Ratima Sagulngam 2008: Adsorption of Iron (II) Ion in Solution by *Hydrilla verticillata* and *Ceratophyllum demersum*. Master of Science (Environmental Science), Major Field: Environmental Science, College of Environment. Thesis Advisor: Associate Professor Nipon Tungkananuruk, Ph.D. 106 pages.

The remained iron (II) ion after its adsorptive extraction from *Hydrilla verticillata* and *Ceratophyllum demersum* can be determined by spectrophotometrically at 510 nm as tris(1,10-phenanthroline) iron(II). The effects of pH (4-13), shaking time or digestion time, contact time, concentration of iron (II) ion (100-500 mg/L) and amount of adsorbent (10-100 g/L) are reported. In addition, the adsorption process is conformed with Langmuir and Freundlich behaviour. The system has been applied to the determination of iron (II) ion in wastewater from an automobile and electronic factory.

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