EFFECT OF SOME FOOD ADDITIVES ON HONEYBEE COLONIES (*Apis mellifera,* L.)

BY

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ABSTRACT

A study was conducted to evaluate the impact of four food veterinarian formulations as food additives to honeybee colonies on their performance under laboratory and apiary conditions during 2017 and 2018 seasons. The results clear that the additive formulations AD3E and VIGO mino vit prolonged the lifespan, increased body weight and induced the highest development of the hypopharyngeal glands of caged workers under laboratory conditions. Apiary results indicated that the formulations AD3E, VIGO mino vit and VIGO-FLU induced the performance of honeybee colonies, resulting in % increased that ranged 59.95 – 61.8% in flight activity, 18.39, 15.65 and 12.24% in brood rearing activity, 37.5, 26.2 and 62.35% in drawing out wax foundations, 26.9, 27.8 and 100.2% in hoarding behaviour and 51.72, 8.62 and 49.13% in clover honey yield for the three additive, respectively. On the contrary, the food additive formulations VIGO I Sel. caused sever reduction in workers and colony performance.