ASSESSMENT FOR STABILITY OF HYDRILLA (HYDRILLA VERTICILLATA) AS AN EGG DEPOSITION MATERIAL AND IDENTIFICATION OF SUITABLE FOR COMMON CARP (CYPRINUS CARPIO L) LARVAL CULTURE

Ву

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ABSTRACT

Experiments were carried out at the Department of Animal Science, Faculty of Agriculture, University of Peradeniya and the Department of Animal Science, Faculty of Agriculture, University of Ruhuna. The efficiency of coconut (Cocos nucifera L) fibre with hydrilla (Hydrilla verticillata) as a suitable material for the deposition of eggs of common carp (Cyprinus carpio L) was compared. Suitability of microworm (Anguillula silusiae), whole egg, egg yolk, swine (Sus domesticas) liver, silkworm (Bombax mori) pupae, Artemia (Artemia salina), a prepared feed and plankton as feeds for common carp post larvae were determined.

Out door cement tanks of $3 \times 2 \times 1.5 \text{m}^3$ were used as spawning tanks. Glass tanks of $90 \times 30 \times 30 \text{ cm}^3$ were used for feeding trials. Randomized complete block design was used as the statistical design and SAS package was used for detailed statistical analysis.

Total number of eggs deposited per unit area of material was found to be significantly higher (P> 0.05) in coconut fibre than in hydrilla leaves. However, percentages of fertility and hatchability did not show a significant difference (P< 0.05).

The results of feeding trial indicated that the silkworm pupae, and prepared feed can

also be recommended for common carp fry up to 42^{nd} day as a feed because the growth performance did not show a significant difference (P<0.05) from reputed live feeds such as artemia and microworm. Among the tested feeds, planktons were found to be the best feed for the common carp fry.