

13種類の植物プランクトン色素混合標準を用いた HPLC 定量法の有用性

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Abstract

In this study, a mixture of 13 pigment standards was quantified simultaneously using HPLC (High performance liquid chromatography). A standard of mixed 13 pigments (chlorophyll *c*3, chlorophyll *c*2, peridinin, 19'-butanoyloxyfucoxanthin, fucoxanthin, 19'-hexanoyloxyfucoxanthin, prasinoxanthin, diadinoxanthin, alloxanthin, diatoxanthin, zeaxanthin, chlorophyll *b*, chlorophyll *a* and β -carotene) was confirmed that peak of these pigments clearly were separated during twenty minutes. Acetone was better than ethanol as a dilution solvent of mixture pigment standards. Pigment analysis in field samples (freshwater lake and brackish water lake) was agreed with the results of phytoplankton composition identified by the microscope. It is judged that the identification of phytoplankton in field sample could be determined rapidly by this calibration standard.