

Introduction

Microencapsulation sustained release method of packaging feed attractants is a good choice for adding attractants in feeds, the current research on feed attractants is less, there are problems such as high volatility and weak sustainability of feed attractants. The sustained release method of microencapsulation can improve the duration of the enticement in the feed and greatly improve the application effect of the enticement. This packaging method can be effectively applied to the slow release of feed attractants for silkworms and the protection of natural flavors in the future, which has a good application prospect. Therefore, it is of great significance to use the new material for controlled-release treatment and analyze its controlled-release effect in feed and after feeding.

Methods

In this study, citral and jasmone were treated with tannic acid (TA) and Fe³⁺ for retardation and the Transmission Electron Microscope (TEM) image of jasmone@TA-Fe³⁺ was analyzed and studied, while equal amounts of emulsions and microcapsules were used as samples for organoleptic analyses, to study the retardation of retardation of slow-release microcapsules effect and to obtain reliable controlled release particles.

Results & Discussion

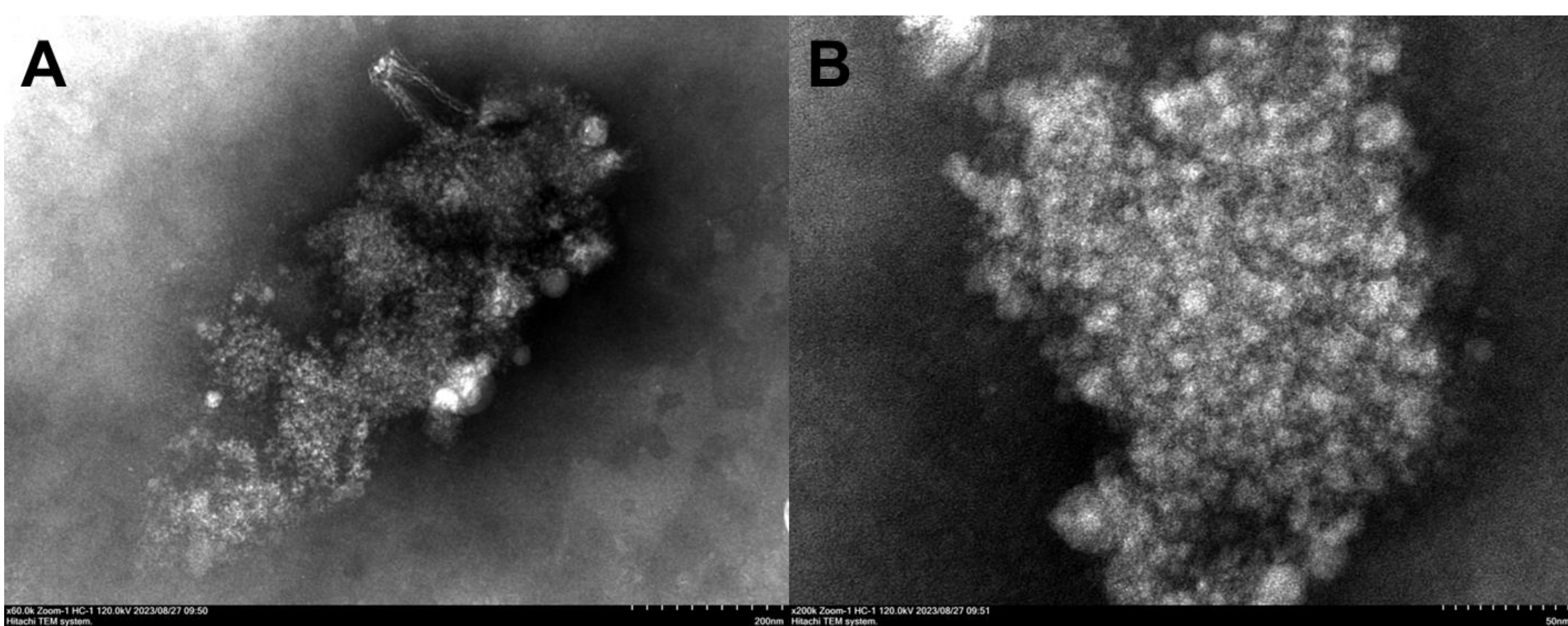


Figure 1. Transmission Electron Microscope (TEM) image of jasmone@TA-Fe³⁺. The scale is 200 nm (A) and 50nm (B).

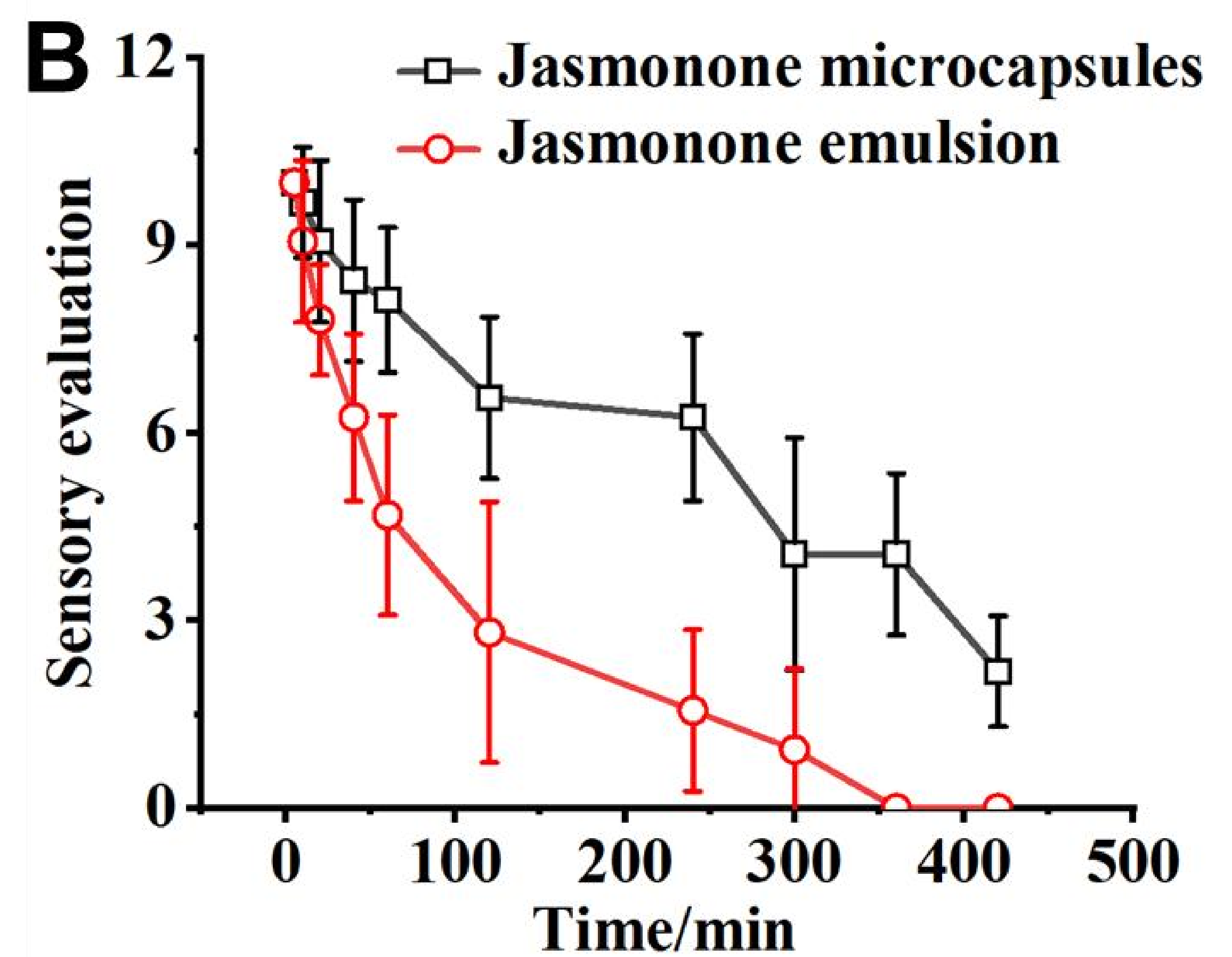
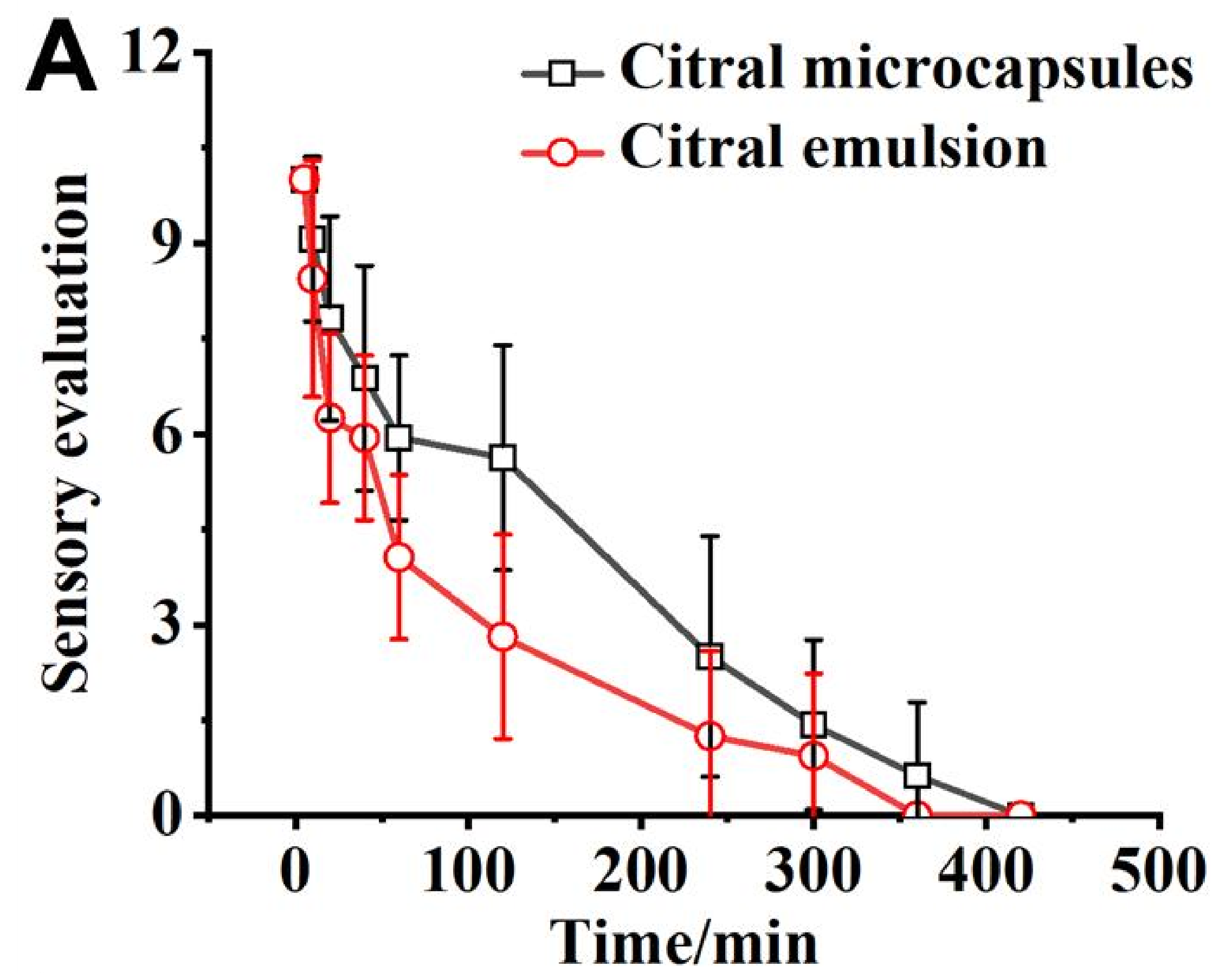


Figure 2. Sensory evaluation of microcapsules and emulsions containing citral (A) and jasmone (B).

Conclusion

In conclusion, the addition of feed enticements to feeds through microencapsulated slow-release encapsulation had a positive impact on their controlled release in feed and feeding effects. Therefore, more packaging methods for feed attractants can be investigated to reduce material loss and increase sustainability. Further research is needed to evaluate its controlled release effect in feed and effect after feeding.

Acknowledgement

This work was supported by the Jiangsu Agricultural Science and Technology Innovation Fund (CX (20) 2029).

References

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