ABSTRACT

MOST PROBABLE NUMBER TEST (MPN) ON SHITAKE MUSHROOM

(Lentinula edodes)

(Study was conducted at the Surabaya Pharmacy Academy Laboratory)

TITO DWI BIMANTARA

Shitake (*Lentinula edodes*) are mushrooms that are often used as a processed food ingredient. Shitake mushrooms can potentially be used as a product. This research aims to determine the quality of samples of shitake mushroom simplicia and to determine the most probable number value (MPN). This type of research is experimental. The method used was APM series 3. The test results showed negative results because no gas was formed in the durham tube. The presence of coliform bacteria is indicated by the presence of gas (CO₂) in the durham tube. In the confirmation test, positive results were obtained on the sample which was indicated by the presence of gas in the durham tube and the color of the media became cloudy. The MPN value for the shitake mushroom simplicia sample was 7.2 APM/gram. This shows that the shitake mushroom simplicia sample is suitable for consumption because it is still below the standard set by BPOM RI, namely ≤ 20 APM/gram.

Keyword : Shitake mushrooms (*Lentinula edodes*), *Coliform*, Most Probable Number