

From: DSSAT - Crop Models and Applications [<mailto:DSSAT@LISTSERV.UGA.EDU>] **On Behalf Of** Frederic Gerard
Sent: Tuesday, June 20, 2017 8:59 AM
To: DSSAT@LISTSERV.UGA.EDU
Subject: 2-year postdoc position on soil-plant modeling (developments), in Montpellier, France

Two-year Postdoctoral position in Modelling plant-soil interactions for water and nutrient acquisition by mixed crops

The Institut National de la Recherche Agronomique (INRA), centre of Montpellier (UMR Eco&Sols and UMR LEPSE) and Wageningen University (Department of Plant Sciences) are looking for dedicated candidates for a two-year Postdoctoral position starting on November 1st, 2017.

This position is opened within the framework of two EU H2020 projects (ReMix and SolACE) that are devoted to water, N and P acquisition by crop mixtures. Consortia involve partners from several countries across Europe.

Research area

Mixing of crops using different species (legumes and cereals) or cultivars of the same cereal species may be used to save water and nutrients while attenuating the effects of climatic changes on crop production. Modelling and particularly detailed process-based modelling can be used to unravel the underlying processes and mechanisms and in an attempt to guide future management practices. The main task of the postdoc will be to integrate simulation models of soil processes (mass transport and biogeochemical reactions), root system architecture and functions (which was developed at UMR Eco&Sols) and with functional plant models for the growth and functions of the aerial biomass (which were developed in Wageningen and at UMR LEPSE). A further task of the postdoc is to perform simulation studies using the model developed and, in collaboration with a PhD student, do a first evaluation of its capacity to simulate water, N and P dynamics against selected field data.

Required qualifications

We seek a committed person who preferably possess the following professional and personal qualifications:

- demonstrated experience with computer programming (C/Fortran, Java/Python),
- PhD degree in Plant Modelling or similar aspects,
- experience with use and parameterisation of dynamic simulation models,
- the ability to conceptualize,
- willingness to collaborate with others as part of a multi-disciplinary research team,
- feel comfortable with working independently.

Condition of appointment

The postdoc will be hired by INRA and the place of work is Montpellier, INRA/SupAgro Campus, located 2 place Viala. Several missions and short stays in Wageningen are planned in addition to the participation to general project meeting in different EU locations.

Mode of application

Further information on the position/project may be obtained from the main researchers involved in these projects:

Dr. Frédéric Gérard, phone +33 499 613 024, email: frederic.gerard@inra.fr

Dr. Pierre Martre, phone +33 499 612 950, email : pierre.martre@inra.fr

Dr. Jochem Evers, phone +31 317 487219, email: jochem.evers@wur.nl

To apply, please send an email (subject: Postdoc EU) to **Dr. Frédéric Gérard**, containing a pdf-file with your application, a detailed CV, and contact details of two references (letters of recommendation are optional).

All applications must be received by: 01/08/2017