Use of foliar lichens as bioindicators of environmental quality in Bogotá.

Camila Andrea Figueredo Salinas^{1*}; Laura Victoria Campos Salazar².

¹ universidad de la Salle *E-mail: camilaafigueredo51@unisalle.edu.co

Among the different species used as bioindicators, lichens are of essential interest for their use in the assessment of air pollution. Its sensitivity to the presence of toxic compounds in the atmosphere is manifested by relevant and obvious morphological and physiological alterations (Rayear, 1975). Given the level of environmental sensitivity, these organisms can show, for example, near a source of contamination a desert of lichens; and away from this source, tolerant species appear, so, the lichen flora approaches normality in richness and abundance of species (Brodo., et al 2001). Indeed, a particularity of lichen is its ability to produce liquid acids, which allow it to survive in extreme environments, large temperature changes, very poor water deficiency substrates, among others (Campos., Et al 2008). Similarly, this research seeks to determine the effects of particulate air pollutants on the communities of foliar lichens, in two sectors of the city of Bogotá, D.C. The foregoing will be carried out by conducting plots in the two sampling areas (study area and control area), choosing random trees to which the lichens coverage in the shaft of these will be measured, taking into account the diameter at chest height, a maximum height of two meters in the measurement and the non-inclusion of tree species with the presence of ritidoma. As expected, results, it is believed that there will be almost total absence of lichens in the samplings on the study area, due to the high environmental pressures present in this urban space, influencing the ecological variables of the liquid community allowing only those species to remain They manage to adapt.