

Fish diversity in tributaries of the Bentota River and threats from *Chitala ornata* (Osteichthyes; Notopteridae), an invasive fish species in Sri Lanka

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Fish were sampled using different fishing gear, such as gill nets, seine nets, cast nets, and from the catch of the fishermen in tributaries of the Bentota River in Katapola, Ganegoda, and Avithawa, from August to November 2016. The length (cm) and weight (g) of individuals of each fish species were recorded. To investigate the potential threats from *Chitala ornata*, the stomach content was analyzed and quantified using a point method based on the percentage of biovolume per food category. Fish species richness is reasonably high in all three sites. Ten fish species were collected from all three sites and among these there were some endemic species recorded including *Clarias brachysoma* and *Channa orientalis*. Some indigenous fish, such as *Puntius vittatus*, *Rasbora daniconius*, *Puntius dorsalis*, and *Trichogaster pectoralis*, were also caught in reasonable numbers. Fish species diversity was high in Katapola (10 fish species) while it is low in the Avithawa area (6 species). Among collected *Chitala ornata* individuals, 45.0 cm and 2.0 kg were recorded as maximum standard length and weight respectively. Stomach contents of *Chitala ornata* larger than 15 cm revealed voracious and carnivorous feeding habits, registering a vast number of food items in the stomach. Parts of fish (fish scales, fins and flesh), mollusk, adult insects, insect larvae, macrophytes and digested/detritus matter were present in the stomach. The highest biovolume (72%) was recorded by fish scales, fins and flesh, significantly different ($p < 0.05$) from other food categories. Macrophytes showed the lowest biovolume (6.5%), which was also significantly different ($p < 0.05$) from other food categories. These macrophytes in the gut of the *Chitala ornata* are believed to be accidentally ingested. However the gut content of *Chitala ornata* smaller than 10 cm exhibited a high percentage (60%) of algae and plant materials. Remains of the fish fins of *Channa orientalis*, and *Rasbora daniconius* suggests a significant negative impact on native fish populations, as well as other aquatic fauna. Therefore urgent attention should be paid to population control to reduce further invasion of *Chitala ornata* species.

Key words: Invasive, *Chitala ornate*, stomach contents, biodiversity, bio volume.