

Thermal requirements and estimate of the annual number of generations sap beetle on strawberry Crop

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Lobiopa insularis (Coleoptera: Nitidulidae) is the main pest of strawberry culture, causing direct damage to fruit, invalidating them for consumption and commercialization. The estimated base temperature and the thermal requirements of the eggs, larva, pupa and the biological cycle (from egg to adult) of *L. insularis* were evaluated in laboratory. Insects were reared on artificial diet based on strawberry fruits, at temperatures 16, 19, 22, 25, 28 and 31°C, in controlled conditions (70 ± 10% U.R.; 12h photophase). The number of annual generations of *L. insularis* was estimated to eight cities in the main producing regions of strawberry in Brazil, based on the base temperature and in thermal constant. Development time of *L. insularis* was proportional to the temperature increase. The best development rate was obtained when insects were reared at 22°C and 25°C. Based on thermal requirements of *L. insularis*, the number of annual generations was estimated between 5 to 7 per year according to the region studied.

Palavras-chave: *Lobiopa insularis*; biological cycle; base temperature

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