PRODUK ENKAPSULASI ASAP CAIR SEKAM PADI DAN APLIKASINYA UNTUK MENGAWETKAN TAHU PUTIH

Title	PRODUK ENKAPSULASI ASAP CAIR SEKAM PADI DAN APLIKASINYA UNTUK MENGAWETKAN TAHU PUTIH
Author Order	3 of 3
Accreditation	3
Abstract	Tofu is a perishable food product, thus requiring a safe natural preservative. Liquid smoke from rice husk can be used as a tofu preservative, but its use in liquid form is less practical. Liquid smoke encapsulation process is a way to resolve the issue. The research objectives were to study the antibacterial activity of liquid smoke from rice husks and their encapsulated products, the effect of the concentration of liquid smoke encapsulation products on the shelf life of white tofu during storage, and the optimal concentration of liquid smoke encapsulation products that were able to maintain the quality of white tofu during storage. This type of research was experimental using a Split Plot Design, with the main plot was the concentration of encapsulated products, while the sub-plot was the storage time. Factors studied were the storage time (0, 2, 4 and 6 days) and encapsulation product concentrations (0, 0.5, 1, 1.5 and 2%). There were 20 combinations of treatment, repeated two times in order to get 40 units of trial. The results showed that the liquid smoke of rice husk had total phenol of 1,624.62 mg GAE/g, also had antibacterial activity against Escherichia coli ATCC and Staphylococcus aureus ATCC. Encapsulation product of rice husk liquid smoke had total phenol of 3,125 mg GAE/g and antibacterial activity against Escherichia coli ATCC and Staphylococcus aureus ATCC. The concentration of the encapsulated product affected the value of water content, protein content and the total plate count (TPC) during storage. The concentration of 2% encapsulated product produced the lowest changes during storage. The concentration of 1% encapsulated product resulted in tofu quality that was still organoleptically feasible until the second day of storage. Keywords: encapsulation, liquid smoke, white tofu
Publisher Name	Faculty of Agricultural Technology, University of Jember
Publish Date	2020-02-05
Publish Year	2019
Doi	DOI: 10.19184/j-agt.v13i02.13994
Citation	
Source	JURNAL AGROTEKNOLOGI
Source Issue	Vol 13 No 02 (2019)
Source Page	180-194
Url	https://jurnal.unej.ac.id/index.php/JAGT/article/view/13994/7789
Author	Dr KARSENO, S.P, M.P