

Population Parameters of *Triatoma spinolai* (Heteroptera: Reduviidae) under Different Environmental Conditions and Densities

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Population parameters of *Triatoma spinolai* Porter were studied using specimens collected in the north and central region of Chile. Two cohorts of 17 and 44 first instars were maintained at a constant temperature of 28°C and 70% RH. Two similar cohorts of bugs were exposed to 16-24°C and 55-75% RH and maintained under a photoperiod of 14:10 (L:D) h for 16 mo. The preimaginal period ranged between 285 and 372 d under constant conditions. The lower-density cohort required 9.5 mo to reach the adult stage compared with 12.4 mo for the high-density cohort. Bugs placed under variable temperature and relative humidity conditions did not survive long. Cohorts with higher densities had similar mortality rates with greater mortality occurring in cohorts that had lower numbers of bugs. Cohorts under constant temperature and relative humidity reproduced and basic reproduction rates (R_0 , intrinsic growth rate [r], and generation time [G]) were estimated. Cohorts with higher numbers of bugs had higher