

## **Abstract**

Fish mildew Sistan (*Schizothorax zarudnyi*) is one of the valuable species is native Sistan region in order to allow its cultivation ponds, identify trends and provide food rations for it is essential. A total of 20 embryonated eggs and 80 larvae live in order to evaluate the activity of alpha-amylase, trypsin, and lipase in five phases: fertilized egg, newly-hatched larvae, the larvae a day, larvae absorbed in the bag 2/ 3 yolk and absorption of yolk sac larvae at the end of the digestive tract and 53 days for histological evolution at every stage fish larvae 15-10 mildew Sistan (*Schizothorax zarudnyi*) were studied. Analysis of the data showed that in all five groups of fish eggs and larvae, the activity of the enzyme alpha-amylase are all the more. Most of the activity of the enzyme alpha-amylase in the bottom of the absorption of the yolk sac ( $59/63 \pm 0/0001$  units / mg protein )and lowest in the 2/ 3 absorb the yolk sac ( $7/78 \pm 0/0009$  U / mg protein ) seen. The activity of this enzyme in the process of absorbing the yolk sac with all the other stages were significantly different ( $p < 0/05$ ). Results showed that the activity of the enzyme trypsin, and lipase from egg to larva four-day rising trend, and most of their activities at the end of yolk sac absorption, respectively ( $0/02 \pm 0/0008$  U / mg protein) and ( $15/26 \pm 3/522$  U / mg protein) is. In assessing enzymes trypsin and lipase significant difference between the larvae and the larvae of the three-day 4-day-old larvae were found a day ( $p > 0/05$ ) but the larvae 4 days fertilized eggs and newly-hatched larvae were significant differences ( $p < 0/05$ ). The results of histology showed the intestinal wall Shyzvtraks larval fish as well as other bony fishes of different classes, which are from inside to outside of class mucosa, submucosa, and serous Ghzlany floors are covered intestinal epithelium is simple cylindrical Is. 54-day-old larvae turn into bone and cartilage has been made.

**Key words:** Fish mildew Sistan (*Schizothorax zarudnyi*), the enzyme alpha-amylase, trypsin, lipase, Histology



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