Meliponini and Apini Research Laboratory

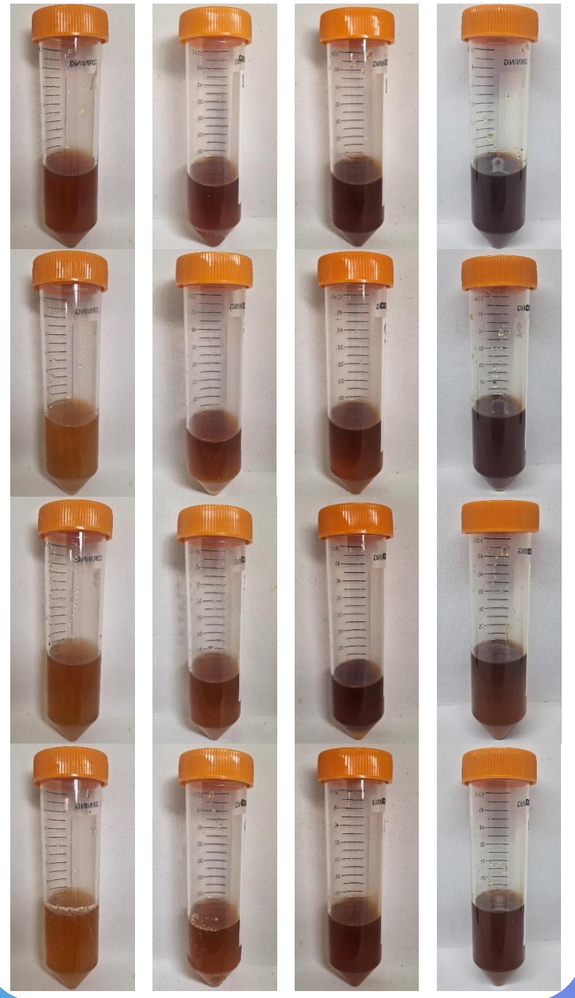
Department of Entomology and Plant Pathology, Faculty of Agriculture, Chiang Mai University. Thailand

Head of laboratory: Dr. Bajaree Chuttong

Mission Statement

Our objective is to ensure the quality of pot-honey through careful assessment and efficient post-harvest methodologies. Our team of experts evaluates honey quality, ensuring that it meets established standards. We prioritize sustainable and efficient post-harvest practices that protect the nutritional value of the honey, thereby enhancing quality and promoting sustainability.

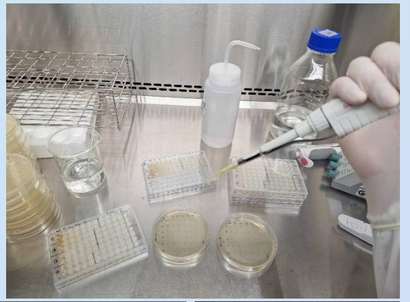
We recognize the critical role of stingless bee management in biodiversity conservation and environmental integrity. By deepening our understanding of stingless bee biology and ecology, we can not only optimize honey yield but also strengthen conservation efforts. Promoting the vitality of stingless bee populations is essential to enhancing the sustainability of our honey production practices and the overall health of the natural ecosystem.

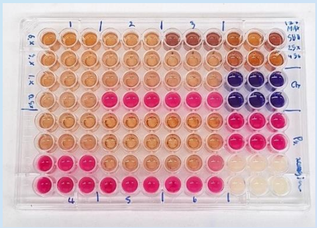


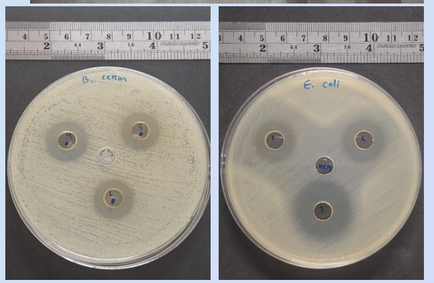
Laboratory key activities

1. **Biology, Ecology, and Stingless Bee Management Study:** Conduct comprehensive studies on stingless bees, including biometric analyses, behavioral observations, management practices, and their interactions with the environment.
2. **Physicochemical Analysis:** Analyze the physical and chemical properties of honey such as acidity, moisture content, sugar composition, and electrical conductivity, to assess overall quality.

3. **Quality Assessment of Stingless Bee Honey:**
   - **Microbiological Quality:** Determination of microbial load to ensures the honey is free from harmful microorganisms
   - **Nutritional and Bioactive Compounds**: Evaluate the content of Phenolic and Flavonoids compounds
   - **Antibacterial Activity**: Test the honey's antibacterial properties against various bacterial strains using methods such as agar well diffusion or minimum inhibitory concentration (MIC) and minimum bactericidal concentration (MBC)
   - **Antioxidant Activity**: Evaluate the antioxidant capacity using assays such as DPPH radical scavenging activity, ABTS assay, and FRAP assay







Our activities




❖ Organize training and workshop programs

❖ Exchange knowledge with local stingless bee keepers




Our Lab Members

Head of Laboratory

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Thank You

For Your Attention