Hatching success and egg size of *Anisops sardeus* Herrich-Schaeffer (Heteroptera: Notonectidae): A seasonal study

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Abstract

Variations in hatching success rate and sizes of eggs of *Anisops sardeus* were assessed in different seasons. Percent of egg hatched during the monsoon season (28.95 ± 0.31°C) was 45.20, 29.26 and 19.89 % higher than those in the winter (26.97 ± 2.40 °C), pre-monsoon (25.92 ± 1.06 °C) and post-monsoon (20.08 ± 1.68 °C) seasons, respectively. This is a clear indication that the percent of hatching of eggs of *A. sardeus* was higher at warm temperature than in cold temperature. On contrary, the length and width of the eggs during the monsoon season (1.56 ± 0.08 and 0.58 ± 0.06 mm, respectively) were smaller than those in the winter (1.81 ± 0.06 and 0.79 ± 0.05 mm, respectively), pre-monsoon seasons (1.74 ± 0.10 and 0.70 ± 0.04 mm, respectively) and post-monsoon (1.62 ± 0.04 and 0.64 ± 0.05 mm, respectively). The variation in the percent of egg hatched and egg sizes of *A. sardeus* among the different seasons was statistically significant. Further, seasonal variation in the relative abundance of the nymphs of *A. sardeus* in the field corresponded with the hatching success in different seasons in the laboratory. Thus, it can be said that faster development in higher water temperature will increase number of generations of *A. sardeus*.

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