

An international vision for wheat improvement

Paris, May 16, 2013 - By 2050, a 60% increase in wheat production will be needed to meet the demand of a growing population. The Wheat Initiative, an international consortium¹ gathering public institutions and private companies, was created as part of the 2011 action plan of the G20 Agricultural Ministries² to coordinate global wheat research and participate to global food security. On May 15, 2013, the Wheat Initiative issues its vision document paving the way for its actions.

Wheat is a major staple crop worldwide but its production has not reached demand in 10 of the 15 past years. Wheat yield models indicate that climate change will reduce wheat yield potential in its major producing areas, and that wheat farmers in South Asia and North Africa will be hit hardest. Hence, all countries share an urgent need to increase the rate of wheat genetic progress for yield, nutrient and water use efficiency, adaptation to biotic and abiotic stress, whilst ensuring the production of high quality and safe products. To take full advantage of the genetic potential, improved agronomic practices and development of innovative cropping systems are paramount.

These needs are immediate and will most efficiently and rapidly be addressed by ensuring coordination and communication among the international wheat scientific community, establishing common goals, sharing resources and information, enhancing technology delivery to breeders, agronomists, and farmers globally and by improved coordination among public and private research funding organizations.

The main objective of the Wheat Initiative is therefore to co-ordinate global wheat research so that, through international efforts, the progress needed to increase wheat production, quality and sustainability can be achieved, thus contributing to the global efforts towards food security and safety under changing climate conditions.

Hélène Lucas, International Scientific Coordinator of the Wheat Initiative explains: “In the last 20 years, wheat has become an orphan crop in terms of research investments considering its importance for global food security. To change this situation, the public and private sectors must address the great challenges facing wheat through substantially increased and coordinated investment in research. This effort will ensure that wheat research and improvement programs are conducted synergistically to increase food security and safety in a changing environment, while taking into account societal demands for sustainable and resilient agricultural production systems”.

Steve Visscher, BBSRC Deputy Chief Executive and Chair-Elect of the Wheat Initiative Institutions’ Coordination Committee, says: “The Wheat Initiative provides a new global framework to establish strategically focused research and organisational priorities for wheat research at the international level. It will bring together both research and funding organisations in the public and private sectors

¹ Participants to the Wheat Initiative : CONICET (Argentina), GRDC (Australia), Agriculture and Agri-Food (Canada), CAAS (China), INRA (France), Federal Ministry of Food, Agriculture and Consumer Protection (Germany), ICAR (India), MiPAAF (Italy), JIRCAS (Japan), INIA (Spain), GDAR (Turkey), BBSRC (UK), USDA (USA), CIMMYT, ICARDA, Florimond Desprez Veuve & Fils, Syngenta Crop Protection AG, KWS UK LTD, Monsanto Company, RAGT, Dow AgroSciences, Limagrain

² http://agriculture.gouv.fr/IMG/pdf/2011-06-23_-_Action_Plan_-_VFinale.pdf

for a new collective effort. It will identify potential synergies and nurture collaborations between research and development programs for wheat improvement, in developed and developing countries". The Wheat Initiative will also develop specific activities to enhance communication and increase access for all to information, resources and technologies.

To answer the challenges of wheat research internationally, the Wheat Initiative will:

- ✓ Develop a global strategic agenda for wheat research through the identification of research and outreach priorities and challenges beyond the capacity of single research groups/countries, and that can best be achieved by international coordination and collaboration between researchers, research institutions and funding organizations.
- ✓ Bring together research funding organizations to encourage efficient investment in wheat research based on the capabilities of, and synergies among, national and international programs.
- ✓ Initiate the development of new collaborative programs and coordinated actions across developing and developed countries.
- ✓ Develop and coordinate knowledge sharing amongst the international wheat community.
- ✓ Improve access for all to resources, services and facilities.
- ✓ Support education of students and life-long learning of wheat researchers and farmers,
- ✓ Stimulate public/private partnerships.

Wheat: the most widely cultivated cereal

With more than 215 million hectares planted annually, wheat is the most widely cultivated cereal in the world. It is the most important protein source and provides around 20% of global calories for human consumption. With around 130 million tons, annual global wheat trade is higher than that of maize and rice combined. More than 60% of wheat is produced in emerging and developing countries: China and India together produce nearly twice as much wheat as the USA and Russia combined. In North Africa and West and Central Asia, wheat is the dominant staple crop and provides 40 – 50% of all calories. Stable and reliable wheat production and the maintenance of prices at an affordable level are therefore paramount for global food security and political stability.

Further Information

<http://www.wheatinitiative.org/>

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