1

_____1, 2,3, 2,3, 2,3, 2,3, 2,3,* ; ²National Marine Bioenergy Research Center, Inha University; ³Department of Marine Science & Biological Engineering, Inha University (leecg@inha.ac.kr*)

Microalgae are viewed as one of the most promising feedstocks for sustainable bioenergy production. Marine microalgae can be transformed into bioenergy such as biodiesel, bioethanol, biohydrogen and etc. Because microalgae are generally obtained as wet matrix, hydrothermal liquefaction (HTL) is considered as one of the most effective conversion processes for production of fuels from wet microalgal biomass. Wet microalgal biomass is converted into an energy dense biocrude. Information of the composition of the biocrude is important for both process optimization and upgrading of the fuel. This study focused on analysis of fatty acids in the biocrude, as obtained by hydrothermal liquefaction of Tetraselmis sp. 20 wt.% wet algal biomass were used and reaction were performed at 250-350 and 20-120 min. Fatty acids in biocrude were analyzed by two different analytical methods and then compared.