NEW DEVELOPMENTS FOR FIELD TRIAL SERVICES IN
BULGARIA AND OTHER EASTERN EUROPEAN COUNTRIES

In response to client demand for field contract research services and new EU regulations for plant protection product (PPP) registration, SGS has invested in its network of experimental field trial facilities and opened new stations in eastern Europe.

GEP accredited and operating within GLP requirements for residue trials, these new field trial stations in Poland, Hungary and Bulgaria complete SGS’s pan-European network. All these facilities follow local regulations and can offer private, independent Contract Research Organisation (CRO) field trials conducting efficacy evaluation and residue assessment on crop protection products.

Until recently, agriculture businesses seeking to run field trials and complete the tests required for crop registration in Bulgaria could only access facilities operated by institutes and universities. However, the Bulgarian Food Safety Agency has implemented an accreditation system for private CROs. SGS Bulgaria Ltd is one of the first companies to achieve certification for efficacy evaluation of PPP in perennial, field, vegetable and greenhouse crops.

SGS Bulgaria now has two field stations, in Plovdiv (south central) and Varna (north east). Both are equipped with state-of-the-art testing facilities for plant protection products and the analysis of results. Highly qualified, SGS’s field trial experts are experienced with many different crops and the implementation of EPPO standards.

Geographical coverage of SGS Field Stations

Climatic conditions at the Bulgarian field stations allow cultivation of almost all of the crops grown in Europe. When testing PPPs, SGS Bulgaria can offer a wide range of efficacy evaluation services, including:

- **Herbicides:**
  - Ability to choose between growing sites in different geographic locations and with a wide range of weed species, with high density.
  - Availability of fields weeded with perennial species (Johnsongrass, Creeping Thistle, Bermuda grass).
- **Fungicides:**
  - Availability of conditions for the stimulation of plant diseases (irrigation, artificial infestation).
  - Ability to choose locations with high infection rates.
  - Optimised methods for artificial infestation with plant diseases (Fusarium Head Blight, common bunt, Late blight, Fusarium dry rot, etc.).
• Ability to select susceptible varieties.
• Establishment of trials in greenhouses and laboratories, or under different storage conditions.
• Presence of own collection with phytopathogenic strains and a high level of aggressiveness towards agricultural crops.
• Insecticides:
  • Understanding of economically significant pests in agricultural crops.
  • Ability to select locations with suitable conditions for development of pests.
• PPPs for seed treatment:
  • Establishment of trials in greenhouse and field conditions.
  • Artificial infestation with storage pests.
  • Collection of seed material containing seed-borne diseases (common smut, leaf stripe disease, Fusarium spp.).
  • Professional seed-drills for precise sowing.

Other services offered by SGS Bulgaria's Agriculture team include: effect of plant protection products on non-target crops, set up of trials concerning application of fertilizers and growth regulators; quality analyses of grains and flour, in our laboratory complex in Varna.

To find out more about SGS’s field trial developments in Bulgaria and/or in other countries in eastern Europe, please contact:

**BULGARIA**
**DR GOSPODIN KOLEV**
Tel: +35 929 1015
E-mail: gospodin.kolev@sgs.com

**HUNGARY**
**DR MIKLOS VILLANYI**
Tel: +36 1 309 33 22
E-mail: miklos.villany@sgs.com

**POLAND**
**DR BOGUMIL KATULSKI**
Tel: +48 691 767 489
E-mail: bogumil.katulski@sgs.com

**OTHER COUNTRIES**
**OLIVIER COPPEY**
Tel: +41 22 73 99 377
E-mail: olivier.coppey@sgs.com
Growing high-production greenhouse crops, whether vegetable or floral, requires regular monitoring of nutrients. In a closed environment all inputs are calibrated to optimise growth, and conditions are monitored to minimise plant stress. Measuring nutrient inputs and monitoring plant performance is vital to achieving this.

Many producers / suppliers of growing media consistently test their products internally, and offer the results to their customers as an assurance of quality. However, greenhouse growers often prefer analyses provided by an independent and accredited laboratory to eliminate bias or perception thereof. Greenhouses are dependent on a large supply of water. Testing the water supply is a critical first step to determining the appropriate level of nutrients in an irrigation solution. Water testing is recommended irrespective of its source. Natural sources such as ponds have seasonal fluctuations of nutrient concentration, as do wells, depending on the particular aquifer. Municipal water tends to have less variability, but does contain ions such as chloride that need to be managed. Testing water for levels of coli form and E.coli is required for food safety.

Once the background nutrient values in the growing medium and raw water have been established, the addition of necessary nutrients into the solution is performed. Nutrient solutions are mixed so that nutrient levels are optimal for plant growth, but also so that ratios between certain nutrients are maintained. For example, calcium can interfere with phosphorus availability, and potassium can be antagonistic to magnesium uptake.

After mixing the solution, samples are taken and tested to verify the mix. Where nutrient solution is re-circulated, the collected drain water is sampled and analysed to determine additional nutrient requirements.

Another tool available, for monitoring plant growth, is tissue testing. Analysis of nutrient concentrations within the leaf tissue can provide information on deficiency or excessive levels. For micronutrients, such as boron and copper, this is the most accurate way to verify deficiency.

Within a greenhouse, where conditions are typically warm and moist, disease threat is also a concern. Although disinfecting is routine, pathogens such as pythium and phytophthora are difficult to contain if conditions for their growth are optimal. With a closed atmosphere and circulated irrigation, disease can spread quickly. To monitor pathogen levels or diagnose disease symptoms, the DNA Multiscan utilising PCR technology is rapid and accurate. The DNA Multiscan test detects the presence and levels of fungal and oomycete organisms, in water, solution, media and the tissue of roots, stems, and leaves. Scans to detect the presence of viral or bacteriological pathogens are also available if their presence is suspected.

Contact :
TRISH KELLY
BRANCH MANAGER
SGS Agri-Food Laboratories
1-503 Imperial Road N.
Guelph, ON N1H 6T9 Canada
Tel: +1 519 837 1600
E-Mail: trish.kelly@sgs.com

TESTIMONIAL
At Erieview Acres, we send samples to SGS weekly for analysis.
Trend samples are sent weekly. Levels are recorded in an internal database and we identify trends in the levels. If we see trends rising, we may reduce inputs of that nutrient well before excessive levels occur. Also, we check for differences between zones and stages of growth. This may give us insight into differences caused by either the climate or the stage of growth.

Occasionally, and whenever we make a change, we send special samples to confirm both the injector settings and a nutrient analysis of inputs. Injector settings and the resulting nutrient levels in irrigation water can be calculated. Occasional confirmation is essential, sometimes injectors fail and errors are obvious and immediately corrected, but they can also drift small amounts which may not be caught by alarm sensors. Suppliers often provide nutrient analysis, but it is worth confirming that you are getting what you pay for. In addition, levels from suppliers can be “minimum” levels – average levels can be significantly higher.

Sometimes we find abnormal plant appearance or growth in the greenhouses. We will then send a sample of both the normal and abnormal plants.

We depend on the timely results, and helpful advice provided by SGS to help us grow the best possible organic vegetable crops.

NORM HANSEN - Erieview Acres Kingsville, Ontario, Canada
BIOTECHNOLOGY SERVICES IN SGS AGRICULTURE NETWORK

The last two decades have seen worldwide acceptance of the practice of improving agriculture crops and livestock through biotechnology. These techniques have gained momentum in food safety and crop/livestock improvement due to their simplicity, accuracy and sensitivity. SGS has been providing biotechnology services for the last 10 years and diversified its services into research, regulatory services and the quality assurance of genetically modified crops as well as food safety and livestock. One of our most advanced biotech laboratory is located in India and covers the following scope:

FOOD SAFETY SERVICES

GM analysis: Qualitative and quantitative GM analysis for grains and processed food is carried out using real time PCR technology employing TaqMan and SYBR chemistries alongside generic primers and event specific primers. This method complies with regulatory requirements of the EU and India, with Limit of Detection (LoD) of 0.01% and Limit of Quantification (LoQ) of 0.1%. Our methods cover all the major GM crops and GM events approved across the world.

Food pathogen analysis: A real time PCR based food pathogen analysis for major pathogens such as Salmonella, E coli, Listeria, etc. for processed food and agriculture commodities.

Food allergen analysis: Food allergens like tree nuts, celery, soy, wheat, etc. are tested using real time PCR techniques mainly on processed foods.

GMO REGULATORY SERVICES

GM method validation: Real time PCR based method validation to achieve 0.01% LoD of GM events under regulatory approval for import/cultivation.

Protein expression: Elisa based protein quantification of transgenic proteins in seeds and tissue samples for GM events under regulatory field trials.

Zygosity analysis: Zygosity analysis by end point PCR for samples of GM crop breeding programs and trait conversion.

GMO QUALITY ASSURANCE SERVICES

GM trait purity: ELISA based qualitative trait purity analysis using 90 individual seeds is performed in GM seed lots produced at the farmer’s field.

Adventitious presence analysis: Presence of unintended GM events in any seed lots produced at contractor farms. 3,000 or 4,600 seeds tests are offered as required.

GM event analysis: Detection of intended GM events by real time PCR in any seed lots produced at contractor farms to ensure the percentage of GM event purity.

BIOTECHNOLOGY RESEARCH SERVICES

Marker Assisted Selection (MAS): Screening of large numbers of progenies derived during plant breeding using molecular marker (mainly SSR & SNP) technology.

Species identification/authentication: Using molecular marker technique, authentication of basmati rice, meat and other high value produce is performed on a genetic analyser platform.

Genetic purity: Identification of molecular markers (SSR) from public databases for crops like cotton, rice, maize, wheat, sunflower, soy, etc. is performed using PCR based techniques. Testing of genetic purity is to assess the hybridity percentage of elite hybrid seed. Comparison of the molecular marker pattern with parental lines is also offered.

Livestock pedigree analysis: Genetic analyser based fragment analysis technologies are administered to assess the pedigree of livestock. The method is used for bovine, canine and equine pedigree analysis.

Worldwide demand for molecular biology based analysis has increased tremendously. Agriculture biotechnology companies are expanding their business across the continents. They need uniform services that will boost their business. SGS is committed to provide biotechnology services in all major countries and has today a network of 11 biotechnology labs offering GMO quality assurance and regulatory services. All the labs are introducing a common system of SOPs, procedures and methods for GM events. Wherever they are based, customers will receive consistent and reliable services from SGS biotech labs across the world.

SGS is in the process of introducing food pathogen, food allergen and species authentication analysis services to all of its biotech labs making them the best choice for your GM crop and rapid food safety analysis needs across the globe.

Contact:

JOSEPH LOPEZ
HEAD SEED & CROP SERVICES
SGS INDIA PVT. LTD
No. 23 Siva Arcade, 29th Main BTM Layout, 1st Stage Bangalore 560 076 Karnataka, India
Tel: +91 80 67261424
E-Mail: joseph.lopez@sgs.com
2012 has seen the continued expansion of Seed & Crop Services in Spain. A crucial part of this growth is based on Seed Variety Trial activity. Starting in 2011, when the necessary investments in personnel and equipment were carried out, 2012 has confirmed the outstanding service provided by SGS to the most important companies in the seed business.

Seed Variety Trial Services are seeing increased demand from most of the Seed Companies in Europe, which used to complete the full testing for product development with their own staff and equipment. However, the need for screening in local conditions to find the germplasm best adapted to each environment makes it very difficult to establish the appropriate number of trials to get the data for the right business decision.

SGS is the ideal partner to complement a testing network in a certain location, or to reach areas where the client is not present. SGS Seed & Crop in Spain provides a full range of services for Seed Variety Trials, including seed preparation, drilling/planting, field maintenance (weed and pest control), evaluation and assessment, harvesting, sampling, analytics of different parameters and data analysis. Our equipment can be adapted to suit all field lay-outs or designs, from a small microplot of few square metres, to demo plots of thousands of square metres. Our clients acknowledge the professional field selection, reliable collaborator farmer portfolio, modern equipment, speed of response in critical moments and our agronomic expertise which provides ideal field management for each crop.

SGS Seed & Crop in Spain covers the entire Iberian Peninsula, including Portugal and a wide variety of crops: cereals (wheat, barley, etc.), sunflower, maize, cotton, peanut, oilseed rape and vegetables. The Seed Variety Trial infrastructure also provides services to other business lines, supporting efficacy and selectivity studies for plant protection products, fertilizers and seed treatment molecules, which require precise yield data.

SGS’s Seed & Crop Division employs experienced Seed Variety Trials staff and agronomists with experience of working for the leading seed companies. They know the crops, the growing areas and the equipment. SGS is one of the few companies able to provide a pan-European testing network, including accredited laboratories to complement the field data with the analytics of different quality parameters.

Contact:

JESÚS ROSSI
BUSINESS DEVELOPMENT
SGS SPAIN
Pol. Ind. Sta. Clara de Cuba, nave 16
41007 - Sevilla
Tel: +34 954 524142
Mob: +34 682 382722
E-Mail: jesus.rossiescalona@sgs.com
SGS REGULATORY AFFAIRS LAUNCHES A NEW SDS / PRODUCT LABEL SERVICE

Continuing the expansion of the services offered to internal and external clients the SGS Regulatory Affairs Team can now design and prepare regulatory compliant product labels and Safety Data Sheets. Our team of regulatory experts are available to update existing labels and Safety Data Sheets, or to prepare new documents for all chemicals and Plant Protection Products.

In the constantly changing world of the transport and registration of Pharmaceuticals, Cosmetics, Chemicals, Biocides, Biopesticides, Fertilisers and Plant Protection Products our Regulatory Affairs Team has expanded its services to include the preparation and maintenance of product labels and Safety Data Sheets.

As part of any dossier, submission labels and Safety Data Sheets must be provided for all products within the registration process. The label should provide sufficient information such that if understood and followed correctly, the product can be used safely and efficaciously.

SDS / MSDS are a worldwide system for providing user relevant information on chemical substances, chemical mixtures and chemical compounds. The formats may vary from source to source within a country and within a region, depending on national requirements.

SGS REGULATORY SERVICES:

• Labelling and classification for all products.
• Standard label formats.
• Full language and country support.
• Identification of relevant substances in mixtures.
• Determination and alignment of hazards with industry standards EU / CLP / GHS.
• Summary of hazards per substance and per mixture.
• Preparation and revision of Safety Data Sheets.
• Technical and regulatory advice.

The SGS Regulatory Team can provide up to date knowledge and expertise in all aspects of regulatory affairs either through specialist scientists within the team or through partnerships with key professionals in chosen areas, e.g. toxicology.

Contact:

DR SUE MCMILLAN-STAFF
REGULATORY AFFAIRS MANAGER
SGS UNITED KINGDOM LTD
The Meadows, Alkerton Oaks Business Park, Upon Estate, Stratford Road, Banbury, Oxon OX15 6EP, UK
Tel: +44 (0)1295 671933
E-Mail: gb.cropservices@sgs.com

Visit our website and download our flyers:
• Regulatory affairs
• Efficacy
• Environmental fate
• Toxicology
• Physical and Chemical Properties
• Residues
• Methods of analysis
• Ecotoxicology

PRODUCT NAME

Registration code: XXXXXX

2.0 litres

IMPORTANT INFORMATION

FOR USE ONLY AS AN AGRICULTURAL / HORTICULTURAL HERBICIDE

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS
SGS CHINA STARTS SOIL NUTRIENT INDEX TEST SERVICE

Equipped with efficient testing apparatus and staffed by a professional testing technical team, SGS China Agricultural services launched its soil nutrition tests in Qingdao city in 2012.

This Soil Nutrition Laboratory provides multiple soil nutrient testing services and customises soil nutrient testing packages for clients.

We use the highly efficient testing method, ASI, and other international standards to measure the soil nutrition elements. The ASI method can be applied to measure 15 soil fertility indexes (including 11 nutrient elements). With many years of laboratory data study and field trials, it can better reflect the supply condition of effective soil nutrient. This approach has been widely used throughout China, including more than 20 provinces. It successfully guides fertilizer production for specific crops and has achieved remarkable economic and social benefits.

Recently, we also started the field trials and market research business in China. The launch of our soil nutrition lab means we now have a full crop service from soil to plant. We can help our clients to analyse soil characteristics and understand both planting demands and market requirements.

Contact:

RIK WANG
SEED AND CROP SERVICE MANAGER
SGS CSTC STANDARDS TECHNICAL SERVICES CO, LTD
16/F Century Yuhui mansion, No.73 Fucheng road, Beijing 100142 China
Tel: 010-68456699-617
Email: rik.wang@sgs.com

SGS MYANMAR INITIATES SOIL TESTING AND FERTILIZER RECOMMENDATION SERVICE

Determination of nutrient levels in the soil is needed to increase yields and sustainable usage. To fulfill these requirements, SGS Myanmar set up a soil testing lab and initiated both soil sampling and fertilizer recommendation services in 2012.

Myanmar is an agriculture producing country. With the opening up of the country, local and foreign investors have come into the agricultural sector. For existing and new contract farming, nutrient levels in the soil are very important both before land is used and before establishment of a new crop. Therefore, in order to provide meaningful soil data to balance the crop nutrient requirements, SGS Myanmar has introduced soil analysis with a systematic sampling method, established a lab for soil testing, and can make fertilizer recommendations based on information supplied by the client. All these services are provided by our experienced, SGS trained, chemists and agronomists. We use standardised sampling procedures and testing which comply with internationally recognised methods for accurate results.

These new services are for various crops and we can deliver details of soil pH, organic matter % and soil nutrient composition to our clients. Our fertilizer recommendation service is provided crop by crop using the IPNI method. These services benefit clients by increasing yields through accurate soil testing results and using the most appropriate fertilizer, thereby reducing fertilizer costs and protecting soil quality for sustainable usage.

Contact:

MR. AUNG KYAW HTOO
BUSINESS MANAGER
SGS MYANMAR LTD.
79/80 Bahosi Housing Complex, Wardan Street, Lanmadaw Township, Yangon Myanmar.
Tel: +959-5130496
E-mail: aung-kyaw.htoo@sgs.com
EXPERIMENTAL RESEARCH IN CHILE

Over the past two decades, worldwide agricultural markets have seen a dramatic increase in demand for products with improved drought tolerance and water use efficiency. This demand has been fuelled by many factors including climate change. This was recently demonstrated in the US Mid West with rapidly declining fresh water supplies, increased irrigation costs and the expansion of agricultural production into lower rainfall areas.

Most public and private agriculture organisations have markedly increased their research efforts and are focusing on the improvement of drought tolerance in a range of commercially important crops.

Field drought stress experimentation is extremely challenging. To create consistent and relevant drought stress episodes both technology and experience is required. SGS has the capabilities to provide this service in several countries, particularly in Chile for the local market or for counter-season experiments for the Northern Hemisphere.

Our Research Farm, based in the Central Valley of Chile provides the following services:

- GMO event evaluations and selection projects.
- Substantial equivalency trials.
- Crop stress projects.
- Bio-efficacy and residue trials.

In addition to our residue field trials in San Francisco de Mostazal, SGS Chile opened last September a new laborato-ry in Concepcion. This facility is equipped with state of the art instruments to provide pesticide residue analysis on crop samples.

To complement our existing capabilities, SGS has also started to provide homogenisation and reduction of frozen samples for regulatory trials to help our sponsors minimise their shipping cost.

Please contact a team member for more information:

JAIME ALVARADO
CONTRACT RESEARCH MANAGER
AGRICULTURAL SERVICES

SGS CHILE LTDA.
Los Lagartos n° 3560
San Francisco de Mostazal, Chile
Tel: +56 72 492291
Email: jaime.alvarado@sgs.com
GLP DUST DRIFT STUDIES

Exposure field experiments have been developed to assist companies in the evaluation of their seed treatment Plant Protection Product (PPP) dossier for seed treatment under regulation 1107/2009.

According to EU guidelines (e.g. Guidance document on the authorisation of Plant Protection Products for seed treatment, SANCO/10553/2012 rev. 0, 8 March 2012), risk assessment studies are required for the evaluation of seed treatments (treated seed and pesticide applied during sowing).

The risk of adverse environmental impact due to the treatment of seeds with PPP and subsequent sowing operations has long been regarded as negligible for regulatory purposes. However, the investigation of incidents concerning honey bees and data from subsequent research projects have shown that exposure, especially to dust drift, is a notable exposure route, which may lead to severe effects on non-target organisms.

The amount, fraction size distribution and residue content in dust emitted during the sowing process from treated seeds, or pesticide granules applied in the sowing row, are relevant for exposure.

All three may differ depending on crop type, dose rate, and treatment regime.

SGS has developed an experimental protocol to evaluate the quantity of residue in dust following application of the PPP in the sowing row, or sowing treated seeds.

The PPP content in dust deposited during drilling is investigated in the “worst case conditions” (windy weather, dry soil) by placing dust collectors in the field. Dust is collected from the air (vertical projection area) and at ground level (soil surface), close to and around the sowing zone, in order to provide a full set of residue data.

Contact following GLP Study Directors, for more information on these studies:

MS. CÉLINE BOUSQUET
E-mail: celine.bousquet@sgs.com

MR. FRÉDÉRIC LEBRUN
E-mail: frederic.lebrun@sgs.com

Rainfall shortly after the application of a PPP can have a significant impact on its efficacy. SGS UK’s new rainfastness testing equipment simulates and measures the ability of PPPs to withstand rain, enabling clients to demonstrate compliance to EU regulations in the product’s technical file.

A PPP is considered ‘rainfast’ if it dries sufficiently, or it has been absorbed by the plant so that it remains effective after rainfall or irrigation. Rainfastness varies greatly between products, however, PPP testing means that product labels can be very specific about the length of time it will take for an application to become rainfast.

With the capability to vary droplet size, rainfall volume, intensity, duration and environmental conditions from mist to thunder storms, the SGS UK team simulates all manner of rainfall events.

They will devise a testing regime to match your requirements.

The team will conduct tests at varying intervals after application and the resulting data can be compared to a treatment without rainfall simulation.

SGS’s regulatory experts integrate this data with the technical dossier and prepare appropriate label text for review the regulatory authorities.

Independent assessment and verification of product claims improves market access and regulatory compliance.

Contact:

MARC WILLIS
BUSINESS MANAGER – SEED & CROP SERVICES
SGS UNITED KINGDOM
The Meadows, Alkerton Oaks Business Park, Upon Estate, Stratford Road, Banbury, Oxon OX15 6EP, UK
Tel: +44 1295 671931
Email: marc.willis@sgs.com

SGS UK ACQUIRES RAINFASTNESS TESTING EQUIPMENT

Are plant protection products (PPP) effective if it rains shortly after application?

Rainfall shortly after the application of a PPP can have a significant impact on its efficacy. SGS UK’s new rainfastness testing equipment simulates and measures the ability of PPPs to withstand rain, enabling clients to demonstrate compliance to EU regulations in the product’s technical file.

A PPP is considered ‘rainfast’ if it dries sufficiently, or it has been absorbed by the plant so that it remains effective after rainfall or irrigation. Rainfastness varies greatly between products, however, PPP testing means that product labels can be very specific about the length of time it will take for an application to become rainfast.

With the capability to vary droplet size, rainfall volume, intensity, duration and environmental conditions from mist to thunder storms, the SGS UK team simulates all manner of rainfall events.

They will devise a testing regime to match your requirements.

The team will conduct tests at varying intervals after application and the resulting data can be compared to a treatment without rainfall simulation. SGS’s regulatory experts integrate this data with the technical dossier and prepare appropriate label text for review the regulatory authorities.

Independent assessment and verification of product claims improves market access and regulatory compliance.

Contact:

MARC WILLIS
BUSINESS MANAGER – SEED & CROP SERVICES
SGS UNITED KINGDOM
The Meadows, Alkerton Oaks Business Park, Upon Estate, Stratford Road, Banbury, Oxon OX15 6EP, UK
Tel: +44 1295 671931
Email: marc.willis@sgs.com
For the 3rd consecutive year SGS will be the corporate sponsor of the Commercial Farm Africa conference (19-20 March 2013 in Accra, Ghana) organised by the Centre for Management Technology (CMT) Singapore. This event is endorsed by the Ministry of Food and Agriculture, Ghana and supported by Private Enterprise Foundation of Ghana.

This conference will give an update on the latest developments and opportunities that agriculture in Africa has to offer. With 60 percent of the world’s remaining uncultivated arable land, Africa not only has the potential to meet its own food demand, but could be an important contributor to global food security.

Investment in agriculture in Sub-Saharan Africa has increased in recent years and is representative of the growing interest in the region’s agricultural potential. Kick-starting the sector has been declared a priority by most governments in the region, with donors scaling up their commitment to its development. Africa’s agricultural development now even features prominently within G8 meetings and attracts a wide variety of foreign investors eager to facilitate growth in this particular sector through commercial expansion.

The Commercial Farm Africa conference will unveil specifics on opportunities, land utilisation and investment policies, including real farm owner case studies. The theme of this 3rd conference is “Into Africa – building local markets, improving farm productivity & increasing ROI” and the following subjects will be addressed:

- Climate change and its impact on the global agriculture market
- Investment opportunities and land utilisation in Ghana, Mozambique, Tanzania, Zambia, Nigeria, Cote d’Ivoire, Ethiopia, Liberia, etc.
- Experience sharing by farm operators in Africa
- Focus on: Sugar, Corn, Rice, Cassava, Palm, Bio-Energy Crops and Rubber
- Transforming small-holders farms and the management of out-growers schemes
- Infrastructure development and market access
- Management and access to input materials
- Securing funding for agri-investment
- Public-private partnership in agri-business growth

Among other topics, Cobus Burger from SGS South Africa will share his experience and expertise on farm productivity and efficiency: “Searching for the key that will unlock the map towards sustainability in crop production”.

This conference offers a great opportunity to participants to meet the senior management of farms, investors and traders, agro and biotech companies, asset management companies and many more. For more information about this event, please visit the CMT website:

http://www.cmevents.com

Photos from 2nd Commercial Farm Africa (Dubai 31 January - 1 February 2011)

Cobus Burger (SGS South Africa) presenting opportunities for investors and farm managers to use precision farming and soil fertility management tools to reduce input costs and increase yield in Sub-Saharan Africa.

Olivier Coppey (SGS Geneva) chairing the panel discussion on opportunities and challenges of public-private partnership in Africa.


For more information about the global footprint of our Seed and Crop Services, please contact:

OLIVIER COPPEY
VP GLOBAL SEED AND CROP SERVICES
SGS GROUP MANAGEMENT LTD,
1, place des Alpes
CH-1211 Geneva 1
Tel: +41 (22) 739 93 77
E-mail: olivier.coppey@sgs.com
**SGS SEED AND CROP UPDATES**

**FIRST INDEPENDENT SEED LABORATORY IN SRI LANKA**
SGS opened its new seed testing laboratory in Sri Lanka on November 23, 2012. Our laboratory will provide the following services using ISTA standards: seed germination, physical and analytical purity, seed viability test, moisture and seed vigour.

SGS is proud to be the first independent seed testing laboratory in Sri Lanka.

**FIELD TRIALS, AUSTRALIA**
In early 2013, SGS Australia will start performing field trials for research and development and registration with first service point on the East Coast.

**A NEW SCOPE OF SERVICES IN BANGLADESH**
SGS Bangladesh started efficacy trials last year. After this success SGS is now expanding its portfolio of services and will also provide product comparison trials, timing comparison trials and variety demonstration trials.

**WINTER WHEAT TRIALS IN USA**
SGS has joined forces with three wheat seed companies to conduct large yield trials within the Wheat Belt. As

**SGS SEED AND CROP EVENTS**

Meet SGS representatives at the following events:

**INTERNATIONAL CROP SCIENCE CONFERENCE & EXHIBITION 2013**
January 6-8, 2013
Nairobi, Kenya
http://www.pmcai.org/home

**XXIII. KESZTHELY PLANT PROTECTION FORUM**
January 23-25, 2013
Keszthely, Hungary
http://www.georgkon.hu/endezvenyek/xxiii-keszthelyi-novenyvedelmi-forum

**12 SYMPOSIUM DE SANIDAD VEGETAL**
January 23-25, 2013
Sevilla, Spain
www.fitosymposium.com

**NAICC NATIONAL CONFERENCE**
January 23-26, 2013
Jacksonville, FL, USA
http://naicc.org/

**AGROMASHEXPO**
January 30-2 February, 2013
Budapest, Hungary
http://agromasheexpo.hu/index.php

**EFFICACY UNDER 1107/2009**
February 6, 2013
University of York, UK
http://www.pesticides.gov.uk/guidance/industries/pesticides

**THE 11TH NEW AG INTERNATIONAL**
March 13-15, 2013
Rio de Janeiro, Brazil
http://www.newaginternational.com/rio/rio.html

**3RD COMMERCIAL FARM IN AFRICA**
March 19-20, 2013
Accra, Ghana

**ISF ATHENS**
May 27-29, 2013
Athens, Greece

**FCI TRADE SUMMIT**
August 6-8, 2013
Miami, USA
http://www.fcitradesummit.com/americas