



Reproductive effort of the marula fly, *Ceratitis cosyra* (Walker) (Diptera: Tephritidae)

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BACKGROUND

Ceratitis cosyra is a dusk mating, Afrotropical species of economic significance to the fruit industry. The long lifespan and use of highly seasonal host fruit by this species may be associated with characteristic reproductive patterns as a trade-off between lifespan and reproduction.

METHODS

329 virgin females were offered a virgin male during mid-afternoon. Mating occurrence and the time copulation began and ended was noted continuously during dusk and then every 30 min thereafter.

Average copula duration of *C. cosyra* exceeds that of many tephritid species.

This likely evolved to **increase the amount of sperm transferred**, or as a **mate guarding strategy**, to ensure paternity.



RESULTS

Mating propensity

76 %

Copula duration

~ 7 hrs*

*417 ± 11 minutes