Atrazine Concentrations in Sediments and Reed *(Phragmitesaustralis*) Shadegan International wetland in Autumn 2011

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Abstract
Shadegan international wetland is one of the most important wetlands in Iran and around the world registered on Ramsar convention. This wetland is on the Jarahi River's outfall, in Khuzestan plain. This study objective is to study the Atrazine poison concentration in the wetland's deposit and cane and suggesting some solutions to eliminate or reduce this poison. The applied method is temporarily experimental, and 6 stations was chosen by field observations and ۱/۲۵۰۰۰۰ maps analysis for sampling. The sampling was conducted in fall, 2011. The plant and deposit poison extraction was done by Soxhlet extractor and n-hexane and then measured by GC NPD chromatograph. Atrazine concentration in all the stations deposit's and plant's samples, except station 4, was more than 3 ppb. The sampling results in deposits media show the decreasing trend of Atrazine amount through Salman Farsi to number 4 stations. This trend depends on the Atrazine half-life, salinity, and poison decomposition microorganism in the media, the water depth and the available mineral material. We should mention that EPA, the world health organization and Institute of Standardand Industrial Research of Iran had specified the maximum concentrations of Atrazine as 3,2,2mg/l respectively. The plant's poison's concentration was directly affected by the deposit's poison's concentration. The plant poison's concentration was decreased by decreasing the deposits poison's concentration and it was increased by the deposits poison's concentration. One of the most efficient methods in Atrazine reducing and eliminating is bioremediation.

Keywords: Atrazine, ShadeganInternational Wetland, *Phragmiesaustralis*, Sediment.