

Determination of benzimidazoles pesticides in environmental water using hollow fiber microextraction

이유리, 한단단, 노경호*
인하대학교
(rowkho@inha.ac.kr*)

An extraction method for the analysis of benzimidazoles pesticides (carbendazim, tiabendazole and tiophanate-methy) in environmental water was developed based on hollow fiber liquid-phase microextraction (HF-LPME) combined with HPLC. The influence of the different factors on the HF-LPME efficiency including the pH and ion strength of the donor solution, the pH of the donor solution, stirring rate and extraction time were examined. The best HF-LPME conditions were as follows: 1-octanol impregnated in the pores of the hollow fiber, stirring rate of 1000 rpm, extraction time of 2 h. Under the optimized condition, it had higher selectivity and sensitivity than the other traditional methods.