Increasing the Honey Productivity of Stingless Bees (Tetragonula fuscobalteata) by Creating Pseudo Honey Pots

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Stingless bees (SB), Tetragonula fuscobalteata, are the recommended species for bee culturing as they are the most important pollinators of fruit crops during blooming. According to the reproductive swarm of SB, the young queen and some worker bees will move to a new nest not far from the old colony in order to collect food while building another colony. Therefore, a number of SB populations/colonies are quite low as the SB offsprings are creating another community, and this results in a low amount of honey (roughly 100-170 ml./colony). In order to increase the honey productivity, the pseudo honey pots created from three different materials such as cellulose, chitosan, and beeswax were explored. The beeswax showed the best result, hence it was chosen to mix with propolis and place into the SB hive before honey flow period. The experimental results showed that the composition of pseudo honey pot made of beeswax and propolis with ratio of 2:1 was the most attractive to the SB as more honey was collected than other ratios (1:0, 1:1, 3:1 and 0:1). Further investigation showed that the number of pseudo honey pots of 21 pots in group placed inside the hive gave the optimal amount of honey collected than other groups of 7, 14, and 28 pots, respectively. Our findings suggested that by creating the pseudo honey pots in the hive would help increase honey quantity, which should be helpful for beekeepers. Keyword; Stingless bee, Pseudo honey pot, Honey productivity

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