



## 3<sup>rd</sup> International Conference on Sustainable Fisheries (ICSF) 2025

The Faculty of Fisheries, Sylhet Agricultural University, Sylhet, Bangladesh going to organize the 3<sup>rd</sup> International Conference on Sustainable Fisheries on 5-7 September 2025.

Please submit your abstract for oral and poster presentation.

Each presenter will be entitled to 10 minutes for oral presentation. The presenter should use PowerPoint. Overhead projector and video player will not be available.

### Instructions for preparation of abstract

1. Title: The title should be in CAPITAL LETTERS except the scientific name.
2. Author(s): Full names of all authors and their affiliations should be included. The presenting author should be indicated with a \* mark and an email address.
3. Maximum Length: One page
4. Page Size: Letter 8.5x11 inch paper
5. One inch margin throughout (left/right/ top/bottom)
6. Spacing: Single space
7. Paragraphs: Paragraphs should be separated by a blank line and should not be indented.
8. Font: Book Antiqua font with 12-point size
9. Figures and Tables: Figures and tables are highly recommended, which should be clearly readable. Figure should be in JPEG format.
10. The abstract should be prepared in camera-ready form.

#### Pb(NO<sub>3</sub>)<sub>2</sub> TOXICITY PROVOKES RETARDED GROWTH, ERYTHROCYTES ABNORMALITIES AND HISTOLOGICAL ALTERATIONS IN VITAL ORGANS OF JUVENILE NILE TILAPIA, *Oreochromis niloticus*

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Lead (Pb), one of the momentous toxins, is responsible for the deterioration of ecological health in aquatic environments as well as a big threat to the aquatic living creatures. Therefore, the present study investigated the effects of lead nitrate Pb(NO<sub>3</sub>)<sub>2</sub> toxicity on growth, blood cells morphology, and studied the histopathology of gills, liver, and intestine of juvenile Nile tilapia, *Oreochromis niloticus*. A 30-day *in vivo* aquarium trial was conducted where organisms were assigned in four treatment groups: control 0 mgL<sup>-1</sup>, T<sub>1</sub> 5.20 mgL<sup>-1</sup>, T<sub>2</sub> 10.40 mgL<sup>-1</sup> and T<sub>3</sub> 20.80 mgL<sup>-1</sup> following the LC<sub>50</sub> value of 51.96 mgL<sup>-1</sup> from acute toxicity test. Overall growth performance reduced significantly ( $P < 0.05$ ) when organisms exposed to lead. Similarly, highest mortality was recorded in T<sub>3</sub>. HSI and GSI values were significantly ( $P < 0.05$ ) higher and lower, respectively, in exposed groups. A few erythrocytes abnormalities were identified in the exposed groups, while nucleus diameter and percentages of nuclei in erythrocytes were significantly ( $P < 0.05$ ) lower in T<sub>1</sub> and T<sub>3</sub>. Histopathological alterations were clearly visible in gills, liver, and intestine of lead exposed *O. niloticus*, while the severity of pathological signs gradually increased in higher exposure levels. A significant ( $P < 0.05$ ) lowest length and highest width of intestinal villi were documented in T<sub>3</sub>. In conclusion, Pb(NO<sub>3</sub>)<sub>2</sub> toxicity had a negative effect on growth performance, erythrocytes morphology and affected vital organs i.e., gills, liver, and intestine of

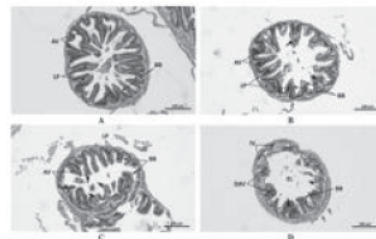


Figure 1. Transverse photomicrographs of the intestine. A. Control; B. T<sub>1</sub>; C. T<sub>2</sub>; D. T<sub>3</sub>. BB: Brush border, AV: Absorptive vacuoles, LP: Lamina propria, L: Lumen, EL: Extended lumen, IV: Increased vacuoles, DAV: Disarranged absorptive vacuoles; tissue rupture (black arrows), extended serosa (blue arrows), and wider villi (white both side arrows).

For abstract submission visit  
[www.icsf.sau.ac.bd](http://www.icsf.sau.ac.bd) or Scan





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### **Guidelines for poster presentation**

1. The poster should be A0 (84.1 cm width x 118.9 cm height) in size.
2. The poster should be a stand-alone visual representation of your research.
3. Recommended font size is 48-60 point for headings and 24-32 point for content.
4. Figure should be good quality with a short and informative caption.
5. Backing materials (gum, pin, clip, etc.) for hanging the poster will be provided at the venue.
6. Look for your poster number on the poster board.
7. Poster presenter is expected to be available nearby the poster during the poster session.