

Preferences *Spodoptera pectinicornis* as biocontrol of water lettuce (*Pistia stratiotes* L.) wetland weeds to various forms of feedstock

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Abstract. The dominance of water lettuce as one of the wetland weeds can cause a decrease in biodiversity in an ecosystem. *Spodoptera pectinicornis* can be a biological control agent for these weeds but requires a mass multiplication stage, so it is necessary to research feedstock in their augmentation. The research aimed to study the preferences and survival abilities of larvae *S. pectinicornis* to three forms of feed preparation made from water lettuce leaves. The research method had carried out in 2 stages (1) feedstocks form; an extracted water lettuce, mashed and cut into pieces (2) the addition of nutrients and preservatives to feedstocks. Observations had been made on the preferences and ability of the larvae to survive. The results showed that the larvae of *S. pectinicornis* had a preference and could survive on cut water lettuce feedstock, while in extracted and mashed died. The addition of nutrients and preservatives to the cut-up feed turned out to cause the larvae to stay away from the feed preparation and eventually die. Based on these, larvae *S. pectinicornis* only prefer to eat the feedstock in cutting form than enrich it with nutrients and preservatives.

Keywords: feedstock, mass-rearing, *Spodoptera pectinicornis*, water lettuce (*Pistia stratiotes*), wetland weed.