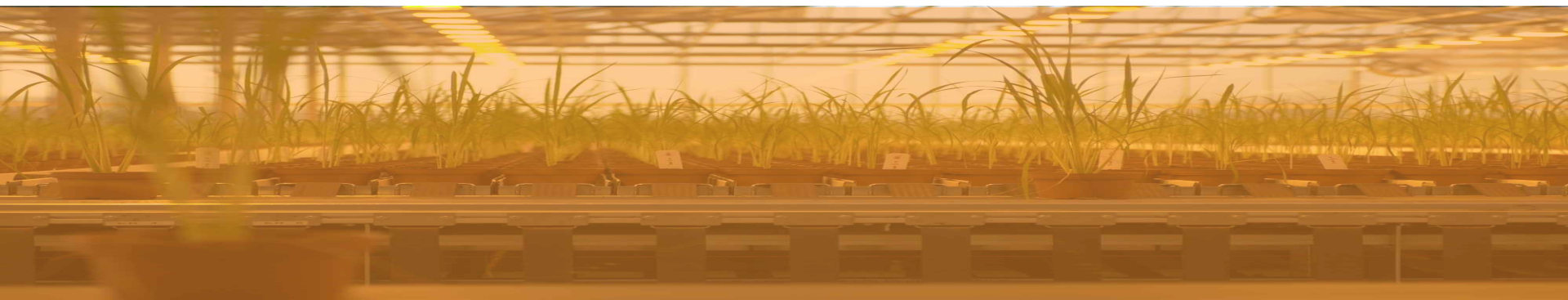




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European Academia/ Research Centers Ranking



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Performance comparison to comparable centres

The major immediate tangible output of the Centre is high-quality scientific publications. To gauge the performance of the Centre against comparable centres elsewhere, we collected data on their publications since 1st January 2006 and the number of citations to each paper, as a recognised indicator of the impact of these publications on their respective scientific communities. Each centre's publications were restricted to ISI-listed publications from Jan 2006 onwards that use the centre's name in the ISI address field.

Centres included in this study:

ARC Centre of Excellence in Plant Energy Biology (CoE PEB); Department of Plant Systems Biology, Rander Institute for Biotechnology, Belgium (VIB); Centre for Plant Sciences, Leeds University (CPS); Institut Jean-Pierre Bourgin, INRA, Versailles (JPB); Max Planck Institute for Plant Breeding Research, Cologne (MPI-PB); Max Planck Institute for Developmental Biology, Tübingen (MPI-DB); Umeå Plant Science Centre, Sweden (UPSC); Boyce Thompson Institute for Plant Science Research, Cornell University (BTI); Chloroplast 2010 project, Michigan State University (MSU); John Innes Centre, Norwich, UK (JIC); RIKEN Plant Science Centre, Yokohama, Japan (RIKEN); Max-Planck Institute for Molecular Plant Physiology, Golm, Germany (MPI-MP); Unité de Recherche en Génomique Végétale, Evry, France (URGV); Donald Danforth Plant Science Center, Missouri (DD); Centre for Novel Agricultural Products, York (CNAP); Samuel Roberts Noble Foundation, USA (SRNF); Laboratoire d'Ecophysiologie des Plantes sous Stress Environnementaux, Bordeaux, France (LEPSE); European Arabidopsis Stock Centre, University of Nottingham (NASC).



7 EU-based research centers rank amongst Top 10 globally

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While Europe has excellent research centers in plant science, the EU policy regarding down-stream development and commercialization may put the development of a competitive agriculture at risk

Issues



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- Achieving yield increase and preserving yield stability in a sustainable way will require a holistic approach
- Europe needs a transparent, science-based approval process for GM crops

- According to WEF
 - 8Bn people by 2025
 - The world population quadrupled from 1900 until 2000
 - Water consumption multiplied by factor 9 in the same period
 - 2.8 Bn or 44% of the world population live in area with water scarcity
 - 67% of global water is used in agriculture

Source: World Economic Forum World Bank

Water a Critical Resource



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- 1 kg of beef meat requires 15,000 l water
- 1 cotton T-shirt requires 2,700 l water
- 1 cup of coffee requires 140 l water

Water a Critical Resource



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- Forecast is that by 2025, water scarcity will reduce agricultural production by 30%
- Meat-based diet requires double the amount of water (i.e. 5,400 l) than a vegetative-based diet
- FAO forecasts that ag production needs to double