Biology of Triatoma infestans populations: fluctuations of fecundity and mortality Biología de poblaciones de Triatoma infestans: fluctuaciones de la fecundidad y la mortalidad.

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Fecundity and mortality in population of insects is relevant to the epidemiology of insect transmitted diseases. These variables were studied for T. infestans during 5 years under constant conditions of temperature, relative humidity, light periods and individual density. Mean fecundity was 0.96 +/- 0.69 eggs/female-week, range 0 to 4. Minima were observed in april and maxima in october and november. Mean mortality of intermediate forms was 0.058 +/- 0.031/individual-week, range 0.009 to 0.135, similar for females and males. Minima for mortality were observed in june and july, maxima from november to march. Fluctuations of fecundity are attributed to endogenous cyclic changes related to mating and egg laying. Possible explanations for fluctuations in mortality include the action of infectious agents. The secondary mortality cycle may be related to delayed effect of population density or to differential mortality of cohorts born under different environmental conditions.