Fito

What makes humans so unique is our capacity to learn. This makes me feel more human, and more confident because, I can tell you, I love learning. And this is how I see the fact of being the new president of ISF, an excellent opportunity to learn from you. And I'd like to thank you all for it.

Here, I want to seize the opportunity to tell you that the first learning of this journey came from you, JC Gouache. From the very first moment you brought me in with the document Horizon 2020 where we reviewed the mission and the vision of ISF. I'm really enjoying working with you and I promise to do my best to be at your level.

To be a good leader, you need to be a good pupil as well. I need to be closer to you to hear you better and make sure my responses are understood. So let me get out from behind this lectern. Reading the ISF's mission statement, you can distinguish two basic pillars. 'Movement of seed' and 'Innovation'. I want to follow this mission to set the priorities of my presidency for the next two years.

When it comes to the movement of seed, we must create awareness. Awareness among us, the seed companies, to understand that if we want a thriven industry we need to respect intellectual property (IP) and, if necessary, change the way we make money by imbedding IP in our business models.

But we also need the implication of our policy makers and our regulators (Executive power) to help us to do things better and achieve our vision to give access to quality seeds to every single farmer on the planet. Obviously, national and regional seed associations are crucial to carry out this task, and that's why I want tied cooperation with them.

Let me give some examples of these objectives:

- Systems approach
- Illegal seed practices
- ISHĪ-Veg

Innovation, as I said, is paramount. Doing research is expensive and unpredictable, which makes it very risky. If we want innovation to be abundant, in my opinion, we need as many breeders as possible plunging into the ocean of the unknown. Players of all kinds; local companies that are closer to the market and can come with creative ideas. Multinational companies that can manage more complex projects. And public institutes that can scout new frontiers boosting partnership between public and private organisations. There is a role for everyone and we need them all. We have to make sure that none is regulated to be expelled out of these research oceans. Leaving the oceans with no fishermen.

To achieve both missions, we need to address the policy makers. The policy makers might be willing to hear us if we know, and we do, at which doors we have to knock. But politicians have to solve what citizens are worrying about. And these citizens read newspapers, watch TV and hear radio that forge opinions. We need to influence those media. Let our story be heard. We need key journalists to know us and understand the importance of our role in the world. As this is a new challenge, we need to keep working hard to convey our messages.

Thanks, this is ISF's purpose, and I hope to serve ISF as well as my predecessor did. This is my humble opinion but I'm eager to learn from you. To foster dialogue and head together towards our vision. So, here is my wish, let's close our eyes and imagine a world where quality seed is accessible to any farmer to achieve food security with sustainable agriculture.

Thank you! "

12. General Assembly close

The Chair closed the meeting at 18:03.

O GENERAL

Tribute to the Departed

Since our last Congress, it is with deep sorrow that we have learned of the passing of Mr. Badrinarayan Barwale, Honorary Life member since 1996, and Mr. Manmohan Attavar, Honorary Life member since 2003.

ISF pays tribute to their personalities for their devotion to the cause of our industry and for the services rendered. ISF expresses, at the same time, its deep sympathy to their families and friends.

• 34th ISF Golf Championship

23 players took part in the 34th ISF Golf Championship at Brookwater Golf Club.

The winners were Ms. Madelon Barenbrug for the ladies' score and Mr. Senthilnathan Sengottuvelu for the gentlemen's score.

Countries represented at ISF World Seed Congress 2018

Delegates and (accompanying persons)

						TOTAL	945	(114)
Greece	3	(0)	Philippines	2	(1)	Zimbabwe	3	(2)
Germany	40	(5)	Peru	3	(1)	Zambia	1	(0)
France	37	(4)	Pakistan	10	(0)	Uruguay	9	(2)
Ecuador	2	(2)	New Zealand	48	(3)	United States	115	(18)
Denmark	10	(4)	Netherlands	60	(6)	United Kingdom	4	(0)
Czech Republic	11	(0)	Morocco	1	(0)	Uganda	1	(0)
Colombia	3	(1)	Mexico	1	(0)	Turkey	15	(1)
China Taiwan	10	(0)	Lithuania	4	(1)	Tunisia	1	(2)
China Hong Kong	5	(0)	Lebanon	4	(0)	Thailand	4	(0)
China	59	(2)	Korea, Rep of	16	(0)	Syria	1	(0)
Chile	29	(0)	Kenya	9	(4)	Switzerland	25	(8)
Canada	8	(3)	Jordan	2	(0)	Sweden	7	(1)
Bulgaria	1	(0)	Japan	57	(0)	Spain	11	(5)
Brazil	26	(4)	Italy	32	(6)	South Africa	24	(2)
Belgium	7	(0)	Israel	6	(0)	Singapore	2	(0)
Austria	4	(1)	Ireland	1	(1)	Russia	2	(0)
Australia	112	(12)	Iran	14	(5)	Romania	1	(1)
Argentina	22	(0)	India	47	(5)	Portugal	7	(1)
Algeria	1	(0)	Hungary	3	(0)	Poland	2	(0)

Additional participants in the exhibit booths: 89

Host countries of future ISF World Seed Congresses

2019	FRANCE	2021	SPAIN
2020	SOUTH AFRICA	2022	MEXICO

Social Media highlights

In 2018, ISF continued its social media efforts with 'live tweeting' from all events using the Congress hashtag #WorldSeed18.

Top Tweet: June 2018





Top LinkedIn update: June 2018



O WHO'S WHO

ISF BODIES AND PERSONALITIES 2018 - 2019

As per elections in Brisbane, June 2018. For up-to-date lists, please contact the Secretariat.

ISF Board of Directors

(*) The figures indicate the years of election and re-election (m.a.l. means member-at-large)

PRESIDENT

Eduard FitoSemillas Fito SA

Calle Selva de Mar, 111

08019 Barcelona **2012** - 2014 - 2016 (m.a.l.) **Spain**

VICE-PRESIDENT

Donald Coles2017-2018Valley Seeds2014 - 2016 (m.a.l.)295 Maroondah Link HighwayYarck, Victoria 3719Australia

IMMEDIATE PAST-PRESIDENT

Jean-Christophe Gouache2018Limagrain2009 (m.a.l.)Rue Henri Mondor63360 Saint-BeauzireFrance

TREASURER

Christoph Betschart 2018
Fenaco Genossenschaft

P.O. Box

8401 Winterthur Switzerland

BREEDERS COMMITTEE

Marc Cool 2018
DowDuPont
P.O. Box 1000
Johnston, Iowa 50131 United States

VEGETABLE AND ORNAMENTAL SECTION

Vicente Navarro2013 - 2015 - 2017

Bayer CropScience Vegetable Seeds

P.O. Box 4005

Netherlands

FORAGE AND TURF SECTION

6080 AA Haelen

Darrell Dziver 2014 - 2016 - 2018
BrettYoung
Box 99 St Norbert Postal Station

Winnipeg, Manitoba R3V 1L5 Canada

FIELD CROPS SECTION

Ellen Sparry 2018
C&M Seeds 2015 (m.a.l.)
6180 5th Line
Palmerston, Ontario NOG 2P0 Canada

PHYTOSANITARY COMMITTEE

Robert Keene 2016 - 2018
Enza Zaden
Haling 1e
1602 DB Enkhuizen Netherlands

SEED APPLIED TECHNOLOGIES COMMITTEE (SAT-COM)

Klaus Schluender
KWS SAAT SE
Grimsehlstrasse 31
37574 Einbeck

2014 - 2016 - 2018
Germany

TRADE AND ARBITRATION RULES COMMITTEE

Hamdi CiftcilerMay Seed Turkey
Samanli Mh Yigitler Cd No. 28 Bursa
16275 Yildirim **Turkey**

MEMBERS-AT-LARGE

Miguel Alvarez Arancedo 2018

Monsanto

Maipu 1210

1006 Buenos Aires Argentina

Santosh Attavar
Indo American Hybrid Seeds (India) Pvt Ltd
7th km Banashankari Kengeri Link Rd
Channasandra, Rajarajeshwari Nagar Post
Bangalore, Karnataka 560098
India

Franck Berger 2018
Limagrain
Rue Henri Mondor
63360 Saint-Beauzire France

Riadh Gabsi UTICA	2016 - 2018	Antonio Calvelo BIOSEM	1990
Rue Ferjani Bel Haj Ammar Cite El Khadhra		Av. Corrientes 127, 6° Piso, Of. 606 1043 Buenos Aires	Argentina
1053 Tunis	Tunisia		
		Gilbert Gouin	1996
	- 2016 - 2018	Sodisem	
Continental Semences SpA		69 rue d'Alleray	_
Via Monzato 9		75015 Paris	France
43029 Traversetolo (Parma)	Italy	Paul King	1996
Mike Gumina	2016 - 2018	New Agriventures, Inc.	1990
RiceTec Inc.	,	P.O. Box 164	C
13100 Space Center Blvd., Suite 300 Houston, TX 77059	United States	Pain Court, Ontario NOP 1Z0	Canada
Houston, 1X 77039	Officed States	Owen J. Newlin	1996
David Malan	2018	3524 Grand Avenue #401	2770
Klein Karoo Seed Production		Des Moines, Iowa 50312–4341	United States
1 Kooperasie Str. 6620 Oudtshoorn, Western Cape	South Africa	Jean-Louis Duval	2000
		15, rue de Dagny	
Christian Pflug DowDuPont	2017	77240 Cesson	France
Rua Alameda Itapecuru 506		Jürg Hauenstein	2000
06454-080 Barueri, Sao Paulo	Brazil	Schluchebärg	
	2016 - 2018	8197 Rafz	Switzerland
Mary Ann Sayoc East-West Seed Company, Inc.	2016 - 2018	Gisbert Kley	2002
Km 54, Cagayan Valley Road, Sampa	loc	Im Heidekamp 2	
San Rafael, 3008 Bulacan	Philippines	59555 Lippstadt	Germany
Weibo Song	2017	Peter Lange	2002
China National Seed Group Corp.		Tiedexer Tor 2	
15/F Sinochem Tower, A2, Fuxingme		37574 Einbeck	Germany
Beijing 100045	China	D	2004
O Susimum	2010	Dietrich Schmidt	2004
Osamu Sugimura Takii & Co., Ltd	2018	Golden West Seed Research Co. In 12052 Linda Flora Drive	ic.
180 Umekoji Inokuma Shimogyo Ku		Ojai, CA 93023	United States
600-8686 Kyoto	Japan	0,01,0173023	Office States
	-	Christopher Ahrens	2006
Marco van Leeuwen		Lundsford Farm	
Rijk Zwaan	2017	Lundsford House	
P.O. Box 40		Etchingham, East Sussex	
2678 ZG De Lier		TN19 7QH U	Jnited Kingdom
	Netherlands		
TREE AND SHRUB SEED GROUP		Bernard Le Buanec	2006
Dave Richardson		24, Rue Treiz-an-Douric	Eranca
Dave Richardson Forestart Ltd	2016 - 2018	29100 Douarnenez	France
The Seed Unit, Ladymas Lane, Hadna		Selwyn Manning	2007
Shrewsbury	411	24B Crosdale Place	2007
•	nited Kingdom	Christchurch 8042	New Zealand
	3 ~~~~		
ISF HONORARY LIFE MEMBERS		Orlando de Ponti	2012
		Gen. Foulkesweg 68E	
Niccolò Morelli	1985	6703 BW Wageningen	Netherlands
39, via Curtatone e Montanara	_		
50053 Empoli/Firenze	Italy		

John Gilbert Germinal Holding Ltd Commercial Road	2014
Banbridge, Co. Down BT32 3ES	United Kingdom
Anton van Doornmalen Rijk Zwaan P.O. Box 40	2014
2678 ZG De Lier	Netherlands
Tim Johnson Illinois Foundation Seeds, Inc. 25 Executive Drive, Suite F Lafayette, Indiana 47905	2016 United States
Gerard Meijerink Gaam Meijerink Consultancy Papenveer 41 1691 Et Hauwert	2018 Netherlands
Stephen Smith 506 4th Street Box 404	2018
Polk City Iowa 50226	United States

Members of Section Boards and Committees

MEMBERS OF SECTION BOARDS

FIELD CROPS SECTION					VEGETABLE AND OF SECTION		-
	Ellen Sparry, Chair	2018			Vicente Navarro, Chair	2013-2015-	2017
1	Johannes P Angenendt, Vice–Chair	2018	DE	1	Santosh Attavar	2018	IN
2	Nigel Moore, Vice-Chair	2018	UK	2	Franck Berger	2018	FR
3	Huub Beelen	2018	NL	3	Fabrizio Ceccarelli	2018	IT
4	Bill Belzer	2018	US	4	Jorge Chepote	2018	US
5	Franco Brazzabeni	2018	IT	5	Rami Dar	2017	IL
6	Samuel Gaste	2017	FR	6	Matthew Johnston	2018	CH
7	Nick Goble	2018	ZA	7	Yoshihiro Konno	2018	JP
8	Michael Gohn	2017	AT	8	David Malan	2018	ZA
9	Eugenio Gonzalez	2017	ES	9	Andreas Mueller	2017	DE
10	Mike Gumina	2018	US	10	Kim Nielsen	2017	DK
11	Pavel Horcicka	2018	CZ	11	Arpad Pavelka	2018	HU
12	Suleyman Yavuz Ilgun	2017	TR	12	Mary Ann Sayoc	2018	PH
13	Jean-Paul Krattiger	2017	СН	13	Weihong Tian	2018	CN
14	Shande Liu	2018	CN	14	Marco van Leeuwen	2017	NL
15	Kim Bonde Petersen	2018	DK	15	(Vacancy)		
16	Patrick Spadin	2018	FR				
17	Eugenie A.C. van de Bilt	2018	NL				
18	Wolf von Rhade	2018	DE		Rob Keene, Permanent O	bserver	
19	Xiaobo Zhu	2018	CN				
20	(Vacancy)						
21	(Vacancy)				4 Jorge Chepote 2018 US 5 Rami Dar 2017 IL 6 Matthew Johnston 2018 CH 7 Yoshihiro Konno 2018 JP 8 David Malan 2018 ZA 9 Andreas Mueller 2017 DE 10 Kim Nielsen 2017 DK 11 Arpad Pavelka 2018 HU 12 Mary Ann Sayoc 2018 PH 13 Weihong Tian 2018 CN		
22	(Vacancy)						
23	(Vacancy)						
24	(Vacancy)						
25	(Vacancy)						
	President – Ex officio				President – Ex officio		
	1st Vice-President – Ex offici	0			1st Vice-President - Ex o	fficio	

		FORAGE AND 1	URF SECTION	
	Darrell Dziver, Chair	2014-2016-2018	10 Emrah Ozdemir	2017 TR
1	Brian Lever, Vice-Chair	2018 ZA	11 Tobias Schmid	2018 CH
2	Johannes Peter Angenendt	2018 DE	12 Eugenio Siboni	2017 IT
3	Adger Banken	2017 NL	13 Brent Stirling	2018 NZ
4	Jiri Barta	2017 CZ	14 Nicolas van Hanja	2018 FR
5	William Gilbert	2018 UK	15 Martin Zingoni	2017 AR
6	Soeren Halbye	2017 DK		
7	Mark Harvey	2017 AU		
8	Satoshi Inoue	2018 JP	President – Ex officio	
9	Michael Malin	2017 US	1 st Vice–President – Ex offic	io

MEMBERS OF STANDING COMMITTEES

	BREEDERS				TRADE AND ARBITRATION	I RULI	ES
	Marc Cool, Chair	2018		1	Hamdi Ciftciler, Chair	2015-	2017
1	Ellen Sparry, Vice-Chair	2017	DE	2	Roque Caivano	2017	AR
2	José Ré(IPC)	2018	UK	3	Fabrizio Ceccarelli	2017	IT
3	Anke van den Hurk (SAC)	2017	NL	4	Gerald Cheynet	2017	FR
4	Miguel Alvarez Arancedo	2018	US	5	Tomas Cullen	2017	AR
5	Leon Broers	2017	IT	6	Qilong Duan	2017	CN
6	Yutaka Fukunaga	2018	FR	7	Darrell Dziver	2017	CA
7	Olivier Lucas	2018	ZA	8	Riadh Gabsi	2017	TN
8	Stevan Madjarac	2017	AT	9	Brian Lever	2017	ZA
9	Mary Ann Sayoc	2017	ES	10	Michael Malin	2017	US
10	Bert Schrijver	2017	US	11	Aykut Ozbugday	2017	TR
11	Ali Ustun	2017	CZ	12	Tim Teague	2017	AU
12	Jian Zhang	2018	TR	13	Corinna Wurmstein	2017	DE
13	(Vacancy)			14	Manni Yang	2018	CN
14	(Vacancy)			15	(Vacancy)		
15	(Vacancy)						
	President, Ex officio				President – Ex officio		
	1 st Vice-President, Ex officio				1 st Vice–President – Ex officio		

NB: The figures indicate the year of election and re-election

According to the ISF Articles of Association, art. 15.2, in the BC and SAT-Com, the Chairperson is not included in the count, whereas in the other committees the Chairperson is included in the count

For up-to-date lists, please contact the ISF Secretariat

MEMBERS OF STANDING COMMITTEES

	PHYTOSANITA	RY			SEED APPLIED TECHNOL	.OGIES	;
1	Robert Keene, Chair	2016-	2018		Klaus Schluender, Chair 2014	-2016-	2018
2	Pierre Amouroux	2017	FR	1	Martin Gruss, Vice-Chair	2017	DE
3	Gabriela Andrade	2017	BR	2	Bekir Artam Atalay	2018	TR
4	Isabella Bezuidenhout	2017	ZA	3	Morten Boisen	2018	CH
5	Fabrizio Ceccarelli	2017	IT	4	Jeff Daniels	2018	US
6	Marian de Beuze	2017	NL	5	Joern Dau	2017	DE
7	Darrell Dziver	2017	CA	6	Luc Dormoy	2017	FR
8	Natalia Fernandez Eraso	2018	AR	7	Nathan Froese	2017	US
9	Mark Johnson	2017	NZ	8	Veronique Heyes	2017	UK
10	Madoka Koshibe	2017	JP	9	Atsushi Iwata	2017	JP
11	Michael Leader	2017	AU	10	Philippe Lesigne	2018	BE
12	Nathan Lyu	2017	CN	11	Mick Messman	2017	US
13	Tom Moore	2017	US	12	Darcy Pawlik	2017	US
14	Dieter Ruecker	2017	DE	13	Palle Pedersen	2017	CH
15	(Vacancy)			14	Robert Pronk	2017	NL
	Frank Claessens, Permanent Observer Seed H	lealth		15	Rick Turner	2017	US
	President, Ex officio				President – Ex officio		
	1 st Vice-President, Ex officio				1 st Vice–President – Ex officio		

NB: The figures indicate the year of election and re-election

According to the ISF Articles of Association, art. 15.2, in the BC and SAT-Com, the Chairperson is not included in the count, whereas in the other committees the Chairperson is included in the count

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MEMBERS OF OTHER COMMITTEES

SUSTAINABLE AGI	RICULTURE	INTELLECTUA	L PROPERTY
1 Anke van den Hurk, Chair	2017 NL	1 José Ré, Chair	2018 US
2 Paul Olson, Vice – Chair	2018 DE	2 Lukeshni Chetty	2017 ZA
3 Miguel Alvarez Arancedo	2017 AR	3 Judith de Roos	2017 NL
4 Sabahattin Bodur	2017 TR	4 Claudia Hallebach	2017 DE
5 Lukeshni Chetty	2017 ZA	5 Tom Hamilton	2018 US
6 Christiane Duchene	2017 FR	6 Arvind Kapur	2017 IN
7 John Duesing	2017 US	7 Laurens Kroon	2017 NL
8 Wenhui Ma	2018 CN	8 Serdar Mart	2017 TR
9 Thomas Nickson	2017 US	9 Frank Michiels	2017 BE
10 Rajvir Rathi	2017 IN	10 Philippe Moreau	2017 FR
11 Mary Ann Sayoc	2017 PH	11 Magali Pla	2017 FR
12 Bernice Slutsky	2017 US	12 Antonio Villarroel	2017 ES
13 Ellen Sparry	2017 CA	13 Liyang Zhang	2017 CN
14 (Vacancy)		14 (Vacancy)	
15 (Vacancy)		15 (Vacancy)	

Chairs of Section Boards and Standing Committees are ex officio Members of the Board of Directors

Chairs of SAC and IPC are ex officio Members of the Breeders Committee

For up-to-date lists, please contact the ISF Secretariat