Abstract
Sugar cane mills from Valle del Cauca have been using the herbicides Diuron, 2,4 D, Terbutryn, Glifosato, Fusilade and Ametryn for the control of weeds and have obtained good results. However, negative impacts on the ecosystem components subjected to herbicides application are generated due to the inherent toxic characteristics and some inadequate handling practices during the preparation. In order to determine the contaminant effect, a biodegradability test by means of the essay Zahn-Wellens/EMPA OECD 302B and toxicity by means of the Respiration Inhibition Test OECD 209 were carried out for each of the aforementioned herbicides. The experimental results show that these herbicides are extremely toxic and not biodegradable in aerobic biological systems according to the assessed methodologies, and constitute an environmental risk when disposed of to the ecosystems without treatment.

Keywords
Biodegradability, activated sludge, pesticides, toxicity.