Title	Psidium guajava as a bio accumulator of nickel around an oil refinery, southern
	Brazil
Author	Carolina Trindade Perry, Armando Molina Divan Jr., Maria Teresa Raya Rodriguez,
	Vera Lúcia Atz
Journal	Ecotoxicology and Environmental Safety, Vol. 73(4)
Abstract	To evaluate the potential of <i>Psidium guajava</i> as a biological accumulator of air
	pollutants, saplings were exposed at nine sites receiving atmospheric emissions from an
	oil refinery (five within, four outside the industrial area) and another reference site
	located at the Federal University of Rio Grande do Sul, 27 km from the refinery.
	Exposures lasted about 3 months each, coincided with the seasons, and totaled five
	exposures between 2005 and 2006. The following parameters were evaluated: dry weight
	of leaves, stems, and roots, leaf area, rate of relative height increase, Ni and S contents,
	maximum assimilation rate, and carboxylation efficiency invivo. P. guajava was found to
	be an efficient accumulator of Ni, since highly significant differences were observed
	(P<0.001) between sites within the industrial area and the reference site for all periods of
	exposure and a significant negative correlation between distance from emission source
	and Ni content. The S content showed significant differences (P<0.05) only at sites
	within the industrial area for two exposures. The dry weight, leaf area, rate of relative
	height increase, maximum assimilation rate, and carboxylation efficiency did not present
	significant differences for any period of exposure. In view of the above, we conclude that
	<i>P. guajava</i> is a good bioaccumulator for Ni.
Year	2010
Pages	647-654
keywords	Psidium guajava, air pollutants, Nickel

Title	Accumulation of selected heavy metals by different genotypes of Salix
Author	Miroslaw Mleczek, Iwona Rissmann, Pawel Rutkowski, Zygmunt Kaczmarek, Piotr
	Golinski
Journal	Environmental and Experimental Botany, Vol. 66(2)
Abstract	The aim of this study was to assess the accumulation of seven heavy metals (lead,
	cadmium, copper, zinc, chrome, nickel and cobalt). The investigations were conducted on
	twelve genotypes of willows which grow in the Potasze Forest Division Salicarium. The
	analysis facilitated quantification of concentrations of selected metals in plants and their
	comparison in relation to sorption ability of each willow genotype. Simultaneously the
	studies allowed us to demonstrate essential differentiation of metal size sorption within
	the species Salix purpurea and in relation to the other genotypes. The results confirm the
	complexity of factors influencing the efficiency of heavy metal accumulation by willow;
	they indicate increasing ion absorption in the case of some metals, while the
	accumulation of other heavy metal ions was limited.
Year	2009
Pages	289-296
keywords	Salix purpurea, heavy metals, ion absorption