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Title: Faba bean integrated pest/disease management in demonstration platform in Egypt

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Faba bean (Vicia faba L.) is the most important food legume crop in Egypt as a good source of quality protein in the common diet, besides being a good source of protein for animal feed. Increasing faba bean production and improving yield quality was thus crucial to meet the demand of the increasing Egyptian population. Five high-potential faba bean cultivars were tested along with integrated pest/disease management options for key diseases, insect pests and Orobanche at five locations of Delta region for three seasons (2012-13 to 2014-15). Results showed that Dakahlia ranked first in the three seasons recording 5.6, 5.2 and 4. 6 t ha-1, respectively. Orobanche control package on faba bean yield in- and outdemonstration fields in Orobanche-infested soil at Dakahlia, Sharkia and Assiut indicated that the two tolerant cultivars (Giza 843 and Misr 3) exceeded farmers' varieties ranging from 11.1 to 35.7%. The mean seed yield increase percentage of demonstration fields over neighboring fields were 22.5, 22.5 and 28.8%, respectively in the three seasons. Average seed yield increase of the tolerant cultivar Giza 843 in the three seasons compared to neighboring fields ranged from 0.83 to 1.48 t ha-1 at Assiut and Dakahlia, respectively, whereas the increase for Misr 3 ranged from 0.37 to 1.07 t ha-1 at Sharkia and Assiut, respectively. The average increase of seed yield of the demonstration fields over the neighboring fields over the three seasons ranged from 0.29 t ha-1 at Nubaria to 1.24 t ha-1 at Sharkia and from 0.50 t ha-1 at Nubaria to 1.06 t ha-1 at Sharkia, also from 0.49 t ha-1 at Nubaria to 1.04 t ha-1 at Sharkia, 2013-14 and 2014-15, respectively. Chocolate spot and rust diseases were also investigated through conducting demonstration fields of resistant cultivars, e.g. Sakha 1 and Sakha 4 as well as the drought tolerant cultivars Nubaria 2 and Nubaria 3.