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### Studying diet priority of *Rutilus frisii*, fingerling in Sefidrud River estuary

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Every year, a few million *Rutilus frisii* fingerlings are produced naturally in Sefidrud River and more than 20 million others are released into the river, after their artificial reproduction. The aim of this study was to determine food items priority of the fish in Sefidrud River estuary seasonally, from February 2012 until January 2013. The results of this study, on 98 specimens, showed intensity of fullness index was  $174.6 \pm 153.2$  and vacuity index of gut was 0.0% for phytoplankton, 49.0% for zooplankton and 30.6% for benthic animals. Inside of alimentary tract of *R. frisii* individuals, 52 genera of phytoplankton, 15 groups of zooplankton and 10 groups of benthic animals were observed. *Nitzschia* with 45.2%, *Navicula* with 18.0% and *Synedra* with 16.0% were abundant food items among phytoplankton genera. *Rotatoria* phylum with 34.3%, *Rhizopoda* with 21.9% and *Cladocera* with 21.2% were among the identified zooplankton taxa and *Chironomidae* larvae with 83.7% among the benthic animals. There were temporal (seasonal) and spatial (river or sea) differences in food items quantity and quality. In general, zooplankton and benthos constitute the main food of the fish fingerlings.

**Key words:** Kutum, *Rutilus frisii*, Fingerling, Diet, Biology, Sefidrud River, Caspian Sea.