

PP45: Achievements of the national faba bean (*Vicia faba* L.) breeding program in Tunisia

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Faba bean (*Vicia faba* L.) is the most important grain legume cultivated in Tunisia. In the northern favorable regions of the country, it plays an important role in the wheat based cropping systems due to its ability to fix atmospheric nitrogen. It is used for human consumption in many traditional dishes, as well as for animal feed. Faba bean planted area is estimated to 55,000 hectares representing more than 75% of the total food legume planted area in the country. In Tunisia, the development of this crop especially in the favorable regions is facing many biotic constraints that seriously reducing the grain yield. Major foliar diseases (Ascochyta blight, chocolate spot and rust) and parasitic plants *Orobanche foetida* and *Orobanche crenata* are the most damaging constraints limiting faba bean production in the main cropping regions of the country. During the last decade, considerable progress has been made resulting in the development of several high yielding varieties that contributed significantly in the improvement of grain production and increased cultivated area especially small seeded faba bean. Seven varieties including two large seeded varieties and five small seeded varieties were registered in the national plant variety catalogue. Recently, three new small/medium seeded varieties, cv. Najeh, cv. Chourok and cv. Chams, were developed from crosses made in Tunisia. Both varieties Najeh and Chourok were registered in the national catalogue respectively in 2009 and 2014 medium seed size (74-76 g/100 seeds) was proposed for registration in 2015. These new varieties are resistant/tolerant to major foliar diseases and carrying a good resistance level for both *O. foetida* and *O. crenata*. The National Faba bean Breeding Program in Tunisia is currently quite active in the development of even better performing genetic material through classical breeding approaches as well as modern molecular tools.