

Effect of Temperature on Development, Mortality, Fecundity and Reproduction of *Tuberolachnus salignus* on Weeping Willow (*Salix babylonica*) and Corkscrew Willow (*Salix matsudana*)

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The development time, survivorship and reproduction of *Tuberolachnus salignus* (Gmelin) (Hemiptera: Aphididae) [Lachninae, Lachnini] were studied on *Salix babylonica* (weeping willow) and *Salix matsudana* (corkscrew willow) at five constant temperatures (17.5, 20, 22.5, 25 and 27.5°C). The development time of immature stages of *T. salignus* ranged from 14.56 days at 17.5°C to 12.50 days at 25°C on *S. babylonica*, and 16.47 days at 20°C to 12.28 days at 25°C on *S. matsudana*. The total survivorship of immature stages of *T. salignus* varied from 28% to 85% at 22.5 and 17.5°C, respectively, on *S. babylonica*, and from 13% to 63%, respectively, at 17.5 and 25°C on *S. matsudana*. The greatest intrinsic rate of increase occurred at 25°C (0.2691) on *S. babylonica* and also on 25°C (0.2607) on *S. matsudana*. The mean generation time of the aphid population ranged from 14.15 days at 25°C to 16.24 days at 17.5°C on *S. babylonica*, and from 14.33°C days at 25°C to 19.86 days at 20°C on *S. matsudana*. The optimal temperature for *S. babylonica* growth, development time, reproduction and percent survival was 25°C.

KEY WORDS: *Tuberolachnus salignus*; development time; survival; host plants; life table.

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