The effects of commonly used fertilizers like diammonium phosphate, urea and calcium ammonium nitrate on the histology of the gills of fresh water fish Clarias batrachus were studied. The toxic effect of diammonium phosphate was more pronounced than that of urea and calcium ammonium nitrate. Diammonium phosphate is highly toxic fertilizer. Scattered necrosis of the lining cells of the lamellae with distortions where seen in gills of the fish. Pronounced congestion in the gill lumen and hyperchromatic nuclei of primary gill lamellae was seen in the fish. Calcium ammonia nitrate caused destruction of secondary gill lamellae but mucosal lining was well preserved in the fish Clarias batrachus.

MATERIALS AND METHODS
The fish were collected from the river Gomti of Lucknow with the help of local fishermen using hand nets. They were brought to the laboratory in coolers and kept in the laboratory at 25°C temperature, under air for 120 hr. Different concentrations of DAP, urea and calcium ammonium nitrate were prepared in aquaria and the effect on the fishes were studied. The toxic effect of diammonium phosphate was observed for a variety of fish species, tested under variety of water chemistry conditions. Solid residues, water effluents, and air emissions from phosphate fertilizer-producing industries cause the pollution of water, air, and land. A decrease in RBC number and lowered resistance to disease (Reichenbach-klinke, 1967; Flis, 1968; Smart, 1976 and Thurston et al., 1978). These histological changes attributed to ammonia exposure causes swelling and diminished number of red blood cells, inflammation and degeneration of gills and kidneys, and lowered resistance to disease (Reichenbach-klinke, 1967; Flis, 1968; Smart, 1976 and Thurston et al., 1978). These histological changes were observed for a variety of fish species, tested under variety of water observed for a variety of fish species, tested under variety of water conditions. Solid residues, water effluents, and air emissions from phosphate fertilizer-producing industries cause the pollution of water, air, and land. A decrease in RBC number and lowered resistance to disease (Reichenbach-klinke, 1967; Flis, 1968; Smart, 1976 and Thurston et al., 1978). 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Ammonia toxicity in fish (Randall et al., 2002), and acute toxicity of inorganic fertilizers to African catfish, *Clarias gariepinus* was also reported (Ufodike et al., 2008).

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