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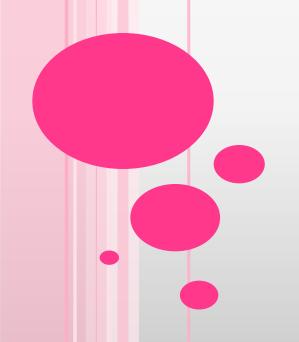
# STINGLESS BEE HONEY AS A HALALAN TOYYIBAN SUPERFOOD: THE BEEKEEPERS CHALLENGES



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#### **OUTLINE**

- •Introduction
- Background
- Objective
- •Methods
- •Results
- Conclusion



### STINGLESS BEE HONEY: A HALALAN TOYYIBAN SUPERFOOD

| Quranic Verse (Translation from Sahih International)  | Prophetic Sunnah<br>(www.iium.edu.my/deed/hadith/bukhari/07<br>1_sbt.html)  |
|---|---|
| An Nahl, 16:68  And your Lord inspired to the bee, "Take for yourself among the mountains, houses, and among the trees and [in] that which they construct.  | Abu al-Ahwas reported: Abdullah ibn Mas'ud, may Allah be pleased with him, said, "You must make use of two healers: the Quran and honey."  Source: Shu'ab al-Imaīn 2345 Grade: <i>Sahih</i> (authentic) according to Al-Bayhaqi |
| An Nahl, 16:69  Then eat from all the fruits and follow the ways of your Lord laid down [for you]."  There emerges from their bellies a drink, varying in colors, in which there is healing for people. Indeed in that is a sign for a people who give thought. | Narrated by 'Aisha, may Allah be pleased with her: The Prophet (sallallahu 'alayhi wa sallam) used to like sweet edible things and honey.  Source: Sahih Bukhari 586  |

Contain up to 85% trehalulose (Fletcher et al, 2020)

Higher polyphenol content compared to other species of honeybee (Isla et al, 2013)

Scientific findings

Strong non-peroxide activity (Temaru et al, 2007)

Reduce body weight, BMI, adiposity index and relative organ weight (Mohd Rafie et al, 2018)

#### **OBJECTIVE**

1. To identify the challenges faced by urban beekeepers in supplying a high quality stingless bee honey for a *halalan toyyiban* superfood at national and international market.

## FIGURE 1: CRITERIA FOR INSTALLATION OF STINGLESS BEE LOGS



Sufficient forage area around 5km radius

Distance between logs not less than 10 feet



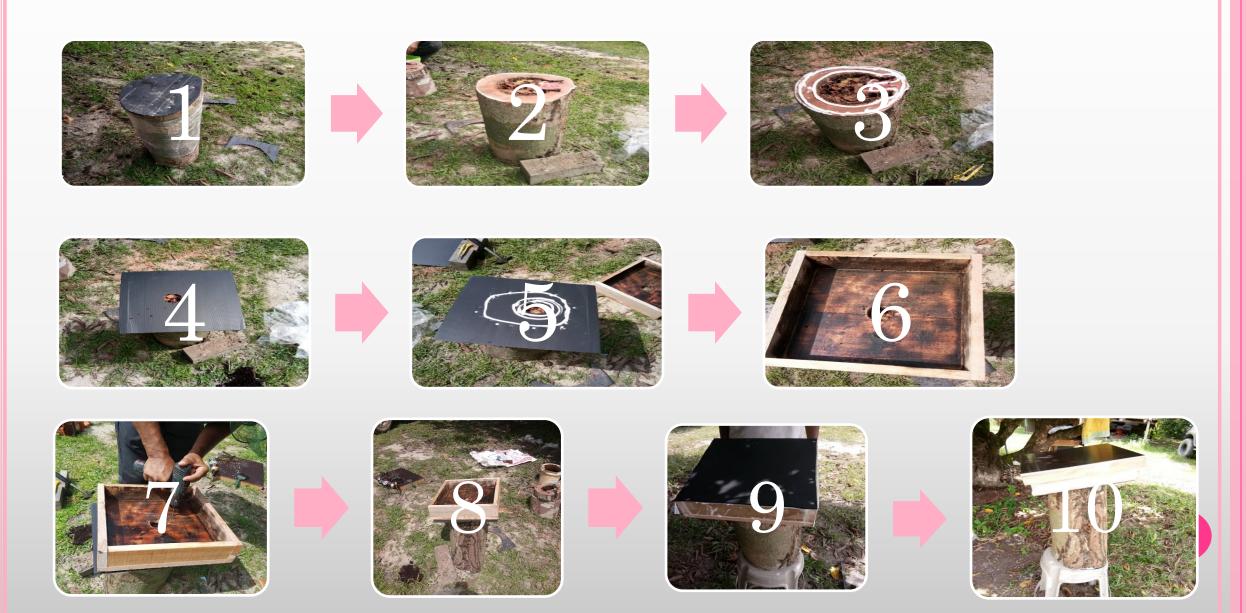


The funnel is not facing each other

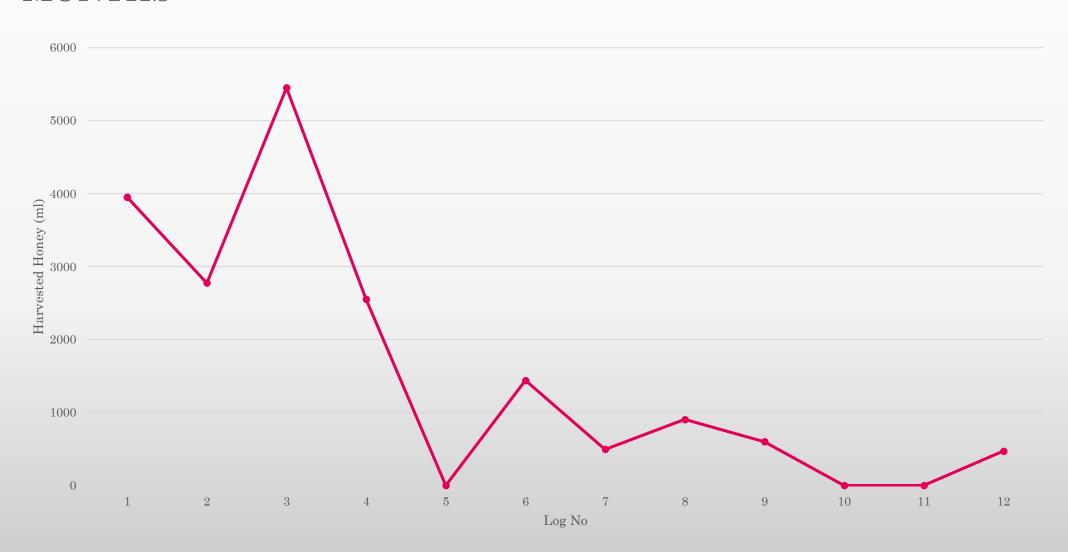
Sheltered location



#### FIGURE 2: TECHNIQUE SETTING UP THE STINGLESS BEE LOG



## FIGURE 3: HARVESTING TREND IN DURATION OF 14 MONTHS



## FIGURE 4: HARVESTING FROM JAN 2020 – FEB 2021

| LOG NO              | 1, 6, 11                        | 2, 4, 5, 8,<br>9,12             | 3  | 7          | 10       |
|---------------------|---------------------------------|---------------------------------|--|------------|----------|
| SPECIES             | Thoracica                       | Itama                           | Apicalis                                 | Doipaensis | Binghami |
| LOG DEATH           | 11                              | 5                               |  |            | 10       |
| TOTAL<br>HARVEST    | 5390                            | 6830                            | 5450                                     | 495        | 0        |
| FLOWERING<br>SEASON | March, April, August, September | March, April, August, September | March,<br>April,<br>August,<br>September |            |          |

#### BEEKEEPERS CHALLENGES

Fermentation

Deteriorate quality

Bubbly and sourly

Adulterated honey

Consumer mistrust Premium price RM200 per kilogram

Death of Log

Predators attack

Weak colony

#### CONCLUSION

- Malaysia as a tropical country could tap on this golden opportunity to utilize the potential of becoming major producer exporter for honey
- It could begin with small-scale beekeepers by providing them necessary expertise and technology to maximize their production and maintain premium quality of the honey





