

International Herbage Seed Group

Newsletter

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IHSG

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Editor's note: Editor's note: We are fresh off a great conference trip to Argentina! While those of you in the southern hemisphere are entering the harvest season, we are experiencing rather cold temperatures as we head full force into our winter months in North America. In this issue, we welcome a new president and look back over Phil Rolston's term as our leader. We share an overview of the recent IHSG Conference and hear from some of our first time attendees. In sad news David Chilcote passed away since our last newsletter edition and we reflect on his many contributions to herbage seed production over the years. John Fairey has provided a very good outlook on UK seed production and New Zealand is stepping up their research efforts with the creation of a new Seed Industry Research Centre. This is issue 56 of the newsletter. Details of the contact person in your area are listed on the back page of the newsletter and on the IHSG website. Please remember to send articles to either of the newsletter editors or to your area contact person to be included in future newsletters.

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President's Welcome

I advanced to the presidency at the 9th IHSG Conference recently held in Pergamino, Argentina. I want to again thank past President Phil Rolston for his exemplary service to our organization and his long standing efforts to improve herbage seed production around the world.

Who is your new president?

My early life experiences with herbage crops began on my family farm in California's Sacramento Valley. Our farm produced alfalfa hay in support of the large dairy industry in the area. From my time



as a young child, I had an interest in science and in particular knowing about the plants on the landscape of our farm and in the wider world that existed in the hills and mountains surrounding the farm. This early interest led me to earn a BA degree in Biological Sciences at California State University, Chico. After graduation, I moved north to get some work experience in the field at Oregon State University in Corvallis.

While working at OSU, I developed a fascination with seeds and their biology. My boss introduced to me to Dr. Don Grabe, a professor and seed scientist. Don Grabe was looking for a graduate student to work on a grass seed production thesis project and we both decided that it was a good fit. In my thesis project, I studied the competition between red fescue seed crops and cereal companion crops used in their establishment. Grabe was an early participant in IHSG and he presented the results of our study at the first IHSG conference. Under Dr. Grabe's tutelage, I learned about Oregon's seed production industry and the practices required for good seed yields. Dr. David Chilcote was a founding member of the IHSG and served on my graduate committee, and assisted in my education. One of my fellow graduate students at OSU was a future long-time colleague and president of IHSG, Dr. Bill Young. As you can see, IHSG was influential in my formative years as a scientist and scholar.

I completed both the MS and PhD degrees in Crop Science at Oregon State University and I needed new challenges, or more succinctly, a job. I found what I was looking for at Washington State University. As assistant professor and acting director of the Washington State Seed Laboratory, I taught seed science and production courses and conducted research on a wide range of seed crops, including herbage grasses. My closest colleague at WSU was long-time IHSG participant Dr. Bill Johnston. Everything was great except that my job was not permanent and as a result, I needed to find a new job after two years in Pullman, Washington.

Oregon State University had an opening for an assistant professor and agronomist at Pendleton in the semi-arid eastern part of the state. This was a tenure-track position and promised long-term employment. I got the job but I was resigned to diverting my career away from seed science and seed production. That did not last long as I quickly established a working relationship with Dr.

Betty Klepper, a renowned crop physiologist located at Pendleton. She had a project that needed someone trained in seed science. Just like that, I was involved in seed research again, albeit this time on wheat and barley. My time at Pendleton was over after three years as Dr. Chilcote's old position as seed crop physiologist was available on the Corvallis campus. I've been in this position for the past 25 years with the notable exception of a five-year term as the department's head advisor.

Today I'm Associate Department Head and Professor of Seed Crop Physiology and Ecology in the Department of Crop and Soil Science at Oregon State University. I conduct research on physiology, ecology, and management of seed crops. While my research is often directed at solving a practical problem, the work also serves a secondary goal of increasing our understanding of the underlying biological processes limiting economic and environmental efficiency of seed crop production. I'm author or coauthor of over 200 scientific and extension publications. I currently teach three courses at OSU: Seed Production, Crop Ecology and Morphology, and Physiology of Crop Yield and these courses are delivered world-wide through the university's Ecampus system. In addition to serving as your president, I've also been elected to serve on a three-year term as a member of the Board of Directors of the Crop Science Society of America.

Looking Back – 2013-2017

Phil Rolston, Immediate Past President

In Pergamino the IHSG Presidents role was handed over to Tom Chastain from Oregon, USA. As I look back over the four years that covered my time as your President, and eight years as Vice President, I note both highlights and areas where progress has yet to be made. I began my tenure at the Methven, New Zealand IHSG Workshop (2013) that doubled as an International Grasslands Congress (IGC) Sydney post-conference event. A highlight of the workshop was the "farmers day" attended by more than 100 local seed growers that included presentations both at the meeting venue and in the field. IHSG members found the opportunity to mix with local growers rewarding, while local growers enjoyed the opportunity to hear from International speakers.



Having two IHSG Conferences (Lanzhou, China 2015 and Pergamino, Argentina 2017) outside our traditional geographic areas has been a goal that I pushed for. Despite some reservations, and a drop in the numbers of participants from traditional areas of Europe, the extra numbers of local participants meant these two meetings were very well attended with between 160 and 150

participants, respectively. Those IHSG members who are regulars found the change in location worth the effort to visit. The great post conference tours in China and Argentina will be remembered for many years. During the organization phase of both of these meetings I was lucky enough to be working on projects in China and Uruguay and was able to meet with the local organizing committees at least twice and join in the discussions on the program and conference activities.

Some challenges we face as an organization is:

- 1. To move our website from a very old and unsupported platform onto a new platform and hosting. Tom Chastain will be driving this.
- 2. To get new funding streams. We don't have a financial crisis, but our traditional revenue streams have dried up. Among the ideas on finding new revenue is having Corporate Membership. Several seed companies have said that they would support IHSG activities through Corporate Membership. Advertising on our "new" website may also be an option.
- 3. To publish new additions of our two books; "Tropical Pasture Seed Production" and "Temperate Pasture Seed Production". The editors of the 1st Editions that we produced 20 years ago have agreed to lead the 2nd Editions with Don Loch taking the out-of-print Tropical book and John Hampton leading the Temperate book.

I am pleased that the Business Meeting at Pergamino have approved our forward conferences; with Oregon in 2019; Serbia in 2021 and France in 2023. This provides members with certainty for planning and a mix of traditional seed production areas with areas not previously visited.

I think we also need also to maintain links with the IGC, where we have previously run our Workshops. The historical links have been difficult to maintain because IGC have not kept to a four year conference cycle, as they attempted to align some meetings with the International Rangeland Conference, and some of the IGC meetings are in places where we don't have members to organize and host a Workshop; eg The Joint XXIV IGC - XI IRC congresses will be held in Nairobi, Kenya, October 25 - 30, 2020.

Despite the challenges we have a core of members (researchers, seed company reps, extension specialists and farmers) that make conferences and post-conference tours a regular event. It was great to see so many old friends in Pergamino and to meet many of the southern South American seed production researchers. Finally a big thanks to Andrea and the local organizing committee for a wonderful experience in Argentina.

Overview of the 9th IHSG Conference - Pergamino, Argentina

Maria Andrea Tomas, Conference Chair

The 9th International Herbage Seed Conference took place in Pergamino, Argentina from October 31st to November 2nd, 2017. Before the conference we enjoyed a tour visiting to a typical Argentinean "estancia" and appreciating the taste of a good "asado", the way Argentineans cook meat. Gauchos showed us their abilities to play "sortija" and we enjoyed Argentinean folklore as performers showed us how to dance the zamba, gato, Escondido, chacarera and other typical features.





More than 150 people from 17 different countries were present attended the formal conference in Pergamino. A few countries were highly represented such as Denmark, New Zealand, and USA. Some delegates traveled long distances from China, Australia, Serbia, etc. Delegates from Latin America were also numerous. Interestingly, there was a very good mix of delegates from both public and private institutions, seed companies, and farming operations.

The conference began with a general presentation from local authorities followed by a session on seed production of both temperate and subtropical species produced in South America. Sessions on seed production systems and plant protection followed. The first day of the conference finished with a business meeting where Dr René Gislum from Denmark was nominated as the vice president for the next two years.

The second day of the conference started with a session on breeding for seed yield, followed by an agronomy and extension session that included an interesting panel discuss and then the one about agronomy and extension commenced with an extension panel discussion moderated by Phil Rolston. In the afternoon we visited a nursery and production fields of Gentos Seed Company at La Lucila were we enjoyed lunch hosted by the company. In the evening a delegate's dinner was offered and the local valet of the city of Pergamino provided some tango dance for enjoyment.

The final day of the conference started with a session about physiology to understand yield potential and a session about seed quality. That afternoon we visited the headquarters of Rhizobacter, Syngenta Seed Care Institute, and experimental field plots and the seed laboratory at INTA.



Over 100 papers were submitted to be presented at the conference. Sixty two percent of the papers dealt with issues in temperate species and the remainder focused on subtropical species. Fifty seven percent of submitted papers were submitted from Argentina, 9% from China, 7% from New Zealand, and 5% from Denmark. The most mentioned species in the posters were ryegrass and fescue followed by *Panicum coloratum*.





Approximately 70 conference attendees participated in the post-conference tour through the Buenos Aires province. Our first stop was at a farm near Bolivar where a demonstration of cattle raising activities and the use of pastures were seen. We then travelled to the city of Coronel Suarez where we visited El Cencerro, a company owned and managed by the Ducos family. We were fortunate to visit their breeding plots and were able to view a demonstration of different stages of selection in various grass and clover species. We then visited several of their seed production fields including cocksfoot, white clover, and hairy vetch. After a fantastic lunch with a typical asado we moved to the southern part of Buenos Aires province, to the city of Necochea.

The next day we first visited seed production paddocks of Gentos S.A. in the proximity of the city of Balcarce. The first stop was to a farm owned by John Cameron where we view closing date and fertilizer trials in white clover. We then visited another farm where we were able to seed annual ryegrass and tall fescue production. Our final stop was spent with PGG Wrighton Seeds at a cocksfoot trial near Coronel Vidal. There we



were lead through an enjoyable group activity to discuss different field management activities that might be most helpful for the field we were in.



The last day was our tour was spent at Los Husares Viejo, a family owned farm that produces several herbage seed crops. We had a very productive talk about annual ryegrass production and covered some of the costs and risks associated with producing seed in Argentina. Maria Zapiola Luz and the entire family provided a fantastic lunch, political science presentation, and overall great hospitality.

Thanks to the conference organizing committee, sponsors, tour hosts and conference presenters and attendees, this was a fantastic 9th International Herbage Seed Group Conference. We look forward to seeing everyone in Oregon in 2019!

Impressions from First Time IHSG Conference Attendees

Juan Pedro Martinez, Production Manager, Gentos S. A. - Uruguay

I have been working in seed production for five years and this was my first IHSG Conference, an experience that I absolutely recommend.

Beyond the professional experience, where the quality of the posters and exhibitions, the level of researchers, technicians and producers of different nationalities were very high, I would like to highlight two aspects that were very important for me. What first caught my attention, and provoked a lot of enthusiasm, was the mixture of youth and "wisdom" that was among the conference participants. We had several young people who, like me, who are very new to seed production and who are taking their place, either from research or from technical advice, but there was also a good group of veterans that apart from sharing all their experience they transmitted all the passion



they put into what they have been doing for many years. That deserves an important highlight.

The second point I would like to highlight, was the openness of each and every one of the participants to share their knowledge, experiences, failures, concerns, challenges and their dreams, regardless of whether they were competing companies or not, whether they were technicians or producers, whether they were from public research or private institutions. Everyone wanted to contribute what they knew and everyone wanted to learn what they did not know. This spirit, added to the joy and enthusiasm from everyone, made the congress a very nice experience. Finally, a special mention to the organization and to all those who received us in the post conference tour. You did a great job!

Nitya Khanal, Research Scientist, Integrated Forage Crops, Agriculture and Agri-Food Canada - Canada

The IHSG conference was well-organized multidisciplinary forum participated by delegates from diverse backgrounds including farmers, students, herbage seed researchers and executives from governmental organizations, academic institutions and private industries from around the globe. It provided a great environment for personal interactions and networking opportunities, opening up the prospects for collaboration.

The program involved activities from in-door oral and poster presentations, experts' plenary, laboratory to field observations, briefings and discussions in a very cordial



atmosphere. The topics covered themes from ecology, breeding, agronomy, economics and forage seed sectoral reviews. The pre- and post-conference tours transecting north-west to south-east parts of Buenos Aires province of Argentina provided excellent opportunities to observe forage seed research and production activities while enjoying the hospitable cultural landscape of the country. I cherish the entertaining horse rides (gaucho) during the pre-conference tour luncheon. As a new forage research professional, all of the conference activities were very interesting, educational and thought-stimulating for me.

I would like to commend the conference organizers, executives and professional staff of governmental and private organizations, universities and the farm families we met. This was my first time being in the southern hemisphere and it was thrilling to realize the seasonal contrasts between the commencing winter in Canada and warmth of spring in Argentina. I look forward to participating in the next IHSG conference in Oregon and will look forward to meeting everyone again.

Jacob Gyldengren, PhD student at Aarhus University, Denmark

Even though I'm part of the seed group at the University of Aarhus, the world of seed production is quite new to me. In my PhD project, I mostly work with wheat, but I'm eager to learn more about the seed production systems. Participating in the 9th IHSG conference in Pergamino, Argentina, was an excellent introduction into this world.

Some of the challenges in producing high quality seed are different from food and feed production systems, and the conference was great opportunity for researchers and producers to discuss some of these issues including timing and type of soil operations, amount and timing of PGRs and fertilizer, harvesting methods, structural capacity at the farm



and regional level, weed issues, storage, etc. There are so many factors which affect the seed yield and quality and this makes these production systems very interesting.

The conference was more than learning new things about herbage seed production. It was also about understanding whole business structure, regulation, and who is who in this community. Everyone was very nice and welcoming to us new people. I was especially impressed about the degree of openness between all the participants, including competing companies who were remarkably open and shared information and experiences.

On the post-conference tour in the vast Argentinian pampa we saw some great examples of both local and international research which helped us understand some of the challenges presented by the natural conditions in this part of South America. Flooding caused by excess precipitation and high ground water levels had prevented planting across huge areas during the early spring. This was a good reminder of some of the difficult conditions and decisions farmers are faced with in different parts of the world.

I would like to thank both the IHSG committee for granting me a scholarship for the 2017 conference and to the Søgård-fund in Denmark, which helped me finance the travel to Argentina. I will also thank the diligent organizing committee for all the work they put into the arrangements of this conference.

Agathe Joffre, Region Referent & Experimental Station Manager, National Seed Growers Association (FNAMS), France

Attending the 9th IHSG Conference was a great opportunity to learn more about the seed industry in the Southern hemisphere, especially the differences in seed production systems between Argentina and France. All the conference meetings and field visits showed the incredible dynamics of the global seed industry. We are have some major challenges in common outside of our specific regions including climate change, investigations on changing pest management practices for insects, weeds, and diseases, access to efficient



production techniques (active ingredients and alternatives), harvest management, etc. A highlight from the IHSG Conference was the unique opportunity to meet researchers, industry representatives, and growers from around the world and to share experiences and questions about herbage seed productions. I would like to thank the IHSG organizing committee for hosting this very rewarding conference and post-tour visits.

Federico Bertuch, Seed Production Representative. PGG Wrightson Seeds, Argentina

Attending the IHSG Conference was an enriching experience. It meant having the opportunity to meet the most important researchers, extension workers and seed growers. Added to this, the fact that the congress was held in Argentina was an added value. It gave us the chance to show our international colleagues what we been doing and ask for advice.



I think one of the most valuable things about the conference was the informal sharing and the

fellowship that was built during the whole time the event lasted. For sure this is not something to be seen on the daily basis.

Many thanks to the organizing committee and to all the international delegates for the great advice you gave us both during the time in Pergamino and at Coronel Vidal where we visited our cocksfoot/orchardgrass/dactylis/pasto ovillo seed production paddock!

David O. Chilcote July 8, 1931 – August 25, 2017



Submitted by: Bill Young, IHSG Past President, Corvallis, Oregon USA

Oregon State University professor emeritus David Chilcote died recently at his home in Corvallis, Oregon USA. Although retired from public service for over 30 years, he was active in the university and Corvallis community until shortly before his death.

Many younger readers will have little knowledge of this man; however, Dave was present at the beginning of our organization... then known as the International Herbage Seed Production Research Group (IHSPRG), and was an early leader in its growth.

Some may recall that IHSPRG was formed in 1978, following the 28th University of Nottingham Easter School in Agricultural Science, with the main objective "to encourage cooperation and communication between workers actively engaged in herbage seed production research." The first IHSPRG Newsletter was published in September 1979 under the leadership of Dr. Paul D. Hebblethwaite, the group's first Chairman (1978-81).

The second IHSPRG meeting was concurrent with the XIV International Grassland Congress held at Lexington, Kentucky USA in June 1981. It was at this venue that Professor Chilcote assumed the chairmanship of our organization (1981-85). In subsequent years we shortened our name to the International Herbage Seed Group (IHSG), and designated that person in the leadership role as President.

At OSU, Dave Chilcote joined the Farm Crops Dept. in 1953 upon completion of his B.S. degree, and worked through the 1950s on the weed project while earning a M.S. degree in 1957. In 1959, he went to Indiana's Purdue University, where he completed a PhD in Crop Physiology in 1961.

When he returned to OSU in 1961, he started a new project in crop physiology, which he maintained until his retirement on December 31, 1986. Dr. Chilcote taught crop physiology, advised numerous grad students, and once was head undergraduate advisor on an interim appointment. Much of his research was centered on grass seed crops.

Seed Outlook – A View from the United Kingdom

John Fairey, Seed Production Manager; Germinal GB Ltd., England

Like most other parts of the world, the UK Dairy industry has been through a tough time, from which it is emerging. There have been some casualties, but milk prices are now at a level that will allow the efficient to survive. Beef and Sheep farmers have had mixed fortunes over the last 5 years and the decision a year ago, to leave the EU has done nothing to boost confidence for sectors that depend on exports.

A longstanding problem here, is persuading livestock farmers to maximise forage use. Maize and Cereals make up too much of ruminant diets and reseeding grass is not done often enough, if at all. There are signs that this is changing, partly because livestock farmers and their advisors must produce meat and milk more cheaply, partly because of the improved grass and clover cultivars available and partly because growing Maize has become more expensive and environmentally it is becoming unpopular.

As a net importer of grass and legume seed, this is providing an opportunity for seed growers in the UK. The surplus of forage and amenity grasses that has been hanging about in Europe has become smaller, and there are even whispers of shortages in the next 18 months.

Seed growers can therefore expect decent returns, going forward, which with less chemicals available, competition from other crops and BREXIT, is the least they deserve.

Last week, I took a group of UK seed growers to Denmark and we were delighted to catch up with Birte and Barthold, who looked after us extremely well. It was very good for UK growers to realise that farming in other parts of the world is tough too, and the level of regulation in Denmark came as a surprise to many.

The concerns among breeders and merchants in Denmark are very tied to the aforementioned levels of regulation, particularly chemical availability for troublesome grass weeds and the quotas on Nitrogen. It seems that countries with less strict regimes are increasing forage seed production, Poland was mentioned on several occasions.

Cereal prices are also poor, which again combined with the restrictions are making grass seed production look attractive again to Danish growers, and who can blame them? Long term, we know that a big increase in production in Denmark will have a negative effect for other European producers, so it is hoped that along with the successful export programme, the production area can be controlled effectively.

New Zealand Steps Up Research Efforts on Herbage and Vegetable Seeds

The formation of the Seed Industry Research Centre (SIRC) in May 2017 by a group of seed companies in partnership with the arable farmer levy funded Foundation for Arable Research (FAR) will strengthen herbage seed research in New Zealand. SIRC is a virtual centre operating out of FAR at its Templeton base, near Christchurch. The member companies are: Agriseeds, CropMark Seeds, Dennis Carter Seeds, DLF, Forage Genetics, PGG Wrightson Seeds, SeedForce and South Pacific Seeds; while five research providers (Lincoln University, Massey University, AgResearch, Plant and Food Research and AsureQuality) have associate member status. The seed companies are committing staff and a levy based on seed produced that will expand the funding from FAR's grower levy base. Ivan Lawrie (FAR) is SIRC's Director and he was a key driver in bringing the parties together.

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