EVIDENCE OF PHTHALATE BIOACCUMULATION IN NEMATODA

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Bioaccumulation of chemical compounds has been a hazardous factor to maintenance of ecological equilibrium in biota. Several potentially bioaccumulators compounds have been identified in different species, due to antropic effects. This study objectived the investigation of these contaminants, using Gas-Chromatography/ Mass Espectrum analisys, in the nematode community of Porto de Galinhas beach (Ipojuca - Pernambuco, Brazil), and a population of *Diplolaimelloides oschei* (Nematoda: Monhysteridae) cultived in vitro (Universidade Federal de Pernambuco/Brazil -Gent University/Belgium). The extract was prepared with 1000 specimens of Nematoda population from Porto de Galinhas and 9000 specimes from culture. The compounds were extracted with hexane HPLC and sonication prior to analisys in GC/MS. The following compounds were identified: 2-ethylhexyl phthalate, diisododecyl phthalate, diisononyl phthalate, diisooctyl phthalate, di-n-decyl phthalate and dioctyl adipate (Porto de Galinhas); diisobutyl phthalate, di-n-butyl phthalate, 2-ethylhexyl phthalate, diisooctyl phthalate and dioctyl adipate *(D. oschei* - in vitro). Unexpected, a high amount of phthalates was identified in both extracts. Phthalates are compounds widely used in industrial activities, mainly as plasticizers. The presence of these contaminants in the cultived specimens indicate bioaccumulation effect of these phthalates.This effect is probably because the cultive was established in plastic Petri dishes, as there was not any other contamination source. This effect was also observed in the population in loco, suggesting the antropic interference in the natural environment.