

## The Effect of Fe-Fortification on Chemical and Sensory Properties of Cassava Biscuits Supplemented with Fish and Tempeh Flours

<b>Publons ID</b>	30596586
<b>Wos ID</b>	WOS:000476659100006
<b>Doi</b>	10.22146/agritech.39522
<b>Title</b>	The Effect of Fe-Fortification on Chemical and Sensory Properties of Cassava Biscuits Supplemented with Fish and Tempeh Flours
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<b>Publish Date</b>	2018
<b>Journal Name</b>	AGRITECH
<b>Citation</b>	1
<b>Abstract</b>	<p>The prevalence of anemia in pregnant women in Indonesia in 2013 was still high at 37.1%. The impact of anemia on long-term pregnant women causes a decrease in the quality of human resources. Therefore, it is necessary to provide foods with high iron content and which are easily absorbed. Cassava biscuits that have been enriched with Tempe fish flour and fortified Fe are expected to be an alternative to anemia control and pregnant women PEM through a "food-based" approach. The study aims to produce cassava biscuits supplemented with Tempe fish flour and fortified Fe, so that it contains high protein and Fe and has good sensory properties. The experimental design used in the study was Randomized Block Design with 2 factors: type of fortification (F); FeSO<sub>4</sub> (F1); NaFeEDTA (F2), and concentration of fortification (K), i.e. 0 ppm (K1); 30 ppm (K2); 45 ppm (K3); 60 ppm (K4); and 75 ppm (K5). The variables observed included water content, Fe content, free fatty acid levels, and peroxide numbers. While sensory properties are texture, fishy smell, metallic taste, and level of preference. The results showed that fortification with 45 ppm FeSO<sub>4</sub> was the best treatment that produced biscuits with the best sensory properties. The biscuits have the characteristics of 6.01 +/- 0.54% moisture content, 43.69 +/- 0.34 ppm db Fe content, 1.17 +/- 0.02% free fat acid content, and 9.66 +/- 0.76meq O-2/ kg peroxide rate. The sensor characteristics are rather crisp texture, less noticeable fishy aroma, less noticeable metal flavor, and rather preferred taste.</p>
<b>Publish Type</b>	Journal
<b>Publish Year</b>	2018
<b>Page Begin</b>	396
<b>Page End</b>	403
<b>Issn</b>	0216-0455
<b>Eissn</b>	2527-3825
<b>Url</b>	<a href="https://www.webofscience.com/wos/woscc/full-record/WOS:000476659100006">https://www.webofscience.com/wos/woscc/full-record/WOS:000476659100006</a>
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