

**ANALYSIS OF TOTAL PHENOLIC COMPOUND AND INHIBITION POWER IN EXTRACTED SUBSTANCE FROM KAI ALGAE (*Cladophoraspp*)****M.Pornpimol**Department of Chemistry  
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THAILAND**ABSTRACT**

Kai algae is the popular freshwater algae for rural people in the north of Thailand. The aim of this work was to evaluate the efficiency of crude extracted from two types of algae as fresh Kai algae and dried Kai algae by analysis total phenolic compound content and antioxidising inhibition power. The extracted substances were prepared by 5 methods such as boiling with water, extraction with sodium hydroxide, alcoholic extraction, acid extraction and mechanical extraction, finally all extracted substances were analysed total phenolic content and antioxidising inhibition power. The results showed that dried Kai algae which extracted by 0.3 N sodium hydroxide at 60 °C gave the best extracted substance, since it contained highest total phenolic substance approximately  $1066.96 \pm 15.12$  mg GAE/100 g. All extracted substance showed the antioxidising inhibition power as 57-88 %. The extracted substance from Kai algae showed the potential as source of antioxidant compound.

**Keywords:** Extracted substance, Kai algae, *Cladophora spp.*, Total phenolic compound, inhibition power.

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