Preliminary study concerning the physical and chemical description of certain alginates obtained from the brown alga *Cystoseira Barbata*

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Abstract. The study examines the physical and chemical description of certain alginates obtained from the brown alga *Cystoseira Barbata*, existing in the coastal area of the Black Sea. The study is focused on two directions: determining the concentration of certain metals and confirming the structure of the alginate type through IR spectral analysis. Results confirmed the alginate type structure as well as the presence of certain metals, among which Fe, Cd, Mn, which are to be found in the alga. The presence of Mg is to be noticed, which was fixed on the alginate during the process of obtaining the alginates.

Keywords: alginates, magnesium, Cystoseira Barbata.