





How can basic plant science contribute to feeding the world?

Date: 27 August, 09.30-15.15

Venue: Stora hörsalen, The Swedish Museum of Natural History,

Frescativägen 40, Stockholm

Host: The Royal Swedish Academy of Sciences, in collaboration with the

Scandinavian Plant Physiology Society (SPPS) and the Swedish Research

Council (Vetenskapsrådet).



Many of humanity's major challenges - for example formulated in the global goals of sustainable development - concern plants and food production. A growing population, climate change and increasing competition for freshwater, fertilizers and cultivable land increase the pressure of plant scientists and plant breeders to deliver innovations and new varieties that can meet these challenges. Applied research is virtually always based on achievements in basic research, this also applies in this case. Today's industry and agriculture is based on yesterday's basic research, and today's basic research will form the basis for future applications.

In the symposium, world-leading plant scientists will give examples of how basic research on plants led to historical breakthroughs with impact for mankind, from Mendel's counting of peas in the garden of his Brno monastery to the development of novel crops. Furthermore, the symposium will show how today's research has the potential to improve our future, but also what problems must be solved to realize this, in a world where facts and science is increasingly questioned.

The symposium will be organised back-to-back with the biannual SPPS conference, which will be held in Umeå on August 28-30.



Programme

09.30 Registration and coffee

10.00 Introduction

Dan Larhammar, President of the Royal Swedish Academy of Sciences. **Stefan Jansson**, Member of the Royal Swedish Academy of Sciences.

10.15 Genetics, from Mendel over McClintock to today

Professor Ottoline Leyser, Sainsbury Laboratory, University of Cambridge, UK. Chair: Roland von Bothmer, the Royal Swedish Academy of Sciences.

11.00 Agrobacterium and biotechnology

Professor emeritus **Marc van Montagu**, Belgium Chair: **Roland von Bothmer**, the Royal Swedish Academy of Sciences.

11.45 Discussion

Chair: Roland von Bothmer, the Royal Swedish Academy of Sciences.

12.00 Lunch

13.00 Photosynthesis and metabolism in a changing World

Professor **Mark Stitt**, Max-Planck-Institut für Molekulare Pflanzenphysiologie, Potsdam-Golm, Germany

Chair: Roland von Bothmer, the Royal Swedish Academy of Sciences.

13.45 Panel discussion:

Plant science and society: What can they expect from each other?

Kjell Ivarsson, Senior Policy Advisor, the Federation of Swedish Farmers and and COPA-COGECA.

Katherine Kahn, Senior Program Officer, Agricultural Development, Bill & Melinda Gates Foundation.

Carina Knorpp, Senior Advisor, Ministry of Enterprise and Innovation Annette Schneegans, Senior Expert, DG Agriculture and Rural Development, European Commission.

Gunnar Öguist, Professor, Umeå University.

Chair: Stefan Jansson, the Royal Swedish Academy of Sciences.

14.45 General discussion

Chair: Ove Nilsson, the Royal Swedish Academy of Sciences.

15.15 Concluding remarks

Stefan Jansson, the Royal Swedish Academy of Sciences.