

**Uji Sitotoksisitas dan Karakteristik Sensoris Daun Tanaman Herbal**  
*(Cytotoxicity Test and Sensory Characteristics of Herbal Plant Leaves)*  
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**ABSTRACT**

*In general, herbal plant leaves can be used in various ways, both for health, beauty and daily needs. Traditional medicine is believed to be safe and able to treat various diseases. The use of herbal plant leaves can also be applied in other forms, such as in making tea. There is an opinion among the public that the use of herbal plant leaves in the form of tea products can be used without paying attention to the dosage used. This is evidence that due to the lack of information regarding the safety of using herbal plants, the Center for Drug and Food Research, Cytotoxicity Testing is a form of developing a method for predicting the presence of toxic compounds using normal cells (Vero cells). To determine the level of cytotoxicity of phytochemical substances, a cytotoxicity test method using MTT (methylthiazol-2-yl-2,5-diphenyl tetrazolium bromide) Assay is required, which is basically in vitro testing using cell cultures (cell lines) which has advantages over in vivo testing. Requires less testing material, is safer and economical due to relatively short testing time. The aim of determining cytotoxicity is to obtain initial information regarding the potential toxicity of a compound. Data analysis was obtained from calculating cell viability (%) of herbal plant leaves. The effect of variations in the concentration of cell viability of herbal plant leaves on normal cells. The concentration variations used start from a concentration of 15.625; 31.25; 62.5; 125; 250; 500; 1000 µg/ml. The higher the concentration, the more active ingredients the sample contains and the greater its ability to kill cells. It is known that all test samples used are not toxic to normal cells, this is because the highest cell viability at a concentration of 15.625 µg/ml in the cytotoxicity test can be caused by a combination of factors that support cell life and health at that concentration. After sufficient data is then analyzed both in terms of technical aspects including calculations of cell viability (%), hedonic, and hedonic quality, it can be concluded that the cytotoxicity test and sensory characteristics of herbal plant leaves are not toxic in the test.*

**Keywords :** *Herbal Plant Leaves, Cytotoxicity Test, MTT assay, Cell Viability*