

## ABSTRAK

Terdapat berbagai masalah yang ditemukan di lapangan, diantaranya yaitu cacat produksi cpo, tingginya kadar asam lemak bebas, peningkatan kadar air dan peningkatan kadar kotoran yang terkandung dalam produk CPO. Tujuan penelitiannya yaitu pengendalian mutu dengan metode QCC, perbaikan proses produksi menggunakan metode SPC dan memberikan usulan perbaikan pengendalian cacat. Penelitian ini dilaksanakan pada bulan Juli 2024 di PT. AMP Plantation. Metode yang digunakan dalam penelitian ini yaitu QCC dan SPC. Berdasarkan hasil penelitian diperoleh hasil bahwa ditemukan produk cacat diduga berasal dari dua penyebab utama kecacatan produk. Metode QCC dilaksanakan dalam empat tahapan yaitu: plan, do, check dan action. Setelah dilaksanakan evaluasi dan implementasi perbaikan, persentase kecacatan produk keseluruhan yang awalnya 7,19% menurun menjadi 1,12%. Pengendalian cacat produk pada PT. AMP Plantation menggunakan metode SPC dilaksanakan dalam 4 tahapan, yaitu: lembar checksheet, peta kendali, diagram pareto dan fishbone diagram. Berdasarkan pengolahan data menggunakan metode SPC diperoleh tiga penyebab utama kecacatan produk yaitu: buah kelapa sawit yang terlalu matang, pengendapan yang terlalu lama dan mesin produksi yang sering rusak dan kurang perawatan. Penyebab kecacatan tersebut berasal dari empat faktor yaitu: faktor manusia, faktor mesin, faktor metode dan faktor material.

Kata kunci: QCC, SPC, Pengendalian Cacat

## **ABSTRACT**

*There are various problems found in the field, including defects in CPO production, high levels of free fatty acids, increased water content and increased levels of impurities contained in CPO products. The research objectives are quality control using the QCC method, improving the production process using the SPC method and providing suggestions for improving defect control. This research was conducted in July 2024 at PT. AMP Plantation. The methods used in this research are QCC and SPC. Based on the research results, it was found that defective products were found to originate from two main causes of product defects. The QCC method is implemented in four stages, namely: plan, do, check and act. After evaluation and implementation of improvements, the overall product defect percentage, which was initially 7.19%, decreased to 1.12%. Control of product defects at PT. AMP Plantation using the SPC method is carried out in 4 stages, namely: checksheet, control chart, Pareto diagram and fishbone diagram. Based on data processing using the SPC method, three main causes of product defects were obtained, namely: oil palm fruit that is too ripe, settling for too long and production machines that are often damaged and lack maintenance. The causes of these defects come from four factors, namely: human factors, machine factors, method factors and material factors.*

*Keywords: QCC, SPC, Defect Control*