Growth of black soldier fly larvae (hermetia illucens) fed with pak choi (brassica chinesis) and carp (cyprinus carpio) residues

Agus Dana Permana, author

Abstrak

One main drawback of the local animal industry is the inavailability of affordable and sustainable protein supply for the livestock. Insect larvae, such as the Black Soldier Fly (Hermetia illucens) larvae (BSFL), have been considered as a protein source which can be produced at a large scale using low cost organic wastes as feeding material. This study was designed to determine the response of BSFL to various waste combinations of vegetable and animal remains, Pak Choi (Brassica chinensis) residues (S) and carp (Cyprinus caprio) fish offal (I)). A total of 540 BSFL were fed with 100 mg/larvae/day combination of vegetable wastes: animal waste 70%: 30% (S > I), 50%: 50% (S = I), and 30%: 70% (S < I). Among the feed combinations, the S < I group showed the best results as it produced the significantly highest weight of BSFL at 122.8 mg/larvae and approximate digestibility of 62.01%, with the least pupae mortality rate at 4.29%.Keywords: bioconversion, biomass, Brassica chinensis, Cyprinus carpio, Hermetia illucen