

ABSTRACT

Anti Bacterial Potential Test Of Nutgrass (*Cyperus rotundus*) With Distillation Method Against *Escherichia coli* Bacteria

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Nutgrass is a weed that grows a lot in agricultural land, in nutgrass it contains alkaloids, saponins, flavonoids, tannins that function to inhibit bacterial growth, so nutgrass can have the potential to be antibiotics against *Escherichia coli* bacteria. The purpose of this study was to determine the potential of nutgrass extract (*Cyperus rotundus*) against the inhibitory zone of *Escherichia coli* bacteria. Nutgrass are extracted by distillation, distillation is repeated 10 times, so 30 mL filtrate will be produced. Then the filtrate obtained is diluted with the addition of aquadest, the concentration of filtrate used is 15%, 30%, and 45%. Inhibition testing using the disc diffusion method, starting with soaking the disc paper at each extract concentration for 15 minutes, then dried for 5 minutes. Method of making bacteria using the spread plate method, disc paper that already contains the concentration of extract is placed on the media, then incubated for 24 hours. The results of the study average inhibition zone diameter at a concentration of nutgrass extract of 15% by 1,17 mm, 30% by 1,58 mm, and 45% by 1,67 mm and belongs to the weak category.

Keywords : Nutgrass, *Escherichia coli*, Distillation, Resistance Power Test, Resistance Zone Category.