# Comparing in vitro Toxicity of Agrochemicals Contaminating Reservoirs with Lake Management Herbicides. (A05-rayburn103304-Poster)

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## Abstract:

The use of agrochemicals has resulted in these chemicals polluting the surrounding waterways thus contaminating wetlands and ultimately river and lake systems. It is common to find levels of herbicides contaminating most aquatic environments in agricultural areas. Such contamination has been found in ponds, streams, rivers, lakes, and reservoirs. Much controversy has existed and will continue to exist with respect to determining acceptable levels of agrochemicals contaminating these aquatic environments. No studies to date have compared agrochemicals with chemicals that are being used in the management of lakes and reservoirs. An agrochemical may indeed have the potential for toxicity. However, when compared to chemicals approved for use in lakes and reservoirs, the risk may be so small as to really be no risk at all. Agrochemicals and chemicals approved for lake management were compared using cytotoxicity and whole cell clastogenicity to determine which of the chemicals has the greatest potential to damage chromosomes. Chinese Hamster Ovary cells were exposed to chemicals at various levels. The chemicals were rank ordered by their ability to induce chromosome damage.

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