PREDATORY EFFICIENCY OF THE SEWAGE DRAIN INHABITING LARVAE OF *TOXORHYNCHITES SPLENDENS* WIEDEMANN ON *CULEX QUINQUEFASCIATUS* SAY AND *ARMIGERES SUBALBATUS* (COQUILLETT) LARVAE

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Abstract. The rate of predation by stage IV instar *Toxorhynchites splendens* larvae on the equivalent instar stage larvae of *Culex quinquefasciatus* and *Armigeres subalbatus*, co-occurring in sewage drains, were noted for a period of three consecutive days in the laboratory using different prey densities and combinations. The rate of predation varied by age of the predator, density of prey, and prey type. The number of *Ar. subalbatus* larvae consumed by a single *Tx. splendens* larva ranged between 0.50 ± 0.71 and 16.40 ± 2.01; while for *Cx. quinquefasciatus* larvae, the number consumed ranged from 0.20 ± 0.42 to 20.40 ± 1.43 per day. The pupation rates of the prey species varied in respect to control, with a minimum of 0.20 ± 0.42 pupa/day to a maximum of 12.20 ± 2.30 pupa/day in the presence of *Tx. splendens*. The values for the controls were 1.00 ± 0.87 and 14.44 ± 2.83 pupa/day, respectively. Irrespective of prey densities and combinations, a single *Tx. splendens* fourth instar larvae was found to consume on average 10.07 larvae on the first day 16.57 larvae on the second day and 4.38 larvae on the third day, killing a total of 17.70 to 45.10 larvae, in three days. In the presence of *Tx. splendens*, the cumulative pupation, irrespective of prey, remained between 12.20 and 45.10, and differed significantly from control where the values were between 13.90 and 54.70. The results indicate that *Tx. splendens* can significantly reduce immature numbers and lower the rate of pupation of *Cx. quinquefasciatus* and *Ar. subalbatus*. *Tx. splendens* may be a potential biological resource in the control of mosquitoes inhabiting sewage drains.

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