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论著

冷冻蝇蛹用于丽蝇蛹集金小蜂繁育的探讨Ⅱ.对丽蝇蛹集金小蜂后代发育和品质的影响

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摘要：

【摘要】 目的 探讨冷冻蝇蛹对丽蝇蛹集金小蜂繁殖的影响。 方法 考查丽蝇蛹集金小蜂在-20 ℃和-70 ℃条件下，冷冻不同时间的棕尾别麻蝇蛹内的发育历期、后代大小和雌蜂寿命、后代的寄生和繁殖能力。结果 丽蝇蛹集金小蜂在-20 ℃和 -70 ℃冷冻后不同时间棕尾别麻蝇蛹内的发育历期均为12～13 d，后代雌蜂体长约为2 mm， 雄蜂体长约为1.4 mm，后代雌蜂寿命约为11 d，与对照比较差异无统计学意义；冷冻棕尾别麻蝇蛹中羽化出的丽蝇蛹集金小蜂对正常棕尾别麻蝇蛹的寄生率为90%～97%，寄生后蝇蛹的出蜂率为80%～87%，每蛹出蜂数为40只左右，雌蜂比90%左右，与对照相比差异亦无统计学意义。结论 冷冻蝇蛹对丽蝇蛹集金小蜂的后代发育和品质均无显著影响。

关键词： 冷冻 棕尾别麻蝇蛹 丽蝇蛹集金小蜂 繁育

Discussions of breeding Nasonia vitripennis using frozen fly pupae （Ⅱ）: Effect on the development and quality of Nasonia vitripennis progeny

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Abstract:

【Abstract】 Objective To study the effects of Boettcherisca peregrine pupae frozen storage on the reproduction of Nasonia vitripennis. Methods The developmental duration, body length, female longevity and reproduction of the parasitoid were tested after the pupae of B.peregrine were frozen for different times at -20 ℃ and -70 ℃. Results The developmental durations of N.vitripennis progeny (F1) at B.peregrine pupae stored at -20 ℃ and -70 ℃ were 12-13 d, the body length of female and male progeny were about 2 mm and 1.4 mm, respectively, and the longevity of female progeny was about 11 days. The above indexes had no significant difference with the control. The parasitic ratio of F1 N.vitripennis to natural B.peregrine pupae was 90%-97%, and the emergence ratio of F1 progeny was about 80%-87%. There were about 40 progeny parasitoids emerged from one fly pupa, and the female ratio was about 90%, the examined indexes had no significant difference with the control. Conclusion Frozen storage of B.peregrine pupae had no effect on the development and quality of N.vitripennis progeny.

Keywords: Frozen storage Boettcherisca peregrine pupae Nasonia vitripennis Reproduction

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