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The Effect of Different Pollen Sources on Colony Foundation Success of Bumblebees (*Bombus terrestris* L.)

Ahmet Akyol^{1*}, Ahmet Şekeroğlu¹, Salim Aktürk², Samet Hasan Abacı³

¹Nigde Omer Halisdemir University, Faculty of Agricultural Sciences and Technologies, Department of Animal Production and Technologies, 51240, Nigde, Turkey

²Apicultural Research Institute, 52200, Ordu, Turkey

³Ondokuz Mayıs University, Faculty of Agriculture, Department of Animal Science, 55200, Samsun, Turkey

Abstract

In this study, different pollen sources used to investigate colony foundation success of bumblebees. 120 *Bombus terrestris* L. queens are used to form 6 feeding groups. Poppy pollen, chestnut pollen, cistus pollen and their difloral mixes (1 / 1 ratio) are used as feeding groups. The groups are also fed with ad-libitum sugar syrup (50% brix value). As a result of the research; pollen consumption ($P<0.01$), worker bee emergence time ($P<0.05$) and number of worker bees in the first brood ($P<0.01$) were statistically significant between the groups.

In conclusion; poppy – chestnut pollen mixture with highest number of worker bees in the first brood, can be recommended in commercial bumble bee breeding. New researches are needed to determine the most appropriate ratio of this mixture.

Keywords: *Bombus terrestris* L., colony foundation success, feeding, pollen

