

PP108: Effect of sowing date and seed treatment on food legume insects

K El Fakhouri¹, M El Bouhssini¹, A Sabraoui¹ and S Lhaloui²

*¹International Center for Agricultural Research in the Dry Areas (ICARDA), Rabat, Morocco; ²Regional Center for Agricultural Research, INRA, Settat, Morocco. *(k.el-Fakhouri@cgiar.org)*

In Morocco food legume crops are attacked by a number of insect pests. Among the important pests are Sitona weevil and Stem borer on faba bean and pea aphid on lentil. Seed treatment with systemic insecticides is becoming an important component of integrated pest management. In this context we tested the efficacy of a liquid formulation of the seed dressing insecticide Celest ®Top (a.i. Difenoconazole + Fludioxonil+ Thiamethoxam) with three doses (1.5 cc, 2 cc, 2.5 cc), and of planting date on the control of Sitona weevil and Stem borer on faba bean and of pea aphid on lentil, under field conditions during the cropping seasons 2013-2014 and 2014-2015. The results showed that foliage damage caused by Sitona weevil was reduced by thiamethoxam with highest dose (2,5cc) compared to untreated control for both years, with a visual damage score of 3 (1-25%) of the leaflet damage for first date, and reduced nodules infestation of about 75% for second planting date. For faba bean stem borer, the seed treatment reduced the infested plants to about 35% with highest dose (2,5cc) for both sowing dates. The highest dose of the same product (2,5cc) did reduce significantly pea aphid infestation on lentil by about 44%. The results of this study showed that seed treatments with neonicotinoid (thiamethoxam) provided good level of protection against the three pests and thus could be used as one of the IPM components for the management of food legumes insect pests.