

3. Aims and Objectives:

Exposure to arsenic can produce reactive oxygen species (ROS) such as: superoxide radicals, hydroxyl radicals, hydrogen peroxide, etc. These species can react with cellular components (lipids, proteins, nucleic acids) and cause lipid peroxidation, membrane damage, inactivation of enzymes, damage to DNA molecule and necrotic/ apoptotic tissue degeneration. Thus, affect many physiological processes and ultimately cell death. In this work following objectives are followed-

1. Studies on the assessment of hepatic toxicity by arsenic (0.6 ppm, sodium arsenite) at cellular, biochemical and molecular level.
2. To find out the effect of extract of mollusc (*Bellamya bengalensis*) for the management of hepatic toxicity.
3. To determine the nutritive values by using these aquatic gastropod.
4. To determine the primary mechanistic layout of the effectiveness of these extracts against arsenic toxicity.

Long term goal

To develop and suggest a cheap nutritive and/or protective source against arsenic related health problems which can be utilized conveniently at nutritional management level.

3.1. Experimental design.

