ABSTRACT

SCREENING OF SECONDARY METABOLITE COMPOUNDS 96% METHANOL EXTRACTS ORGANIC BLACK RICE (*Oryza sativa* L. indica) USING ULTRASONIC METHOD

(The sample was taken from Tegal, Central Java)

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Rice is one of the main food ingredients that cannot be replaced, especially in Indonesia. Rice contains carbohydrates, proteins, fats, vitamins and other nutrients. There are various colors of rice in Indonesia, including white rice (*Oryza sativa* L.), black rice (*Oryza sativa* L. indica) and red rice (*Oryza nivara*). Black rice until now a lot of research. Organic black rice has potential for health due to the content of secondary metabolites in organic black so it is necessary to carry out phytochemical screening studies. The purpose of this study was to determine what secondary metabolites were contained in extracts of organic black rice. The method used in this study is the true experimental method. In this study, a qualitative test was carried out using the phytochemical screening method on organic black rice (*Oryza sativa* L. indica). The extraction method used in this study uses an ultrasonic extraction method which aims to help the entry of solvent into plant cells, so that more secondary metabolites are obtained. Where the solvent used is 96% methanol solvent because methanol solvent is a universal and polar chemical compound that is expected to attract most of the secondary metabolite compounds in organic black rice extract (*Oryza sativa* L. indica). The results of the determination of organic black rice plants taken from Tegal, Central Java, are *Oryza sativa* L. indica. The results showed that organic black rice extract (*Oryza sativa*

L.indica) taken from Tegal, Central Java, had a yield of 10,15 %. The results of the phytochemical screening test for organic black rice extract (*Oryza sativa* L.indica) were positive for alkaloids, flavonoids, terpenoids, tannins, saponins and negative for steroid compounds. The next research is the TLC test of organic black rice (*Oryza sativa* L. indica) with methanol solvent