







Root morphology of oilseed rape in response to nitrogen

Mineral nitrogen (N) is the quantitatively most important nutrient in cropping systems. However, a considerable N fraction is lost through runoffs with detrimental consequences for the environment and human health. Increasing the plant N uptake by optimizing the degree of root branching for exploring a larger soil volume in search of the mobile nitrate resource may contribute to limit soil leaching. Oilseed rape (*Brassica napus* L.) is a major oil crop showing whose production highly dependents on N fertilization. The project aims at understanding the genetic control of root system architecture and how it is impacted by N nutrition. A measurable outcome will be to provide genetic markers for selecting new crop genotypes with positive root morphological features.

- ➤ One PhD fellowship (1 year + prospect for additional funding) as early as January 2019

  Skills: Plant physiology, molecular biology, RNAseq, hydroponics, root phenotyping
- > One post-doc fellowship for non-Belgian resident (3 years) as early as July 2019

Relevant experience: *Brassica* genomics, QTL mapping (association and linkage), ShoreMap, gene networks

Enthusiastic researchers meeting these criteria are kindly invited to contact Christian HERMANS (**chermans@ulb.ac.be**). Include your CV, qualifications and the names of two academic referees whom I can approach prior to appointment. Applications must be received by December 15<sup>th</sup> 2018 (PhD position) or April 1<sup>st</sup> 2019 (post-doc position).