Potensi Limbah Tangkai dan Bunga Tembakau (*Nicotiana tabacum L.)* sebagai Bahan Baku Bioetanol Generasi II *(Potential Wastes and Flower Stalk Tobacco (Nicotiana tabacum L.) as a Second Generation Bioethanol Raw Materials)*

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ABSTRACT

Production of second generation bioethanol research from waste tobacco stalks and flowers can be concluded that the waste stalks and stems of tobacco could potentially be used as an alternative raw material production of second generation bioethanol. Second generation bioethanol production process from waste tobacco stem and stalk begins with the drying process materials, raw material reduction, delignification, hydrolysis and fermentation, then topped with a distillation process to produce ethanol. In the process of acid hydrolysis of waste tobacco stalks and flowers are made using H_2SO_4 2 M, 2,5 M and 3 M produce glucose at 6.8%, 8% and 9.2%. Later in the fermentation process of the waste stalks and flowers of tobacco use Sacharomyces cerevisae bacteria can produce ethanol content of 0.61% at a concentration of 2 M, 0.75% at concentrations of 2.5 M and 0.81% at a concentration of 3 M.

Keywords: acid hydrolysis, bioethanol, fermentation, Tobacco waste