

## **ABSTRACT**

*PTPN VIII is a company operating in the agricultural industry. The company focuses on the production of black tea powder, particularly at the Sinumbra factory in Ciwidey, West Java. PTPN VIII produces defective baleuy products in every production process. The drying process is one of the processes that produces defective baleuy products. This research aims to improve the tea powder drying process using the DMAIC and QFD methods. The result of this research is a design of a temperature detector device that can be used in the tea drying process. Based on the calculation results of the new sigma value, the use of this temperature detector device can increase the average sigma value by 0.22.*

**Keywords – Six Sigma, Defects, Quality, Tea Powder, Baleuy.**