The Study of Food dietary *Anadonta cygnea* in Anzali Wetland

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Abstract

One of the unique and important aquatic species of Anzali wetland, *Anadonta cygnea*, native Anzali wetland and its rivers, and the most important two-body system of this blue system, has declined sharply in recent years due to various reasons. Is this species is considered to be smuggling and has a special sensitivity to environmental changes (biological pollution assessment).Anzali Wetland is a special ecosystem for the cultivation and development of various types of aquatic animals on the southern of the Caspian Sea. On the other hand, the special position of the mollusks in relation to the use of other creatures from them and the industrial industrial applications and the role of water purification necessitates the study of the *Anadonta cygnea* diet in the Anzali Wetland. Of the 14 stations surveyed, only 9 stations, including the stations entrance of the West Bank, Bahambar, Shijan, Soussar Rogah, Abkenar, Mahruzha, Karkan, Siakishim, and finally Hindakhale, were caught in the Anodont shell. In the above study, the average length and weight of *Anadonta cygnea*, regardless of their specific situation, were 8.25 ± 1.17 cm and 58.03 ± 27.53 gr, respectively. The most frequencies and distribution in different seasons belong to the entrance stations of West Wetland, Behmbar, Shijan and Sossar Roogah and the highest average age in the spring seasons belonging to the station of Behambar (7 years old), summer related to Mahrooz station (8 years old) Autumn belonged to the Sossar Roogah (7

year old) sonar station and finally to the Shijan Station (8 years old) winter. In general, it can be said that *Anadonta cygnea* feed from phytoplankton branches of Chlorophyta and Bacillariophyta more than other branches throughout the year. In an experimental study of the Anzali Wetland anodentic sheath, it can be stated from the different stations that most of the phytoplankton species used from the green algae of *Scenedesmus*, *Chlorella* and *Pandorina* were from the branches of the Diatoma *Cyclotella*, *Cembella* and *Navicula* algae. Nutrition from zooplankton was detected in a small amount, from the Ciliophora of *Arcella* and *Amiibia*, from Cilliata, and finally from rotifers *Brachionus*, *Asplachna* and *Rotaria*. Suitable substrate type is sandy with some flowers, with the range of silt-clay changes in stations ranging from 80.8 ± 3.8 to 97.64 ± 2.2 percent. In the study of *Anadonta cygnea* diet, it was determined that the above *Anadonta cygnea* are fed by filtration (non-selective selection). Therefore, with regard to different ages and abundance in the living environment, in the first place (more than 90%), branches Microscopic phytoplankton from 5 to 20 micron (branches such as Chlorophyta, Bacillariophyta and Cyanophyta), and in the next step (about 10 percent), microscopic zooplankton from 5 to 30 microns (orders such as Ciliopoda, Rhizopoda, Rotatoria and Cladocera, as well as detritus in these dimensions).

Keywords: Food dietary, *Anzali* Wetland, Abundance, *Anadonta cygnea*