## **ABSTRACT**

PT. Nyonya Meneer Semarang is an industry engaged in the manufacture of herbal medicine, especially Jamu Sehat Perkasa. Companies require a plan of raw materials so that production can be run in accordance with pre-planned. Planning of raw materials is very influential on the course of production. The problem in this study concerning raw materials, which occurred late delivery of raw materials in the expedition. Therefore needed a information system which is expected in the raw material needs can be done properly and the determination of inventory cost can be defined as optimal as possible through the application of MRP.

Variables in this study is the planning of raw material inventory. Source of data derived from internal company sources. Types of data used are primary data and secondary data research company conducted. Data collection techniques used were interviews and company documentation. Technique analysis done of the past mengeplot demand data, forecasting, and MRP (Material Requirements Planning).

From the results it can be concluded that the application method of Wagner Whititn Lot Sizing Algorithm for each raw material Jamu Sehat Perkasa PT. Nyonya Meneer, Semarang can minimize the total cost of inventory when compared with the method of Lot Sizing and Lot for Lot, Part Period Balancing.

Keywords: PT. Nyonya Meneer Semarang, MRP (Material Requirements Planning), raw materials, Lot Sizing.