

**PENGENDALIAN KUALITAS KERIPIK PISANG SANG RAJA
MENGUNAKAN METODE *STATISTICAL PROCESS CONTROL*
PADA USAHA RUMAH ORGANIK KECAMATAN SUMBERSARI
KABUPATEN JEMBER**

(Andi M. Ismail, S.ST., M.Si. selaku Dosen Pembimbing)

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ABSTRAK

Sektor industri pengolahan di Kabupaten Jember mengalami pertumbuhan signifikan, membuka peluang usaha, khususnya pada agroindustri keripik pisang. Usaha Rumah Organik merupakan salah satu pelaku usaha di bidang ini, yang memproduksi keripik pisang Sang Raja secara manual. Proses produksi yang belum optimal menyebabkan ketidaksesuaian produk dengan standar mutu yang ditetapkan. Penelitian ini bertujuan untuk: 1) mengidentifikasi pengendalian kualitas keripik pisang, 2) mengidentifikasi faktor penyebab kecacatan produk, dan 3) menganalisis penerapan metode Statistical Process Control (SPC) dalam pengendalian kualitas. Metode SPC yang digunakan meliputi peta kendali p, kapabilitas proses (Cp), diagram pareto, dan diagram sebab-akibat. Penelitian dilakukan selama 20 kali pengamatan dan menunjukkan bahwa terdapat titik di luar batas kendali pada atribut keutuhan (10 titik) dan kerenyahan (10 titik), sedangkan atribut keseragaman warna seluruhnya berada dalam batas kendali. Diagram pareto menunjukkan jenis cacat tertinggi terjadi pada atribut keutuhan bentuk, yaitu sebesar 23.960 gram atau 37,96%. Berdasarkan diagram sebab-akibat, penyebab kecacatan ini antara lain adalah proses penggorengan yang tidak optimal, pisau perajang yang tumpul, kurangnya pelatihan karyawan, serta kondisi lingkungan kerja yang panas dan mengganggu kenyamanan pekerja. Oleh karena itu, penerapan metode *Statistical Process Control* (SPC) sangat penting untuk membantu Usaha Rumah Organik dalam mengendalikan mutu produk secara konsisten dan terukur.

Kata kunci : Pengendalian Kualitas, Kualitas Produk, *Statistical Process Control*, Keripik Pisang, Pisang Sang Raja

***QUALITY CONTROL OF BANANA CHIPS USING STATISTICAL PROCESS
CONTROL METHOD AT ORGANIC HOME BUSINESS IN SUMBERSARI
SUB-DISTRICT JEMBER DISTRICT***

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ABSTRACT

The processing industry sector in Jember Regency has experienced significant growth, opening up business opportunities, particularly in the banana chip agro-industry. Rumah Organik is one of the business players in this field, which produces Sang Raja banana chips manually. The production process has not been optimized, causing product incompatibility with the established quality standards. This study aims to: 1) identify the quality control of banana chips, 2) identify the factors causing product defects, and 3) analyze the application of the Statistical Process Control (SPC) method in quality control. The SPC methods used include p control map, process capability (Cp), pareto diagram, and cause-and-effect diagram. The study was conducted for 20 observations and showed that there were points outside the control limits on the wholeness attribute (10 points) and crispness (10 points), while the color uniformity attribute was entirely within the control limits. The Pareto diagram shows that the highest defect type occurs in the shape integrity attribute, which is 23,960 grams or 37.96%. Based on the cause-and-effect diagram, the causes of this defect include a non-optimal frying process, blunt chopper knives, lack of employee training, and hot working environment conditions that interfere with worker comfort. Therefore, the application of the Statistical Process Control (SPC) method is very important to help Organic Home Businesses in controlm control product quality consistently and measurably.

Keywords: *Quality Control, Product Quality, Statistical Process Control, Banana Chips, Sang Raja Banana*