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THE EFFECTS OF HONEY BEES ON CROSS-POLLINATION AND HYBRID SEED PRODUCTION IN SESAME (*Sesamum indicum L.*)

Hasan BAYDAR[1] *Fehmi GÜREL*[2]

[1]*Süleyman Demirel University, Faculty of Agriculture, Department of Field Crops,* Isparta-TURKEY

[2]*Akdeniz University, Faculty of Agriculture, Department of Animal Science,* 07070 Antalya-TURKEY

ABSTRACT

Three sesame varieties (`Gölmarmara', `Margo' and `Yousung') with contrasting characters were grown in alternate rows of caged plots to exclude insects and non-caged plots to open to insect pollination in 1997 and then their progenies derived from the caged and the non-caged plants were grown to estimate the ratios of cross-pollination (RCP) and heterotic seed yield at two locations of Turkey, Antalya and Isparta, in 1998. The RCP were similar for the locations, but significantly different for the varieties and in the caged experiments. The RCP's were 4.29%, 18.69% and 11.72% in progenies from non-caged plots, and 2.40%, 4.61% and 4.46% in progenies from caged plots of the `Gölmarmara', `Margo' and `Yousung', respectively. And also, seed yield increased in the varieties were up to 9.52%, 39.65% and 21.49%, respectively, indicating practically hybrid seed production in sesame.