Characterization of Blood Cells, Hematological and Biochemical Parameters in Diplodus noct from the Red Sea

Usama M Mahmoud, Ola I Muhammad and Alaa El-Din H Sayed

Abstract:

The main aim of the present study was to obtain a basic knowledge of the hematology and biochemistry of the Red Sea seabream Diplodus noct. The samples were collected from the Red sea at Hurghada, Egypt. Baseline values for hematological parameters including Red Blood Corpuscles (RBCs), Hematocrit (HCT), Hemoglobin (Hb), Mean cell hemoglobin concentration (MCHC), mean cell hemoglobin (MCH) and mean cell volume (MCV) and biochemical parameters including AST, ALT, glucose, total protein and urea were established. Erythrocytes, thrombocytes and three types of leucocytes, lymphocytes, neutrophils and eosinophils, were distinguished, characterized and measured. The morphological and cytochemical aspects of peripheral blood cells of Diplodus noct were studied by light microscopy. This investigation may be helpful as a tool to monitor the health status of Diplodus noct and will grant early detection of clinical pathology.

Keywords:

Seabream; Hematology; Biochemistry; Blood cells; Aquaculture; Health

Published In:

Journal of Marine Biology & Oceanography , 5 , 1-6