





# CHARACTERISTICS OF CRYSTAL PALM SUGAR FROM BATANG KULUR VILLAGE

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## INTRODUCTION

Batang kulur village is a center of palm sugar industry in South Kalimantan. Some sugar palm farmers in Batang Kulur Village became interested cultivated and process palm sap into crystal palm sugar. But the compotition of the resulting crystal palm sugar in this village is not yet known.

## **OBJECTIVE**

The purpose of this research is to analize characteristics of crystal palm sugar from Batang Kulur Village which include shape, flavor, taste, smell, color, water content, sucrose, reducing sugar, fats and ash content

# MATERIAL AND METHODS

The materials used in this study is a palm sap from Batang kulur Village, Hulu Sungai Selaatn District, South Kalimantan, Indonesia. The research Method includes the preparation of tapping sugar palm sap, processing crystal palm sugar and testing of crystal pal sugar. The organoleptic test include shape, taste, smell and color, chemical compotition testing includes water content, protein, sucrose, sugar reduction. Fats, potassium, and phosphorus use test methods SNI. 01-2894-1992. The results of data crystal palm sugar test will be tabulated and descriptively

## RESULTS AND DISCUSSION

Crystal palm sugar from Batang Kulur Village was made in the traditional way, using a wood stove and striing is done manually by human power.

Table 1. The Characteristics of Crystal palm sugar (Arenga pinnata) from Batang kulur Village

No	The	Results		
	Parameter	<b>Crystal Palm</b>	<b>Crystal Palm</b>	<b>Crystal Palm</b>
		Sugar 1	Sugar 2	Sugar 3
1	Shape, taste,	a soft dry granular,	a soft dry granular,	a soft dry
	smell and	a sweet taste and	a sweet taste and	granular, a sweet
	color	aroma typical	aroma typical	taste and aroma
		crystal palm sugar	crystal palm sugar	typical crystal
		and brown	and brown	palm sugar and
				brown
2	Water content	4.48	3.72	5.24
	(%)			
3	Protein (%)	1.66	1.46	1.31
4	Sucrose (%)	69.75	64.99	70.19
5	Reducing	3.61	3.06	2.53
	Sugar(%)			
6	Fats (%)	0.16	0.14	0.10
7	Potassium	1.46	1.31	1.42
	(mg/kg)			
8	Phosphorus	1.15	1.13	1.14
	(mg/kg)			

The results of characteristics of crystal sugal palm research can not yet meet all the quality requirements SNI 01-3745-1995 palm sugar, but it can still be produced to be consumed. Improving the quality of crystal sugal palm do start early stages when tapping palm sap that is doing preservation to prevent damage to palm sap add preservatives such as lime and sodium metabisulfite. The water content of crystal palm sugar can also be reduced through the drying process. In term of the reducing sugar content, crystal palm sugar was safe to be consumed primarily to maintain stable blood sugar in the body. This crystal palm sugar have a sweet taste and a very distinctive taste and verr practical use is good for sweetening breads, cake, tea, coffe drink s tap.

# **CONCLUSSIONS**

Crystal palm sugar have a soft dry granular, a sweet taste and aroma typical crystal palm sugar and brown. The characteristics of crystal palm sugar had water content 4.61%, sucrose 68.29%, the reducing sugars 3.07%, fats 0.13%, and phosphor 1.14%.