

Predation Capacity of Phytoseius crinitus Swirski Et Schebter on Each Stage of Tetranychus urticae and Alternative Food for Laboratory Mass Rearing

Publons ID	37937854
Wos ID	WOS:000656158000010
Doi	10.1088/1755-1315/593/1/012010
Title	Predation Capacity of Phytoseius crinitus Swirski Et Schebter on Each Stage of Tetranychus urticae and Alternative Food for Laboratory Mass Rearing
First Author	
Last Author	
Authors	Budianto, BH; Basuki, E;
Publish Date	2020
Journal Name	SOUTH-EAST ASIAN+ CONFERENCE ON BIODIVERSITY AND BIOTECHNOLOGY 2018
Citation	
Abstract	<p>Providing a sensible breeding stock of predatory mites for a biological control system is important. For this purpose, the predatory mites need high feeding capacity on every stage of pest mites and high survival rates on alternative food. This research aimed at testing the predation capacity of <i>P. crinitus</i> on each stage of development of pest mites <i>T. urticae</i>, and investigating appropriate alternative food for laboratory rearing of predatory mites <i>P. crinitus</i>. Completely Randomized Design (CRD) was used in this research. For investigating the predation capacity of <i>P. crinitus</i>, we performed 20 experiments consisted of treatments with eggs, larvae, nymphs, and adults of <i>T. urticae</i>, with five replicates. The variable for these experiments was the number of individuals of each stage of <i>T. urticae</i> consumed by <i>P. crinitus</i> during the period of 24. For investigating the proper alternative food for predatory mites, <i>P. crinitus</i> were given a free choice between pollen of <i>Euphorbia pulcherrima</i> Willd and pollen of <i>Hibiscus rosa-sinensis</i> L, with six replicates. The variables of survival rate, fecundity, duration of oviposition, and the length of the life cycle of <i>P. crinitus</i> were recorded for each alternative food. All experiments were conducted in room temperatures (-) and rH (-). The data were analyzed using the F test and followed by Least Significant Difference (LSD) with error levels of 5% and 1%. The results indicated that predatory mites <i>P. crinitus</i> consumed eggs more than other developmental stages of <i>T. urticae</i>. In terms of alternative food, the pollen of <i>Euphorbia pulcherrima</i> was more suitable for laboratory mass rearing of <i>P. crinitus</i>.</p>
Publish Type	Book in series
Publish Year	2020
Page Begin	(not set)
Page End	(not set)
Issn	1755-1307
Eissn	
Url	https://www.webofscience.com/wos/woscc/full-record/WOS:000656158000010
Author	Dr Drs BAMBANG HERU BUDIANTO, M.S