SGS EXPANDS FIELD RESEARCH NETWORK IN BRAZIL

SGS is investing to expand and strengthen the services and geographic reach of its Brazilian field trials research network.

THREE NEW STATIONS IN BRAZIL

SGS will invest in three new experimental field research stations and expand others in response to increasing demand from the agriculture industry, for research projects across the country.

Already operating six stations across Rio Grande do Sul, Parana, Sao Paulo, Minas Gerais and Goias, SGS conducts field research for different companies developing fertilisers, seeds, pesticides, biopesticides and transgenic plants. This expansion will establish experimental stations in a further three states, at Primavera do Leste in Mato Grosso, Luis Eduardo Magalhaes in Bahia and Petrolina in Pernambuco.

Building on our existing facilities, we will also invest to increase the capabilities and capacity at our existing experimental station at Restinga Seca, Rio Grande do Sul. New infrastructure will ensure the facilities are in place, and our investment in the training, skills and qualifications of our local experts will increase the range of services available to clients.

CROP RESEARCH COVERAGE

SGS field trials test new pesticides, seed varieties and fertilisers to the highest standards, in a variety of relevant geographic and climatic conditions. Examples of the crops covered include:

- Row crops: soybean, corn, cotton, wheat, beans, rice, peanut and sunflower.
- Horticulture: citrus, tomato, potato, pepper, apple, banana, grape, mango, melon and watermelon.
- Others: sugar cane, coffee, eucalyptus, palm tree and coconut tree.
We provide you with a globally standardised field trials research service including:

**BIOTECHNOLOGY**

Regulated GMO trials:
- Efficacy of Bacillus thuringiensis (Bt) plants
- Efficacy of herbicides
- Herbicide residues (GLP)
- Composition and expression (GLP)
- Agronomic
- NTO trials
- Environmental fate

**PLANT PROTECTION**

Residue field trials:
- Field trials as principal investigator
- Study director
- Project management
- Quality assurance

Bioefficacy trials:
- Insecticides
- Fungicides
- Herbicides
- Biopesticides

Equipped with the latest technologies, state-of-the art laboratories and field stations, we have more than 100 field trial experts ready to deliver tailor-made research projects. We also offer greenhouse studies, pest resistance management, field studies and a range of GLP and ISO compliant analytical solutions.

These investments, and our unrivalled network of research stations, will enable us to meet agribusiness needs across all the key geographic and agricultural regions of Brazil.

For more information download our [Contract Research Services Brochure](#).

Contact:

**RENAN GRAVENA**

REGIONAL BUSINESS DEVELOPMENT HEAD

SGS - BRAZIL
Rodovia Deputado Cunha Bueno,
Km 221,5 Mail Box # 546
14.870-990 – Jaboticabal/SP
Tel: +55 16 3209-1221
E-mail: Renan.Gravena@sgs.com
MANAGE WATER TO CUT COSTS AND IMPROVE EFFICIENCY

Water stress is an increasing issue for agriculture. Water management services can help you save water, reduce costs and optimise yields.

Do you know whether there are different water storage capacities in a single crop area? Can you prevent puddles in, or erosion to, your soil by managing the irrigation time? Does uniform distribution in your soil optimise inputs such as water and fertilisers?

Water management services can help, especially in agricultural regions where water resources are scarce, or under stress. SGS water management services does support special cropping situation on small scale green house (e.g. 20 ha Banana in Turkey) up to 30,000 ha field scale in sugar cane.

Optimising water usage and improving irrigation on your land helps to save money, increase yields and protect the environment at the same time as making your business more sustainable.

1-WATER IN SOIL STORAGE CAPACITY MAPPING

Understanding soil storage capacity and water dosing means increased accuracy, improved crop yields and enables you to better plan an irrigation system. Soil sampling and identification data is used to prepare storage capacity maps, as well as to establish both standard and differentiated irrigation management zones.

2-INFILTRATION SPEED

Avoid puddles and water erosion by identifying the optimum irrigation time and calculate water storage capacity by determining the vertical speed entry of a thin sheet of water to the soil profile.

3-MOISTURE RETENTION CURVE

Identify water constants (saturation, field capacity and wilting point), avoid moisture stress and obtain the criteria that will determine the usable water or constant irrigation water regime with a moisture retention curve. Carried out in a laboratory, with different retention values (from 0 to 15 atmospheres), determining the moisture retention curve recognises the amount of water soil can store within its suction boundaries.

4-IRRIGATION SCHEDULE

Avoid excessive irrigation costs by devising an irrigation schedule, in quantity (m3/ha) and frequency (hours/days). It will enable water to be applied to a crop in precise quantities and at specific times.

5-IRRIGATION SYSTEM AUDIT

Identify areas for improvement, determine if the fertiliser applied and the water programmed is distributed homogeneously, and identify corrective measures to optimise resources.

EXPERTISE IN ACTION

Developed and supported by our in-house experts, SGS’s water management services are conducted using validated methodologies, supported by an extensive network of laboratories worldwide. With decades of experience, we have staff trained to identify issues and troubleshoot irrigation projects, as well as internationally experienced professionals who understand the local realities.

Contact:

JORGE BAZO
GLOBAL BUSINESS DEVELOPMENT MANAGER
SGS DEL PERU S.A.C.
Av. Elmer Faucett 3348, Callao
Tel: +511 517 1900
E-mail: Jorge.Bazo@sgs.com
HERBICIDE EFFICACY FIELD TRIALS ON WEED COMMUNITIES IN INDIA

Small-plot field trials, developed by SGS, are spearheading herbicide research on prominent weed communities in India.

Weeds compete with cultivated crop species for space, sunlight and nutrients. They also host plant-pathogens and insect-pests. Herbicides are the most popular form of weed control and are used in various crops across different geographies.

Traditional herbicide field trials are conducted in large field plots, and researchers often find themselves limited by the absence or non-uniform density of the weed species to be tested in the trial plots.

SMALL-PLOT FIELD TRIALS

In India, SGS has developed an alternative approach that uses small-plot field trials, where typical weed communities of the major crops are planted at the desired, uniform, density across randomised plots. SGS initially covers the important complex-weed-flora of paddy (direct seeded and transplanted), cotton, soy bean, groundnut and maize for the ensuing kharif (rainy) season. The planting of weed seeds can be planned in line or as broadcast, or as mixture of line and broadcast. Herbicide trials can be tailored for different herbicide management regimes:

- Pre-plant incorporation (PPI)
- Pre-emergence (PRE)
- Post-emergence (POST)

All management regimes can be tested in simple Randomised Complete Block Design (RCBD) or factorial design, depending on the number of factors of investigation. The trial results will be analysed by statistical means and results submitted as the percentage control of weeds, along with significance of various treatments at a level of 5 %.

Various purposes can be fulfilled alongside efficacy testing of herbicides, including:

- Phyto-toxicity evaluation
- Effects of herbicides on germination (with or without safener)
- Effect of herbicide application on follow-up crops
- Effects on soil micro-flora
- Examination of weed-resurgence

Trials can also be conducted under small poly-tunnels, or in a green-house, depending on the requirement and size of treatments, to avoid the risk of additional weeds through dispersal and to eliminate the uncontrolled effects of rain.

INCREASED BENEFITS

This new field trial method will benefit formulators and manufacturers. They will be able to use it as a research tool to complete efficacy evaluations of new formulations, the inclusion of mixing partners to the formulation, or for tank mix formulations. Small-plot trials will help to fix the dosage and test efficacy before going through the expensive process of registration. In the future, this method will be extended for other crops like wheat, vegetable crops and other complex weed flora.

Contact:

DR. RANJEET K PODDAR
AGRICULTURAL SERVICES
MANAGER - FIELD TRIALS
SGS India Private Limited
Ecospace, Block – 3A, 2nd Floor,
Kolkata – 700 156, West Bengal, India
Tel: + 91 33 665 06 188
Mobile: + 91 86977 30059
E-mail: Ranjeet.Poddar@sgs.com
REDCUT PLANT PROTECTION PRODUCT RISKS

Comparative assessments (CA) are driving the Plant Protection Product (PPP) market towards safer alternatives with less risk.

EU Regulation 1107/2009 requires new/extended PPPs to undergo comparative assessments to reduce the potential risk to humans, animals and the environment from the use of products containing ‘active substances’.

WHAT IS A COMPARATIVE ASSESSMENT?

When authorising the use of new PPPs the potential risks posed by these products are considered and compared to other, lower risk, alternatives.

MANDATORY CA

Under Regulation 1107/2009, a new PPP containing an ‘active substance approved as a candidate for substitution’ (CFS), known as a candidate product (CP), must undergo a comparative assessment before it can be authorised. This applies to new PPPs and new uses for existing PPPs. This process reduces risk by reviewing the CP and where practical, replacing it with products of lesser concern.

OPTIONAL CA

In some circumstances, a PPP not containing a CFS may need to undergo assessment. For example, if a non-chemical control or prevention method already exists and is in general use in that EU Member State. These are known as optional comparative assessments.

CA SCHEDULE

CAs are carried out by Member States at the same time as the application for PPP authorisation, and when:

- A review for an existing PPP is required at renewal
- An application is submitted for:
  - Amendment of the registration of a PPP
  - A new PPP

STEP-BY-STEP

Prior to starting a CA, potential alternative products must be identified.

At every step, the PPP and its CP are considered against the alternatives. Further environmental risk mitigation measures may be considered for the CP, including:

- Avoiding breeding and flowering seasons
- Use of larger buffer zones, vegetative buffer strips, and low drift technology
- Restrictions on the soil types
- Use of unsprayed headlands

Derogation is available when the active substance controls a pest that can ‘cause serious danger to plant health’. The alternative product identified under the CA must be authorised, and widely available for a minimum of five years, in order to allow for sufficient experience of the product to be gained. Withdrawal of the use of the PPP becomes effective three years after the Member State decision, or at the end of the active substance approval period.

Currently, there is some debate as to whether it is appropriate for manufacturers to conduct CAs for their own products. It may be more appropriate for independent companies to carry out these assessments.

SGS SERVICES

SGS has relevant experience in all areas of comparative assessment including:

- Efficacy: field trials, BAdS
- Residues: minor uses, field trials, dossiers, dietary risk calculations
- Environmental: testing, EIS preparation, modelling: FOCUS, OpEx, dossiers
- Ecotox: testing, dossiers, modelling: birds and mammal risk, TER’s, risk mitigation
- Biologicals: alternative biological agents, IPM

Contact:

**DR SUE MCMILLAN-STAFF BSC., PHD., C. CHEM. M.R.S.C**

REGULATORY AFFAIRS MANAGER

SGS UNITED KINGDOM LIMITED
The Meadows, Alkerton Oaks Business Park Upton Estate, Stratford Road
Banbury OX15 6EP
Tel: +44 1295 671933
E-mail: Sue.Mcmillan-Staff@sgs.com
We have opened a new laboratory in Voronezh, Russia, to study the seed quality of cereals, leguminous crops and oil-yielding crops.

Fully equipped to test corn, soybean, wheat and barley seeds, this new laboratory opened on April 1, 2015. It specialises in verifying seeds’ sowing characteristics, for example, germination, purity or weight per 1,000 seeds.

Seed quality analysis has an important role to play in agriculture. Testing and analysis enables informed decisions to be made on sowing, planting as well as improving understanding of how a batch of seed will perform. The results can help to ensure proper plant growth without additional energy costs (for example, fertilisers and pesticides) as well as assuring to reduce the negative impact of weeds, diseases and pests. Analysis can therefore increase crop yield and production quality, as well as assuring the sustainability of the field.

We use both Russian and international methods to conduct seed quality testing in our SGS Voronezh laboratory. In addition, we also offer professional sampling services, which improve the accuracy of analysis.

“Thanks to our highly qualified staff, modern analytical equipment and the efficient quality management system implemented at our laboratories, we can provide our customers with high quality testing services.” said Sergey Derzhavin, Agricultural Services Business Manager at SGS Vostok Limited, the Russian subsidiary of the SGS Group.

Though seed quality analysis services are currently limited to corn, soybean, wheat and barley seed, in the future, we plan to expand the new laboratory’s scope of services to other crops.

Contact:
ALEXANDER SHISHKIN
BUSINESS DEVELOPMENT MANAGER
SGS VOSTOK LIMITED
33, Solnechnaya Str.
Voronezh, 394026 Russia
Tel: +7 (473) 239-38-32
E-mail: Alexander.Shishkin@sgs.com
SGS SEED AND CROP UPDATES

NEW AGRICULTURE ANALYSES IN PORTUGAL

SGS’s MultiLab in Lisbon, Portugal has launched a new range of agriculture analyses to serve local produce markets. In a region renowned for its fruit and vegetable produce, SGS’s ISO 17025 accredited laboratory now delivers analyses including:

- Soil (summary and full)
- Water (including fertigation and soil solution)
- Leaves
- Roots (arginine and starch)

NEW AGRICULTURE TESTING LAB OPENS IN KALULUSHI, ZAMBIA

SGS has opened a new soil, plant and fertiliser testing laboratory in Kalulushi, in response to increasing demand for farming support in Zambia and the surrounding sub-Saharan countries.

This new facility delivers timely and effective testing, analysis and sampling to farmers on a wide range of independent services including:

- Soil chemical gridding
- Soil classification
- Crop inspections
- Yield data management
- Semi detail bush surveys
- Fertilizer recommendations for certain soil types and crops

Manage soil fertility more accurately and with a positive impact on profitability with SGS.

SPAIN LAUNCHES POLLEN TRIAL SERVICE TO PROTECT POLLINATORS

In Spain, SGS has launched a new pollen trials service, extending its network for GLP and dust drift studies, as well as its pollen and nectar sampling expertise to help the agriculture industry meet new registration requirements.

This service will help clients to meet the requirements of new guidance issued by the European Commission (EC), EFSA and EPA, to address the risk posed to pollinators, such as bees and other non-target arthropods, by plant protection product (PPP) residues in nectar, pollen and guttation water.

SGS SEED AND CROP EVENTS

Meet SGS representatives at the following events:

CROP & CHEMICAL USA
July 21-24, 2015
Raleigh, NC, USA
http://www.informa-ls.com/event/cropsandchemicalsusa

BRAZILIAN CONGRESS OF PHYTOPATHOLOGY
August 10-14, 2015
São Pedro, SP, Brazil

INTERNATIONAL PLANT PROTECTION CONFERENCE
August 24-27, 2015
Berlin, Germany
http://www.ippc2015.de/

BRAZILIAN COTTON CONGRESS
September 1-4, 2015
Foz de Iguaçu, PR, Brazil
http://www.congressodoalgodao.com.br/

PESTICIDE SYMPOSIUM ON PESTICIDE CHEMISTRY “ENVIRONMENTAL RISK ASSESSMENT AND MANAGEMENT”
September 2, 2015
Piacenza, Italy
http://www.symposiumpesticide.org/

THE BCPC CONGRESS
October 6-7, 2015
Brighton, UK
http://www.bcpccongress.org/

4TH COMMERCIAL FARM
October 8-9, 2015
Lusaka, Zambia

ANNUAL BIOCONTROL INDUSTRY MEETING (ABIM)
October 19-21, 2015
Basel, Switzerland
http://www.abim.ch/home-abim.html

NEW AG BIOSTIMULANTS
November 16-19, 2015
Florence, Italy
http://www.biostimulants2015.com/