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Introduction

e Western honey bee, Apis mellifera, is a vital pollinator responsible for the reproduction of numerous plant species and the production of honey. e health and productivity of honey bee colonies rely on the availability of high-quality pollen sources, which serve as the primary protein component of their diet [1-3]. Pollen provides essential nutrients that are crucial for the growth, development, and overall physiological functioning of honey bees. However, the composition of pollen can vary signi cantly depending on the plant species, which can have a profound impact on the physiology of Apis mellifera workers [4, 5].

e protein content of pollen plays a crucial role in the nutrition and well-being of honey bees. Proteins are vital for honey bee development, as they are involved in critical processes such as larval growth, metamorphosis, and the production of glandular secretions.

Conclusion

e impact of di erent pollen protein diets derived from essential plant sources on the physiology of Apis mellifera workers is crucial for the overall health and productivity of honey bee colonies. e availability and diversity of pollen sources play a signi cant role in providing honey bees with balanced and nutritious diets. Optimal protein intake in uences honey bee development, longevity, glandular secretions, immune function, and nutrient storage. To support honey bee populations and promote their well-being, it is essential to maintain diverse and abundant sources of high-quality pollen proteins in their foraging habitats. By understanding the relationship between pollen protein diets and honey bee physiology, researchers and beekeepers can make informed decisions to enhance honey bee health, resilience, and the essential ecosystem services they provide.

Acknowledgement

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Con ict of Interest

None

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