

ABSTRACT

Many people still do not know about the safety of food, especially those that use preservatives and do not use preservatives. The emergence of public anxiety regarding the durability of food containing natural preservatives and synthetic substances that are harmful to the human body. Some traders aware of the food quality of the food products they trade, generally prefer to use natural food preservatives. However, not a few traders use synthetic preservatives in their food products. Formalin is a problem that is often encountered in the community environment. As we know, formalin contains dangerous substances that can preserve corpses, but it can also kill germs. According to BPOM, in 2021 as many as 2-3 tons of wet noodles are produced per day, and 1.5 tons contain formalin. Development of a Formalin Level Detection System in Wet Noodles and Tengawang Seed Fat (*Shorea.sp*) as a Natural Preservative Solution. The development of this system aims to detect formalin levels in wet noodles based on color sensors. As well as providing a natural preservative solution that can increase storage time and taste in wet noodles. The results of the experiment on detecting formalin levels with 16 different samples obtained 15 samples containing formalin and 1 sample containing no formalin and had an accuracy of 96.25%. It was also obtained from the observation of wet noodles for 4 days showing that wet noodles containing tengawang seed fat (*Shorea.sp*) could last 3 days at room temperature (25°C).

Keywords : Formalin, Wet noodles, Tengawang seed fat, Detection Tool