

EVALUATION OF FEEDING INDICES TO UNDERSTAND THE FEEDING RATE AND FOOD PREFERENCE OF *Macrobrachium assamense peninsulare* IN THE RAWASAN STREAM, UTTARAKHAND, INDIA

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Abstract

Abstract: In this paper the feeding index (FI), Gastro somatic index (GaSI) and Food Prevalence Index (FPI) of freshwater prawn *M. assamense peninsulare* were evaluated to assess the quantity and kind of food which this prawn consumes in the Rawasan stream. A total of 401 prawns were collected for an interval of two years from five selected site in Rawasan stream of Garhwal in Central Himalaya, India from August 2013 to July 2015. Collected prawn was in the size range of 20-75 mm in male and 24-65 mm in female in total length during the study period. The stomach contents of 10 collected specimens were examined monthly and observed that 35% of the stomach was full or semi-full and 15% stomach were empty. Highest Gastro somatic value (Mean±SE) was obtained 2.95 ± 0.80 during June in the male and 3.25 ± 0.44 during May in the female. After that, it gradually decreased in both the sex and this repeated in cyclic pattern each year. More or less a similar trend was reported in the feeding index value during the study indicate a significant relationship between feeding intensity and Gastro somatic index. Highest Food Prevalence Index (FPI) was seen in fragment of animals in both sex, which was (88.48) in male and (58.26) in female prawn and lowest FPI value in sand debris 7.9 and 5.7 in male & female prawn respectively. Main food items were fragment of plants & animal, diatoms, algae, and sand. In overall, the results show that this prawn is selectively abstemious

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