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(Updated program is found on: <http://www.evp.slu.se/Projekt/NOVA2005/invitation.pdf>)

**Department of Ecology and Crop Production Science**  
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Invitation to the 22:nd Nordic postgraduate course on  
**CROP PRODUCTION**

Course Subject

**CROP PHYSIOLOGY and NUTRITIONAL QUALITY**

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- Course leaders: Drs. Henrik Eckersten and Anders Göransson
- Time: January 15 – April 15, 2005
- Location: March 16-22 2005, Uppsala, Sweden. Otherwise, at home office.
- Registration: Ph.D. students from Nordic and Baltic countries. Written registration form (enclosed) should be sent to Henrik Eckersten.
- Registration deadline: **3:rd December** 2004 for Nordic students ([registration form](#))
- Credits: ECTS: 5 points
- Subject:** This course is a continuation of a series of Nordic postgraduate courses in crop production conducted since 1979. The topic will be on crop physiology and nutritional content of crops. The aim is to learn about how basic phenomena of crop physiological and external factors together determine the crop yield and nutritional quality.
- As a special topic, the student will apply a theory for nitrogen supply in relation to plant growth, to achieve defined plant nitrogen levels. The student will build and apply a dynamic simulation model to design fertilisation regimes, and control the cultivation in Uppsala, on distance, by communication and lectures over the WEB.
- Program:** (the student is in the home office, if not else stated) ([program in more detail](#))
- Course duration: January 15 – April 15 2005
  - Cultivation experiment: January 15 – March 16
  - Intensive week with lectures and exercises at Uppsala: March 16 – March 22 (the students gather in Uppsala)
  - Examination of Intensive week: Answers handed in not later than April 11.

- Topics:**
- Plant photosynthesis and respiration and the relation to climate conditions
  - Crop physiology and resource capture
  - Crop phenology and development in relation to climate conditions
  - Plant development in relation to cold temperatures
  - Biochemical aspects of plant nutrient content
  - Plant nutrition on whole plant level
  - Grain nitrogen accumulation and protein composition
  - Modelling growth, plant N, phenology and crop protein composition
  - Cultivation of plants in a nutritional experiment

**Literature** Main course literature will be a preliminary version of a new textbook on Crop Physiology including chapters on Phenology, Canopy Development, Assimilate Partitioning, Limiting Factors and High Yield, and Quality etc. The book is written by Robert Hay (Scottish AgricSciAgency) and John Porter from KVL, Denmark. A quiz (small exam) will be held at the beginning of the course week.

**Poster presentation** of own research work will be included to inform others about own research. The poster presentation is a prerequisite for full credits of the course.

**Ph.D. students** from both the **Nordic** and the **Baltic** countries are welcome with **applications**. The **total number** of participants is limited to 25. In case of over registration, preference will be given to Ph.D. students in crop production sciences. Furthermore, the course leaders have to adjust the number of participants according to the funds made available by NOVA (Nordic students) and NorFa (Baltic students), respectively.

The **course language** will be English, which has to be used for posters, presentations, lectures and discussions.

**Accommodation.** Information will come later.

**Financing:**

**Nordic students:** Full board and lodging will be covered for participants from Denmark, Finland, Iceland, Norway and Sweden with a doctoral study programme. Travel expenses have to be covered by the participants' home institutions.

**Baltic students:** After Baltic students have sent their individual registration forms to the course leader Henrik Eckersten, he will consider which applicants can be

accepted and, subsequently, he will prepare an application to NorFA for coverage of travelling expenses, board and lodging.

**Further information** can be obtained from the course leaders, from the members of the cooperating network in the Scandinavian countries, or especially for Baltic students from the NOVA-BOVA coordinators.

[Contact persons](#)