長翅水螳螂(Ranatra longipes longipes Stål)之 形態與生活史研究

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摘要:長翅水螳螂(Ranatra longipes longipes Stål) 若蟲及成蟲皆生活在水中,這種半翅目水生昆蟲主要棲息在淺水的池塘或靜水流域之水草間,主要以水中的小魚、蝦、水蟲等水中小動物爲食,亦可捕食蚊子的幼蟲爲食。長翅水螳螂的卵具有二根呼吸角;若蟲與成蟲之形態相似,具有捕捉足及呼吸管。若蟲共有五齡,在 $25\pm1^{\circ}$ C, RH,12L:12D 之恒溫條件下,卵的平均發育日數爲 6.50 ± 2.10 天;在自然條件下卵有的越冬現象,若蟲第一齡至第五齡的平均發育日數分別爲 14.92 ± 2.05 、 17.21 ± 2.95 、 18.81 ± 2.90 、 19.28 ± 3.03 、 25.06 ± 1.95 天;若蟲期,隨著齡期愈大,發育日數愈長。成蟲的壽命可長達一年,全年可見,由觀察飼育的結果可做爲昆蟲館飼養展示之參考。

關鍵字:長翅水螳螂, Ranatra longipes longipes Stål, 形態, 生活史, 繁殖行為

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Morphplogy and Life History of the water water walking stick (*Ranatra longipes longipes* Stål)

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Abstract: The water walking stick (*Ranatra longipes longipes* Stål) is also called water scorpion but has a much thinner body. They hunt for small fish, the nymph of dragonfly or damselfly, crustaceans and tadpoles. They may also feed on mosquito larvae. The water walking stick has two filaments that help the embryo inside the egg extract air from the water. Nymphs are similar to their parents, their front pair of legs are adapted for seizing their prey, and have long, slender thread on the tail. They always hangs with its head down, waiting for passing prey in the water. Nymphs have five instars, which were placed a growth chambers with $25\pm1^{\circ}$ C, RH,12L:12D photoperiod. The results indicated that the duration of egg stage was 6.50 days. Nymphs have 5 instars, and the nymphal stages were 14.92 days `17.21 days `18.81 days `19.28 days `25.06 days respectively. Egg and adult could over the winter, the elder of the stages the longer of the development time. The longevity of adults can last more than one year. The results could be suggested some information for management of rear and exhibit on insect house.

Key words: water walking stick, *Ranatra longipes longipes* Stål, morphology, life history, reproductive behavior

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