



Reproduction and longevity of *Campyloneuropsis infumatus* (Hemiptera: Miridae) at different temperatures

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Mirids are one of the important Heteropteran predators groups used in biological control. In Europe, *Nesiodiaporis tenuis* and *Macrolophus pygmaeus* are effective to control *Tuta absoluta* and in Brazil there are few studies about the mirid species. The aim of this work was to evaluate the reproduction and longevity of the mirid predatory bug *Campyloneuropsis infumatus* at five constant temperatures. Newly-emerged males and females of *C. infumatus* originated from nymphs maintained at 16°C, 20°C, 24°C, 28°C and 32°C, RH 70 ± 10% and 12h photophase were kept in glass jars (1.7 L) containing tobacco plant (*N. tabacum* L., cv. TNN) as oviposition substrate and *A. kuehniella* eggs as food in climate chambers. The reproductive parameters and the longevity of *C. infumatus* were evaluated at the same temperatures. The pre-oviposition and pos-oviposition periods of *C. infumatus* were shorter at 24°C (4.1 and 3.8 days, respectively) and 28°C (4.2 and 4.3 days, respectively). The oviposition period was shorter (28.7 and 29.3 days), however, the fecundity was higher at the same temperatures. The daily and total fecundities were at 24°C (6.7eggs/female/day and 178.9 eggs/female) and at 28°C (6.5 eggs/female/day and 181.3 eggs/female). The longevity was longer at 24°C (31.4 days). The temperatures between 24°C and 28°C are suitable for reproduction of the mirid *C. infumatus*. These results could be important for optimize the mass rearing at laboratory conditions and for releases of this predator in greenhouse crops.

Key-words: biological control, Miridae, temperature.

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