

PCBs and DDTs in surface mangrove sediments from the south of Iran (ID NO. 048)

ABSTRACT

Mangrove sediments were collected during wet and dry seasons from nine stations in Khamir, Laft and natural reservoir mangrove-dense areas of Hormozgan province in the south of Iran. Σ PCBs ranged from 5.33 to 15.5 ng/g dry weight and the dominant congener was no.153. Average Σ DDTs for Khamir and Laft mangroves were 16.58 ± 1.51 and 18.8 ± 9.98 ng/g dry weight. DDT was more abundant than DDE and DDD isomers, which indicated the input of DDT. The sediment quality guideline shows that the concentration of Σ PCBs were below the ER-M guideline, whereas levels of Σ DDTs were between ER-L and ER-M. The mangrove ecosystem in Hormozgan province is suffering from urban and industrial development.

Keyword: PCB; DDT; Mangrove sediment; Hormozgan province; Iran