ABSTRACT

One of the plantation commodities that is very important for the national economy, especially as a provider of employment, income, and foreign exchange, is cinnamon bark, one of which is in the cinnamon producing area, namely Renah Pemetik Village, Kerinci Regency, Jambi Province. In the cinnamon bark production process, there are several important stages, one of which is scraping the cinnamon bark. The problem during the process of scraping the cinnamon bark is pain or discomfort in the body parts such as the arms, shoulders, back, or neck of the operator or farmer. These symptoms are closely related to the problem of Musculoskeletal Disorders (MSDs). The purpose of this study is to design an ergonomic work chair needed by cinnamon bark scraper operators to reduce the risk of Musculoskeletal Disorders (MSDs). In analyzing and strengthening operator problems, assessments in the form of NBM, GOTRAK, and RULA are used. Product design uses the Kano method and Quality Function Deployment (QFD) with user needs obtained from cinnamon bark scraping operators. The results of the RULA assessment in the initial condition of 6 decreased to 1. This value means that the work posture is safe to use for a long time. The design results have proven to meet the needs of users. The product provides comfort characterized by the presence of pads used as a seat by the operator with memory foam material, product size tailored to the operator's body size (anthropometric data) and data on product part requirements with durable materials. Product mechanisms that provide comfort and ease of use for operators. And the price is affordable by the operator as the user of the designed product.

Keywords: Cinnamon Bark, MSDs, NBM, GOTRAK, RULA, Kano, QFD.