

**PENGARUH PEMBERIAN PAKAN TAMBAHAN TERHADAP  
PERKEMBANGAN KOLONI LEBAH MADU (*Apis cerana*) DI HUTAN  
PENDIDIKAN WANAGAMA I PLAYEN, GUNUNGKIDUL**

Oleh :

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**INTISARI**

Pemberian pakan tambahan dapat meningkatkan perkembangan koloni lebah madu *Apis cerana* saat terjadi kekurangan sumber pakan lebah terutama nektar. Tujuan dari penelitian ini adalah untuk mengetahui pengaruh pemberian pakan tambahan terhadap perkembangan koloni (luas sisiran sarang, berat koloni, berat dan panjang lebah pekerja, jumlah larva dan pupa serta *absconding*) *Apis cerana* di Hutan Pendidikan Wanagama I, Playen, Gunungkidul.

Penelitian dilakukan dengan rancangan CRD (*Complete Randomized Design*). Pada penelitian ini, terdapat 20 kotak koloni *Apis cerana* yang diberi perlakuan pakan tambahan sebanyak 200 ml per koloni per minggu berupa sirup gula, *inverted sugar*, sirup pisang dan kontrol masing-masing lima ulangan. Perkembangan koloni diamati setiap dua atau tiga minggu selama dua bulan.

Berdasarkan hasil penelitian, diketahui bahwa pemberian pakan tambahan tidak memberikan pengaruh signifikan terhadap peningkatan berat koloni, berat lebah pekerja, panjang lebah pekerja, jumlah larva dan pupa serta perilaku *absconding* *Apis cerana*. Peningkatan luas sarang serta jumlah larva dan pupa lebih banyak terjadi pada pemberian pakan tambahan sirup gula dan *inverted sugar*. Pemberian sirup gula meningkatkan luas sarang secara signifikan antara pengamatan ke tiga dan ke empat ( $P < 0,05$ ). *Absconding* yang terjadi diduga disebabkan oleh serangan ngengat lilin dan gangguan antropogenik.

Kata kunci : *Apis cerana*, pakan tambahan, perkembangan koloni, Hutan Pendidikan Wanagama I

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**EFFECTS OF SUPPLEMENTAL FEEDING ON HONEY BEE (*Apis cerana*) COLONY DEVELOPMENT IN WANAGAMA EDUCATION FOREST I PLAYEN, GUNUNGKIDUL**

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**ABSTRACT**

Supplemental feeding can increase the colonies development of honey bee *Apis cerana* in the lack of food resources, especially nectar. The purpose of this research was to know the effect of supplemental feeding on colony development (the area of the honeycomb, weight of the bee colony, the length and weight of the individual worker bees, total of larva and pupa, and absconding) of *Apis cerana* in Wanagama Education Forest I, Playen, Gunungkidul.

Completely Randomized Design was used in the research. Twenty colonies of *Apis cerana* were divided into four treatments: 1. sugar syrup, 2. inverted sugar syrup, 3.banana syrup and 4.control (without supplemental feeding). Each treatment consisted of five colonies. The colony were fed with 200 ml of the syrup every week respectively. Development of the colony was determined every two or three week in two month.

The results showed that supplemental feeding did not give significant effect on the increase of the weight of the bee colony, the length and weight of the individual worker bees, individual number of larva and pupa, and absconding of *Apis cerana*. Supplemental feeding with sugar syrup and inverted sugar seemed to increase the area of honeycomb and the total individual number of larva and pupa. Sugar syrup feeding increased the area of the honeycomb significantly from the third to forth observation ( $P < 0,05$ ). Absconding of *A. cerana* seems to be affected by wax moth attack and anthropogenic disturbance.

Keyword : *Apis cerana*, supplemental feeding, colony development, Wanagama Education Forest

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