**Postdoc position** (molecular biology, plant and/or soil biology, agronomy) to investigate plant and soil determinants leading to innovative nitrogen fertilization strategies in winter wheat.

The postdoc candidate will work within the newly started project “GAIN” (see below).

In this frame, he/she will screen various wheat genotypes for their ability of take up nitrogen in the form of ammonium and will characterize genetic components responsible for this trait. The selected genotypes will be used to test their compatibility with the strategy GAIN, with a secondary aim to adapt the approach to organic agriculture conditions. This will imply developing various bio-assays using microbiology, plant phenotyping and molecular biology.

Research activities will be performed at University of Liège, Gembloux Campus (35 min by train from Brussels (Belgium)) in an international newly established team (Plant Genetics, Low Input Agriculture Lab) with research focus on 1) improvement of crops and 2) soil and rhizosphere management.

The other partners of the project are CRA-W (http://www.cra.wallonie.be/fr/) and the association Greenotec (http://www.greenotec.be/) with whom the candidate will have strong collaboration.


**Profile** The candidate should hold a PhD and have demonstrated expertise as well as scientific publications in molecular biology, plant nutrition and/or soil ecology/biology. Excellent oral and written communication in English is required.

Appointment is for 2.5 years with possibility of contract extension.

**Benefits** Net salary after taxes and social benefit costs is 2250 €/month.

**Information and application:** Dr Cécile Thonar, Plant Genetics, Gembloux Agro BioTech, University of Liège, Belgium (cecile.thonar@uliege.be) Application (CV, cover letter, copy of diplomas and two letters of recommendation) should be sent by Email to Cécile Thonar with “GAIN APPLICATION” in the subject.

**Deadline for application:** 30 April 2018. Ideal starting date: June 2018

**General abstract of the project** (more information on request):

The project GAIN has the objective to offer multiple and innovative solutions for improved nitrogen fertilization management as well as weed control in order to reduce nitrogen losses, herbicide use and mechanical weeding in winter wheat cultivation system. These innovative solutions will be provided by intensive field surveys with Walloon and European farmers that test new practices together with the GAIN concept that will combine the use of improved wheat genotypes and new fertilizing strategies. This multi-disciplinary project is particularly innovative by joining expertise from weed control, plant genetics, and soil and fertilizer biochemistry and has the objective to offer solutions compatible with conventional and organic agriculture. It aims also to value the use of organic fertilizers produced on the farm. A number of dissemination and translating tools will be elaborated in the framework of this project and will be complementary to scientific publications. The project builds on a close collaboration with the regional research center for agriculture (CRA-W). As part of the GAIN project a postdoc (plant molecular and soil biology), a researcher (farm survey and weed control) and a lab technician will be recruited.