

⌘ SWEET SCIENCE FOR SMARTER BEEKEEPING ⌘

This innovative platform leverages honey-based proteomic analysis to detect honeybee pathogens and monitor environmental health. By analyzing specific protein signatures in honey – essentially a biological snapshot from hives – it enables early detection of disease and exposure to environmental toxins offering beekeepers and ecologists a scalable, non-invasive monitoring solution.

- ✓ **Non-Invasive Testing** – Uses honey already collected during routine harvest – no bee disturbance.
- ✓ **Early Disease Detection** – Identifies pathogens before symptoms appear in the colony.
- ✓ **Environmental Monitoring** – Detects stress signals, pesticide exposure, and forage quality.
- ✓ **Data-Driven Insights** – Provides actionable metrics to improve hive management and colony survival.
- ✓ **Scalable & Portable** – Compatible with field-ready proteomics for use in research and commercial apiaries.

Applications

🐝 **Commercial Apiaries:** Routine health screening for early disease detection.

🔬 **Research Studies:** Tracks environmental stressors, such as pesticide exposure or poor forage availability.

🌍 **Ecotoxicology Monitoring:** Measures subclinical environmental impacts on bee colonies.

📦 **Food Authenticity Testing:** Offers quality control by assessing honey's biological content.



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