

PROTEIN RESOURCE ALTERNATIVES FOR MASS REARING OF *CERATITIS CAPITATA* WIEDEMANN (DIPTERA: TEPHRITIDAE).

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Background: *Ceratitis capitata* is one of the most economic importance pest in fruit crops around the world and it's control need to be a safety and environmental friendly technique, such as Sterile Insect Technique (SIT), that consists to mass rearing insects with high quality insect and low cost. Artificial diet is the major bottleneck in the Facility Moscamed Brazil (BMB), regarding the source protein (yeast hydrolysate) of the adult's diet, because it is expensive and has to be imported.

Methods: Two commercial products, from national origin and low cost, were tested (yeast autolysed-AL and yeast extract-EL) as substitutes of imported protein. The biological parameters appraised were: fecundity, adults' longevity and eggs' viability.

Results: We founded that flies mass reared on the national protein sources were equivalent or superior to the flies on imported one, where females fed on EL protein in laboratory conditions presented higher fecundity and females fed on EL protein had higher longevity.

Conclusions: Based in the obtained results the two commercial products demonstrated to be possible substitutes for imported protein (yeast hydrolysate) in *C. capitata* mass rearing, which can be easily found in the national market, and with low cost.

Keywords: Mediterranean fruit fly, medfly, adult diet, facility, SIT.