

Screening a Vicia faba L. collection sitona lineatus resistance

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Advances in grain legume cultivation and use

BOOK OF ABSTRACS



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Translating Legume Research Into End-Users Reality

> 27-28 SEPTEMBER 2017 NOVI SAD, SERBIA

International Conference

Advances in grain legume breeding, cultivation and uses for a more competitive value-chain

BOOK OF ABSTRACTS

27-28 SEPTEMBER 2017 NOVI SAD, SERBIA **Screening a** *Vicia faba* L. collection for Sitona lineatus resistance JB. Magnin-Robert⁽¹⁾, C. Deulvot⁽¹⁾, G. Duc⁽¹⁾, P. Marget⁽¹⁾

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A screening in field condition was carried out in 2014 of a collection of 250 accessions of Vicia faba for intensity of sitona adult damages on leaves and for N2 fixing activity. Extensive damage on leaves was seen in, with no differences between genotypes. 16 most contrasted genotypes for N2 fixation activity were selected for further screening of sitona susceptibility trial at INRA Dijon in spring 2016 and spring 2017. On the 2016 trial again extensive damage on leaves was seen, with no differences between genotypes. We sampled root systems in the field and recorded nodule damage induced by sitona larvae (% of nodules with larval attack). 2 genotypes were highly damaged (56 and 76% of nodules damaged), other genotypes displayed medium attack (11 to 40%) and no completely resistant nodulation system was found. These differences were not significant. However they were negatively correlated with N2 fixation measurements of 2014. This tendency is under reevaluation in spring 2017 in order to establish the significance of genotypic differences.