Meeting of the Committee for Agriculture at Ministerial Level

In February 2010, Ministers of Agriculture from the OECD’s 30 member countries and those from Argentina, Brazil, Chile, Estonia, Indonesia, Israel, Slovenia, the Russian Federation, South Africa and Romania and representatives from the EU, the FAO and the WTO met in Paris around the theme “Food and Agricultural Policies for a Sustainable Future; Responding to Global Challenges and Opportunities”.

This meeting brought together Ministers and senior policymakers from countries that together account for a large proportion of the world’s production and consumption of food and agricultural products.

Ministers noted that recent developments have brought a number of issues and questions confronting the global food and agriculture system into clear focus.

Strong growth in demand for feed, food and non-food uses of agricultural raw materials, alongside persistent global food security issues; climate change, exacerbated by increasing competition for land, water and other resources; price volatility; opportunities for “green growth”.

With potential economic and environmental benefits; growing interest in the manner in which food is produced; food related health concerns; a renewed emphasis on innovation, efficient resource use and productivity growth, in both developed and developing countries, including the production of renewable energies such as bioenergy on a viable economic and environmentally sustainable basis.

The essential role of trade in ensuring a sustainable and reliable flow of food and raw materials.

The Ministerial meeting agreed that a deeper understanding of the nature, extent, and implications of these issues for the sector and for public policy choices is required and invited the OECD to explore these issues further over the medium and longer term, in cooperation with national...
governments and other relevant international organisations.

Finally, it was concluded that the task for Ministers and members of their governments, is to ensure that the regulations, the institutions and the policies are in place to enable farmers and the entire food system to supply safe nutritious food to where it is needed, respond to various societal and consumer demands, and act as custodians of our natural resources. In parallel, careful monitoring and analysis of progress would be essential. With this in mind, Ministers agreed to come together again at OECD, not later than mid-decade, to take stock of progress.

The Seed Schemes, through its programme of work, already deal with a number of key issues identified by the Ministerial Meeting. The countries participating in the Schemes have set up harmonized procedures for production, processing and trade of seed. More specifically, the adoption of OECD seed certification standards has encouraged the growth in the seed trade by reducing the technical barriers to trade and by increasing access by farmers to high-quality seed in all regions of the world.

2010 Annual Meeting of the OECD Seed Schemes

The Annual Meeting of the OECD Seed Schemes took place on 25 and 26 March 2010 in Christchurch, New Zealand. The primary purpose was to discuss issues relating to the Varietal Certification of Seed Moving in International Trade. The meeting was highlighted by the following new documents and a Workshop on Seed Certification in Asia.

Compact Version of the Seed Schemes Rules

The aim of the “Compact Version” of the Seed Schemes Rules is to streamline the existing rules in a more user friendly layout. The revision has been carried out in order to reduce duplication, without making any substantive changes to the rules. This has been done by taking the common texts from each of the seed schemes (excluding Vegetables) and putting them together in a single part of the Rules, applicable to all Schemes. Therefore, all rules and conditions present in the 2010 Rules shall be identifiable in the new compacted version, either in the section on information applicable to all schemes or on specific pages of the schemes. The new Compact Version of the Rules will apply from January 2011.

Guidelines for Control Plot Tests and Field Inspection of Seed Crops

The Guidelines for control plot test and field inspection are intended to address the methods used to determine varietal identity and varietal purity and consist of procedures which are advisory to National Designated Authorities (NDA). The last issue of the guidelines was published in 2001 and has been identified by delegates as a very useful tool. The Technical Working Group meeting in 2007 decided that the guidelines needed to be revised, updated and complemented, in order to keep abreast of new developments.

After several years of discussion and revisions, the Guidelines were adopted at the 2010 Annual Meeting. The brochure will be published in September 2010.

Guidelines for Multiplication Abroad

The purpose of the Guidelines for multiplication abroad is to identify responsibilities of each party in the seed multiplication process, starting with the NDA of the country of registration, the NDA of the country of multiplication, the company sending the seed, and...
the company conducting multiplication.

The work on multiplication abroad started in 2007 in the form of an Ad-Hoc Working Group (AHWG) consisted of experts dealing regularly with multiplication issues. The primary aim of the AHWG was to set up rules on multiplication abroad, but the idea of having guidelines was seen as being very important. The Guidelines will be published in September 2010.

Workshop on Seed Certification in Asia

As part of the Annual Meeting, a Workshop on Seed Certification in Asia was held on 26 March 2010. Presentations were made by delegates from Japan, India (current members of the Seed Schemes), Indonesia, Korea (potential applicant countries) and the president of the Asia Pacific Seed Association. The purpose of the Workshop was to get a better understanding of the different systems for seed certification and trade in Asia and evaluate the use and value of the OECD Seed Schemes in the Region. It could also encourage greater participation in the Schemes from Asian countries.

During the annual Council meeting at Ministerial Level, held on 27 May 2010, OECD countries welcomed four new members: Chile, which joined the Organisation on 7 May 2010, Slovenia, which joined the Organisation on 21 July 2010, Estonia and Israel, which OECD countries agreed on 10 May 2010 to invite as members. The remaining candidate country, Russian Federation, is still in the process of accession.

These accessions are part of a broader process of global outreach through which OECD is strengthening its collaboration with emerging and developing economies, and strategically engage with them through regional activities on Middle East and North Africa, Latin America, Southeast Asia and Africa. This process also includes the Enhanced Engagement process with Brazil, China, India, Indonesia and South Africa.

Being a Part II Programme of the OECD, membership of the Seed Schemes is not only open to OECD member countries, candidate countries and enhanced engagement countries, all of these countries are already members of the Schemes, with exception of Korea, China and Indonesia. Therefore, the Workshop on Seed Certification in Asia was held in order to get these countries involved in the Schemes.
quality management and to enable them to train their own staff in Iraq. Also investigated, was whether the laboratories comply with the ISTA rules for seed testing and the ISTA accreditation standard, and advice was given on how to improve their own situation. The scope concerned the full range of crops and species that are cultivated in Iraq.

This training is part of a project to improve food security and nutrition for the Iraqi people with increased domestic production of vegetable crops. This will be brought about by the use of improved seeds, and locally adapted varieties of the major vegetable crops, by rehabilitation of the infrastructure in the government research centres and by enhancing seed production and quality control capacity.

The training included practical sessions and demonstrations, lecturing and visits to areas of seed quality control activities in the Netherlands. The training provided the Iraqi trainees a wider knowledge of regulations, seed testing and reporting of results.

Website: www.nak.nl

Emerging Global Wheat Rust Threats: The Role of FAO

By Thomas Osborn, Agricultural Officer, Plant Production and Protection Division

Many of the OECD Seed Scheme members are wheat producers and exporters. Wheat is grown on more than 200 million hectares of land worldwide and is a source of food and livelihoods for over one billion people in developing countries. Plant disease had always placed constraints on wheat production. Exacerbated by climatic stress, especially in rainfed areas, the impact of disease is expected to increase. By eliciting additional losses in yield, disease causes wheat prices to increase, in turn creating additional challenges for vulnerable, wheat-reliant populations.

Throughout recorded history, rusts have always been the most economically damaging diseases affecting wheat. However, several new emerging threats from rusts are of particular concern. The virulent strain of wheat stem rust disease known as Ug99 has emerged from East Africa and spread quickly across borders. Ug99 reached the Islamic Republic of Iran in 2007 and now has also been found in the Republic of South Africa. The pathogen is also changing rapidly; seven variants are now recognized in the Ug99 lineage within Africa. These variants generally exhibit increased virulence compared to Ug99. The Ug99 lineage now threatens the Near East, Eastern Africa and Central and South Asia. These regions account for some 37 percent of global wheat production, and wheat is the staple food crop for most of the countries in these regions. On average wheat provides 40 percent of the per capita calorie supply, and it is especially important to the diets of the most vulnerable. An estimated 80% of commercial wheat cultivars are considered susceptible to Ug99; the risk that it could cause serious epidemics is very real. In Kenya, where Ug99 has become well established, field trials have shown resulting yield losses of up to 80 percent on susceptible varieties. Moreover, the cost of a 10 percent loss in areas immediately at risk is estimated to exceed USD 7 billion.

In addition to the re-emergence of stem rust as a threat to wheat production, global yellow rust epidemiology is changing dramatically. Since 2000, two closely related strains of yellow rust are now causing serious epidemics across several continents. These new strains are more aggressive (producing two to three times more spores per day than older strains) and adapted to warmer temperatures. This temperature adaptation is highly significant, as it is permitting the colonization of areas in which yellow rust was previously unknown as a serious economic disease of wheat. There are also new races of yellow rust spreading which are virulent to Yr27 (a key resistance gene in much of the CWANA region that has replaced Yr9 after the famous global epidemics in the 80 and 90’s). Regional breakdown of this gene
was reported from South Asia in 2002-2004, and favorable conditions have been inductive to epidemics in several Near East and Central Asia countries in 2009 and 2010.

Many international and national organizations have come together to coordinate their work under the “Borlaug Global Rust Initiative (BGRI)”, founded by the late Dr. N.E. Borlaug. The BGRI has the overarching objective of systematically reducing the world’s vulnerability to stem, yellow, and leaf rusts of wheat and advocating/facilitating the evolution of a sustainable international system to contain the threat of wheat rusts and continue the enhancements in productivity required to withstand future global threats to wheat. The partners in the BGRI include CIMMYT, ICARDA, ICAR, Cornell University, FAO and a network of scientists and national agricultural research institutes around the world. CIMMYT, ICARDA and Cornell University have focused mainly on breeding for resistant varieties and other pathology research aspects and disease surveillance. Using additional resources, FAO developed its Wheat Rust Diseases Global Programme, to complement the work of the BGRI and national partners. The Programme covers around 30 countries and is focusing on the following aspects to counter the threat of wheat rust: (i) support to national policy for preparedness and contingency planning; (ii) enhancement of surveillance, global monitoring and information sharing systems, including virulence tracking; (iii) enhancement of national wheat varietal registration programmes for the quick release of resistant varieties; (iv) enhancement of seed systems for quick multiplication and distribution of quality seeds of resistant varieties; and (v) improvement of wheat rust management at the field level through participatory farmer training to reduce risk and improve yields under local farming conditions.

FAO together with its partners organised global, regional and national advocacy events to raise awareness of over 150 key policymakers and researchers from the Programme countries on the status and threats posed by wheat rusts. The events fostered inter-institutional cooperation and exchange of information at both the national and regional levels to enhance the countries’ preparedness and capacities to prevent and manage the spread of wheat rust diseases.

In the area of surveillance, the foundation of the Global Cereal Rust Monitoring System, namely databases, applications and a web-based information portal for the dissemination of surveillance and monitoring information, were created at FAO Headquarters (www.fao.org/agriculture/crops/rust/stem/en/). At national level, support and training in wheat rust field survey and race analysis were extended to researchers and plant protection technical officers from several countries. Laboratories and greenhouses for race analysis are being upgraded in five priority countries.

Capacity building of the national seed sectors was initiated to strengthen the fast-track release, seed multiplication and distribution systems of wheat rust resistant varieties. Seed multiplication facilities are also under physical upgrading in five priority countries. At community level, season-long participatory training using the Farmer Field School approach was organised in Pakistan and several farmers groups facilitated by national researchers and extension officers initiated their participatory field experimentation work in Yemen to test best management practices on wheat rust control and wheat productivity enhancement.

As a result of these activities, the Governments of some countries have already taken independent actions in the context of country
preparedness to prevent and manage wheat rusts and requested further FAO technical assistance.

In conclusion OECD Seed Scheme members need to maintain vigilance regarding the threat of wheat rusts. The seed scheme may be a useful way to move wheat rust resistance varieties between countries since resistant varieties are the best way to counter this threat.

Website: www.fao.org/agriculture/crops/en/

ISF Conference on AP and LLP: Impact on the International Seed Trade

By Piero Sismondo, Director, Seed Technology and Trade

More than 120 representatives of the seed industry participated to the Conference on Adventitious and Low Level Presence of GM in seed. This event was organized by the International Seed Federation (ISF) and was held on June 3rd in Calgary, in conjunction with the World Seed Congress 2010. In the full day event, during 3 sessions, 12 speakers covered a broad range of aspects and specific issues that an unintended presence of a GM trait may have on the activity of the global seed industry.

The opening note indicated the main goals of the Conference. It explained in detail the terms AP and LLP which are commonly used in trade and set the goals of the Conference. Also, it reported about the project that is being developed in OECD to provide general guidance to regulatory authorities on appropriate elements of a safety assessment for seeds and commodities that can be used as seed when low level of biotech material, with approval for cultivation in at least one country but not in the country of import, is found.

The first session was aimed to provide the participants with an update on the global use of plant biotechnology and what is in the pipeline of events and crops. In 2009 approximately 14 million farmers in 25 countries grew GM crops on 137 million hectares. The first presenter stated that to date close to 40 GM events have been approved for commercialization and it is foreseen that in 2015 there will be more than 120 events available for cultivation worldwide.

Another speaker discussed on distinctions between food, feed and seed as far as AP and LLP is concerned and pointed out that it is becoming more and more difficult (if not impossible) to work for the concept of “zero tolerance” or zero presence of a GM trait in farming products. He warned the audience that if this situation persists, the prices that countries that enforce this measure will have to pay will increase exponentially. Also he mentioned that the system of testing upon arrival creates a lot of delays and extra costs to exporters and is always subject to the risk of AP. As an alternative he suggested moving from testing to verification of the production process.

The third speaker informed about international efforts that are being developed especially by the OECD Working Group on the Harmonisation of Regulatory Oversight in Biotechnology. In few slides, the scope of this project as well as the actions already taken and objectives targeted were very well presented and explained.

Two speakers illustrated the situations and the perceptions that may be experienced in the field crops or in the vegetables sector, respectively. The speed and the frequency of international movement of commodities and produce as well as of seed, add complexity to the scenario. In both cases it has been pointed out that there is a need for a global policy in order to maintain the international trade of seed and help the seed industry perform its activities and fulfill market demands. Risk assessment and the definition of reasonable thresholds have been indicated as the tools that governments may adopt to maintain the trade of seed. Acceptance of GM crops has been analyzed and found non uniform in different regions of the world causing difficulties in the commercialization of fresh food items.

The seed industry was invited to explain how it is equipped to manage all production phases in order to comply with the regulations using systems and information resources available, such as the OECD Seed Schemes, AOSCA guidelines, ISTA standards and protocols and the ASTA Seed Quality Manual. The participants were exposed to what are the operating procedures of a seed company that can assure the respect of stringent quality standards and what are the appropriate methods that may be used for testing and detecting AP in seed. The importance of the standards that are set as well as of the sample that will be used for determining quality compliance of seed was pointed out.

The importance of testing was discussed mentioning all the
advantages and disadvantages of different analytical methods and explanations of when one method is better adapted than another for a specific objective. A very important aspect that was stressed is that seed is neither food nor feed: the value of a small sample to be tested may be of very high value (for example a parent line of a hybrid vegetable) and therefore it is extremely important to define the appropriate size of the sample. After speaking of the importance of harmonization at international level and of monitoring the performance of seed laboratories the concept of performance based approach testing was introduced: it represents a step forward in the aim of facilitation of the international seed trade.

During the third session, several presentations explained the different approaches that have been adopted in different regions of the world in order to support the development of both conventional and genetically engineered crops.

In Australia acceptance of GM is mixed, but the Australian Government recognized the increased production of GM crops worldwide and moved to understand and manage the risk with the cooperation of the Australian Seed Federation. The industry responded by developing a Best Practice Guide to Management of AP in Canola. In Chile coexistence between GMO and Non-GMO seed activities is not only possible but successful: the Chilean experience has proven it for more than 15 years. A comprehensive overview of the situation in this country was made and an interesting demonstration of the method for tracing all the production sites based on use of the GPS was given. With its geographical situation, Chile represents one of the most important players in the world for production of seed on a regular basis and for the offseason production for other regions.

Europe is in a very good situation from a regulatory standpoint since there is a Directive providing guidance in the deliberate release and cultivation of GM crops, two Regulations supporting traceability and labelling of food and feed, indicating threshold levels, and guidelines for coexistence. But from a practical view, Europe has not been able to accept the evaluation of products based on science made by its official Agency, has not been able to issue authorisations for cultivation and to agree on thresholds and is not ready yet to accept LLP of GMOs approved for cultivation and use in third countries. The speaker concluded that the seed industry asks the EU to reach reliable authorisation processes respecting timelines and based on science, to develop an enabling policy that is practical and to give to breeders freedom to operate and to farmers freedom to choose.

China is currently faced with important challenges: population growth: 1/5 of the world population with only 6% of the world cultivated land; agricultural land reduction: in 2008, farmland was about 121.7 million hectares, which is about 12.2 million hectares less than 1978, with an annual reduction of 0.39 million hectares on average; climate change and water shortage: water resources pro capita are only 1/4 of the world average; the average farmland pro capita is 1.00ha, which is 40% of the world average and it is forecast that, in 2010, farmland pro capita will decrease to 0.93ha. In this scenario, the choice for GM crops appears as the only alternative for China to being able to feed its population. Both public and private sector are very active in research and breeding activities for developing new varieties that will support the growth of this huge country; there are today 8 species approved for cultivation in China: cotton, tomato, pepper, petunia, poplar, papaya, rice and corn.

The conference was successful in raising the level of awareness in the industry on adventitious presence and provided clarity on the difference between adventitious presence and low-level presence. As a threshold of ‘zero’ was impractical there was industry-wide consensus that a pragmatic approach to adventitious presence was imperative. To avoid trade disruptions caused by a patchwork of regulatory procedures, the industry called for a policy framework that was global and practical to implement.

A conclusive panel discussion has consolidated final considerations and suggested action items. The seed industry needs to aim for a global and integrated approach; it should come to common understanding of wording and consistency in its use; it should choose for either AP or LLP or at least define the differences between AP and LLP. The concept of “zero tolerance” should be expanded: a presence of impurities at “zero” level is not possible in nature and this should be broadly accepted, especially by the authorities. Next step will be to work on developing the acceptance of a threshold: without threshold, it would be difficult to make progress. A possibility may be to examine if existing quality assurance testing can be used, e.g. OECD.
varietal purity levels. Also, it is advisable to seek for a better communication within the seed industry and between industry and regulators with the objective of looking at regional solutions for global opportunities. **Public acceptance** should be a priority that may help to find a way to continue working for the evolution and development of the seed industry, respecting all parties, keeping the balance and allowing coexistence of all.

Website: www.worldseed.org

**Times of change – Europe’s seed industry faces radical overhaul of EU rules and policies**

*By Garlich von Essen, Secretary General ESA*

A new Commission, new policy responsibilities and - with the entry into force of the Lisbon Treaty - important changes in the regulatory environment marked the start of the year 2010 for the European Union and with that also for ESA, the European Seed Association.

With the decision of Commission President Barroso to transfer the responsibility for GM related legislation from DG ENVI to DG SANCO, we certainly hoped that this would be the beginning of a more practical and pro-active policy approach that would result in the setting of **appropriate thresholds for adventitious presence of GMOs** in seed of conventional varieties. Judging from a first analysis of the new Coexistence Guideline and the proposed change to the legislation for authorisation of GMOs for cultivation (where competence shall be entirely transferred to Member States), both published on July 13th, it seems that the needs of the seed sector are again neglected. ESA will do its best to obtain improvements of the proposals to finally achieve the much needed legal (and with that economic) certainty for its membership. Realism and leadership are needed to convince the public that an acceptance of GM presence is a precondition for achieving coexistence and freedom of choice for all. Here, ESA also sees a strong role for OECD and we are committed to continue our contribution to the discussions with the OECD’s Committee on Regulatory Oversight for Biotechnology via the International Seed Federation ISF.

Next to the discussion on the future policy for GMOs, the ongoing work on the **Better Regulation initiative** aiming at a modernisation and simplification of Europe’s seed marketing legislation will keep ESA busy in the coming years. Moving from the first evaluation to the implementation of the respective Commission Action Plan, more detailed studies on some aspects of the future regulatory framework for seed and planting material, e.g. regarding DUS and VCU testing and certification and possibilities for differentiation of obligations in relation to the importance of the crop will be discussed. ESA wants to assure that the principles of the legislation which are well established and trusted by breeders, seed producers and farmers all across Europe will not be hampered by the desire to please a few, albeit very vocal interest groups outside of the farming community.

Directly linked to the evaluation of the seed marketing legislation is a similar exercise for **Europe’s Plant Health regime**. Here, the result of the evaluation will be presented at a large scale conference in fall where first ideas for a revision will be put forward. With an ever increasing exchange of plant breeding material and seed all around the world, the industry’s interest is twofold: effective rules and procedures to assure that the spread of harmful organisms is either avoided or properly controlled – and a regime that takes account of the specificities of the seed sector, its high value material and the high frequency of movements between countries and regions. Here, ESA also works closely with IPPC and national governments to improve international rules and procedures to these effects.

Another very important subject, maybe the most important one, is the work on an update of ESA’s **Position on Intellectual Property**. Following a conference in April, ESA is now defining its approach to the various aspects of IP protection based on the guiding principles of the need for access to genetic resources for further breeding and the importance of a strong stimulus for innovation and appropriate protection of such
innovations. Again, this is not a theoretical or academic debate. The European Commission has just launched its evaluation of the current legal framework for the Community Plant Breeders’ Rights and the seed industry must assure that its voice is heard and its needs are well understood and accepted in the following political debate.

It is obvious: the legal and political but foremost the societal framework in which the seed industry operates is changing. And it is changing fast. It is a huge challenge for the industry to contribute to all the evaluations (and later on contribute to the political decision making and regulatory developments) in a timely and effective manner. But it is also a great opportunity for the seed sector to help shape its own regulatory environment and with that its own future. It is now that we have to sow the seeds for a good future for plant breeding!

Website: www.euroseeds.org

The 39th Session of the Specialised Section on Standardization of Seed Potatoes of the United Nations Economic Commission for Europe (UNECE)

By Pier Giacomo Bianchi and Serguei Malanitchev

The 39th Session of the Specialised Section on Standardization of Seed Potatoes of the United Nations Economic Commission for Europe (UNECE) took place in Geneva in March 2010. Representatives of 19 countries attended the meeting;
The Specialized Section also formulated its position regarding blackleg of seed potatoes:

- Blackleg occurrence in seed potato crops is an important indicator of quality. In the UNECE Standard for Seed Potatoes, strict tolerances for blackleg in the growing crop and at lot inspection underpin, as part of the rot tolerance, the control of this disease in certified seed.

- Disease expression in the progeny crop is not always directly related to either inspection findings or bacterial loading in mother tubers. This is due to the importance of the environmental and agronomic influences in the epidemiology of this disease. However, regular inspections remain an effective tool to limit the spread of the disease.

- Conditions which favour blackleg, particularly excessive moisture and in the case of *Dickeya*, high temperatures, can lead to spread of the disease. For the time being, enforcing strict tolerances at certification continues to be the best available regulatory mechanism to control blackleg in marketed seed potatoes.

- Good agronomic practices, such as forced ventilation immediately after harvest, removal of diseased tubers prior to planting, allowing mother tubers to fully deteriorate prior to harvest, are all important in blackleg control.

**Promotion**

The Specialized Section decided to carry out an experimental demonstration trial in 2010 in the Russian Federation to show how the Standard can be used in practice to control the quality of seed potatoes for certification.

The Specialized Section will hold a regional workshop for Asian countries in Bandung, Indonesia, from 18 to 22 October 2010. The purpose of the workshop, to which about 20 countries have been invited, is to promote the practical application of the Standard in that part of the world. This event will be organised back-to-back with the meeting of the Extended Bureau of the Specialized Section, which will allow participants to learn more about the work of the Section and to participate in its substantive work on the Standard.

Similar regional events were organised in 2008 in Kyslovodsk (Russian Federation) for the former Soviet Union republics and in 2009 in Cairo for Northern Africa and Middle East countries.

**Future work**

The planned future activities of the Specialized Section include: the preparation of a questionnaire on varietal identity and purity; discussion papers on statistical comparability of the post-harvest evaluation results, on internal defects caused by low temperatures, on practices in cutting tubers for internal defects during inspection, on crop rotation practices, reproductive cycles and Silver scurf. The delegates will also update information on national certification schemes.

For more information please visit: [www.unece.org/trade/agr/welcome.htm](http://www.unece.org/trade/agr/welcome.htm)

(1) Chairman and Secretary of the UNECE Specialised Section on Standardisation of seed potatoes

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[www.oecd.org/tad/seed](http://www.oecd.org/tad/seed)