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植物保护

芒果挥发物对桔小实蝇成虫的引诱作用*

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摘要 利用Y型嗅觉仪测试了不同生理状态下（性成熟与性未成熟）桔小实蝇（*Dacus dorsalis*）两性成虫在不同时间内（5，10，15，20，30，40，50，60min）对不同剂量完整芒果（250g，500g，750g，1000g）、芒果果肉（0.01g，0.1g，1.0g，10g）挥发物的反应。结果显示，桔小实蝇两性成虫对完整芒果挥发物不产生反应。芒果果肉挥发物对桔小实蝇两性成虫均能产生显著的引诱效果。剂量反应结果表明，随着测试剂量的增加，芒果果肉挥发物对桔小实蝇成虫的引诱作用增强。时间反应结果显示，随着测试时间延长，实蝇成虫对芒果果肉挥发物的反应增强。从生理状态上看，性未成熟成虫比性成熟成虫对芒果果肉挥发物的反应更加敏感。从性别上看，雌虫比雄虫对芒果果肉挥发物的反应更加敏感。

关键词 桔小实蝇； 芒果； 挥发物； 反应

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Attraction of the Volatiles from Mango Fruits for Oriental Fruit Fly, *Dacus dorsalis* （Hendel）

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Abstract

Choice responses of oriental fruit fly, *Dacus dorsalis* （Hendel） adults （immatures and matures） at different time （5,10,15,20,30,40,50 and 60min ） to the volatiles from intact mango fruits at different doses（250, 500, 750, 1000g）, and that from mango pulps at different doses （0.01,0.1,1.0,10g） were bioassayed by using Y-Tube olfactometer in laboratory, respectively. The results showed that the both sexes of adults including immatures and matures could respond significantly to the volatiles from mango pulps but not to that from intact mango fruits. Dose-response indicated that the adults were more attracted when the dose of mango pulps was increased. Time-response mean that the adults became more and more attracted to the volatiles from mango pulps when testing time progressed from the 5 th min to the 60th min. It was also confirmed that sexually immature adults, physiologically, were more sensitive to the volatiles from mango pulps than sexually mature adults, and females were more sensitive to the volatiles than males.

Key words *Dacus dorsalis* （Hendel） mango volatiles responses

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