

Abstract

The study and appropriately honey bee selection for increasing pollination efficiency objective is 1) To evaluate and select the potential honey for tree fruit pollination of coffee, peach, and avocado 2) To study the suitable hive model for increasing quality and quantity of honey 3) To study of suitable rearing queen bee technique in highland. From this study found the introduced European and Asian honey bee treatments got average fruitful percentage in coffee, peach and avocado more than no bee treatment at 95% significant by LSD. The fruitful of coffee by European honey bee pollination, Asian honey bee pollination and no bee treatment is 30.88%, 36.88% and 13.32%. The fruitful of peach by European honey bee pollination, Asian honey bee pollination and no bee treatment is 22.19 %, 20.59% and 5.34%. The fruitful of avocado by European honey bee pollination, Asian honey bee pollination and no bee treatment is 0.59%, 0.72% and 0.02%. For the study about suitable hive model in highland, the apiary is at Royal Project Center Thung Ruang. Taiwan and European hive model showed lower decreasing rate of population than modified hive model. Moreover, number of brood of each model is no significant different. The observation found that beekeeping in highland got terrible weather. The observation data found all hive models able to collect honey in the same number of cells. Moreover, modified hive model has capped honey cells more than the others treatments. The humidity of water in honey found 18.6, 19.6, and 20.3 %RH in Taiwan hive model, modified hive model, and Europe hive model respectively. Thus, modified hive model able to adapt for keeping honey bee colony rather than using Europe and Taiwan hive model. Anyway, modified hive model must have more development to prevent other factor that make problem of honey bee and bee product in hive.