

**Sistem Pendukung Keputusan Rekomendasi Jumlah Produksi Roti  
Dengan Metode Simpleks** (Decision Support System Recommendation the  
amount of Bread Production Using Simplex Method).

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***ABSTRACT***

*Bread is one of the main foods that are important besides rice, corn and tubers. The raw materials for making bread consist of wheat flour, yeast, sugar and powdered milk. One of the bread producers in Jember is Roti SIP which is a business unit at the Politeknik Negeri Jember with several variants of sweet breads including boy bread, sandwiches, and mattress bread. In a bread production process there are several obstacles in Roti SIP, one of which is the limited raw materials that can be provided per month. This is a problem for Roti SIP in determining the production amount planning, where Roti SIP does the planning for the amount of bread production still manually. From the constraints that have been described, the researcher has a solution to determine the combination of the number of production of each bread variant and to predict the composition of the amount of bread production, this can be done with a linear regression calculation system. In this research, a decision support system for the recommendation of the amount of bread production was developed using the simplex method, because the simplex method has linear regression and is used for more than two variable input. The results of this research are to provide recommendations for the amount of bread production based on maximum profit.*

**Key words** : Decision Support System, the amount of bread production, Simplex Method