

## **A REVIEW ON BEEKEEPING IN MALAYSIA: HISTORY, IMPORTANCE AND FUTURE DIRECTIONS**

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**Abstract:** This review aims to share the history of Malaysian beekeeping, in order to guide current developments in beekeeping. It is also intended to sustain and promote the local beekeeping industry. Beekeeping in Malaysia has been practised and first found documented since the Sultanate of Malacca. Today, both traditional and modern approaches to beekeeping are used locally. Beekeeping is crucial to the conservation and sustainability of the ecosystem. It offers natural pollination, future food security, high income generation, medicinal products, and research opportunities. However, bee domestication, problems with queen rearing, low honey production, inconsistency in quality and the high price of honey, dumping of adulterated honey on the local market, the lack of a Malaysian honey standard, and no existing body or centre to monitor beekeeping development have become a major challenge. The issues could address, with the establishment of a Majlis Lebah Negara and a one-stop centre, to guide, monitor and develop Malaysian beekeeping to an exceptional level, for the benefit of all.

**Keywords:** Economic value, ecosystem conservation, food security, Malaysian honey standard, traditional and modern beekeeping.

### **Introduction**

Albert Einstein is said to have stated, "If the bee disappeared from the surface of the Earth, man would have no more than four years left to live." This statement reflects the major role played by bees in conserving the ecosystem and thereby sustaining human life. However, only a few realise the importance of bees, apart from the simple fact that they produce honey. In fact, bees perform a major function in indicating and maintaining a balanced ecosystem, as a natural pollinator, and consequently in supplying and securing food for humankind. In addition, bee by-products including honey, propolis, bee venom and beebread offer various applications for example as a natural sweetener and medical benefits.

In Malaysia, little information is recorded about bees, their by-products and related issues. Despite this, local apiaries and the beekeeping industry have experienced extensive growth in the past few years. This review will discuss the history of beekeeping in Malaysia; its functions in sustaining a balanced ecosystem,

supplying foods, enhancing agriculture sectors, and increasing socio-economic levels and Malaysia's Gross Domestic Product (GDP); authenticity issues; and several suggestions for improving the sector in the future. The review aims to document information systematically regarding beekeeping in Malaysia, guide beekeepers, researchers and other authorities in accelerating their planning and activities related to the beekeeping sector.

### **History of Beekeeping in Malaysia**

#### ***Traditional Beekeeping***

Traditional beekeeping in Malaysia has been documented since the Malacca Sultanate (Hassan, 2003). However, it is believed that beekeeping was practised for a very long time ago. Villagers known as honey hunters harvested honey directly from beehives. The practice may have been similar to the method applied by the late Mr. Hj. Salleh Mohd Nor (Pak Teh, pers. comm), a traditional honey hunter based at Tasik Pedu, Kedah (FINAS

Apiculture to Meliponiculture Historical evolution.

By Abu Hassan Jalil

Humans have been collecting honey for at least 15 thousand years, indicated by cave wall depictions. Bee rearing probably started some 9 thousand years ago as found in dated pottery used for in North Africa. Later, bee domestication for honey and pollination in its crude form must have started during the period of the Pharaohs some 4 to 5 thousand years ago, as seen in hieroglyphs and evident in stored jars of honey found in pyramidal tombs of the Pharaohs. (Wikipedia, 2016)

Illustrations in a Medieval health handbook showed some form of Apiculture as far back as the 14<sup>th</sup> century. It wasn't until the 18<sup>th</sup> century that European understanding of the colonies and biology of bees allowed the construction of the moveable comb hive so that honey could be harvested without destroying the entire colony.



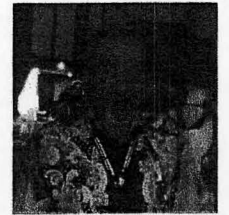
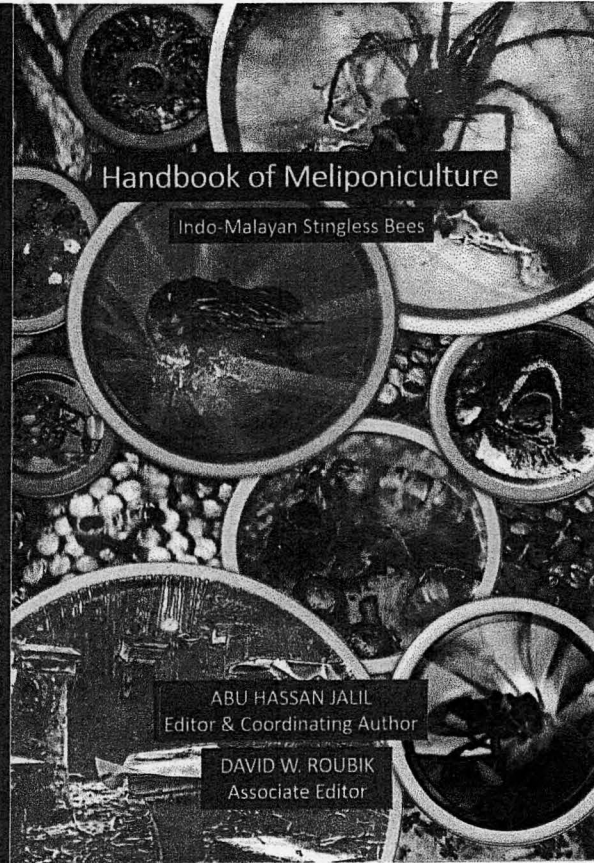
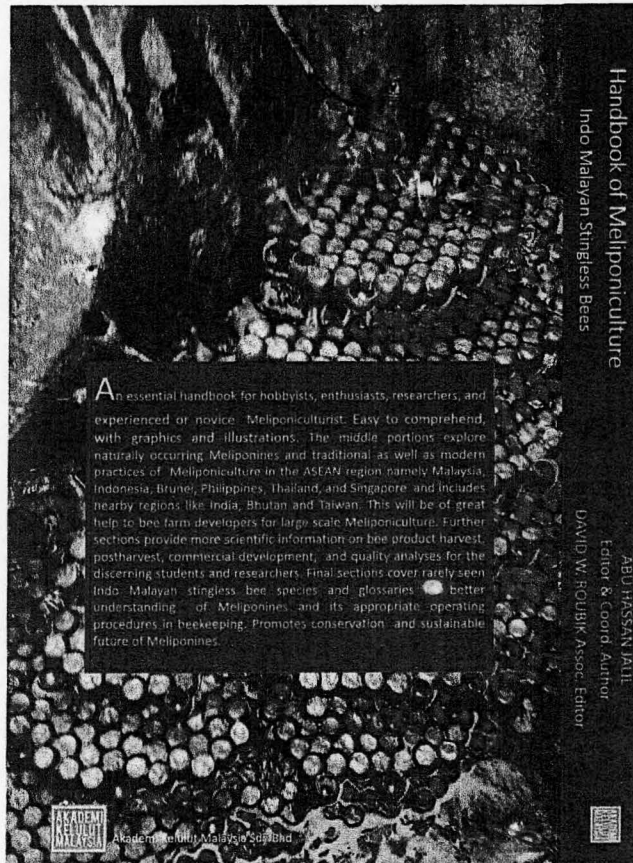
The Beekeepers, 1568, by Pieter Bruegel the Elder

However, the Mayans have been rearing stingless bees a few thousand years before this. (Roubik 2005). It is from these practices Meliponiculture evolved. In the Maya region, the bee of choice was *Melipona beecheii*, called xun'u'u kab or colek-kab ("royal lady") in the Maya language. Bishop Diego de Landa describes the beekeeping practices of both domesticated *Melipona beecheii* (the most-used stingless honey bee) as well as the practices of hunting and collecting honey from wild bees in the forests. (Imre, Young, & Marcus, n.d.) Pre-Columbian Uses of Bees

The products of bees—honey, wax, and royal jelly—were used in pre-Columbian Mesoamerica for religious ceremonies, medicinal purposes, as a sweetener, and to make the hallucinogenic honey mead called balché. (Hirst, 2016)

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