

## ABSTRAK

Aktifitas pemanenan kelapa sawit (TBS) yang dilakukan secara manual berisiko untuk menyebabkan gangguan otot rangka atau *musculoskeletal disorders* (MSDs). Hal ini dikarenakan bekerja secara manual. Dengan kondisi tandan buah segar (TBS) yang berat, semakin tua maka tinggi pohon kelapa sawit dan kondisi lingkungan. Penelitian ini bertujuan untuk mengetahui tingkat risiko ergonomi pekerja panen menggunakan metode REBA (*Rapid Entire Body Assessment*) di PT. XYZ, serta mengidentifikasi risiko penyakit MSDs yang dialami pekerja panen dari hasil Kuisisioner *Nordic Body Map* serta *re-design* alat kerja pada pekerja panen TBS. Pengumpulan data dilakukan dengan observasi dan wawancara secara langsung dengan menggunakan kuisisioner dan *Worksheet* REBA. Perhitungan REBA tingkat pekerjaan panen penurunan TBS dari pohon mempunyai kategori level tinggi, (skor 9), pekerja pemuatan/pengumpulan TBS ke TPH mempunyai kategori level tinggi (skor 9), pekerja pengumpulan buah kelapa sawit (brondolan) ke karung mempunyai kategori level sangat tinggi (skor 11), pekerja penimbangan TBS dan buah kelapa sawit di TPH mempunyai kategori level 7 sedang (skor 7), dan pekerja pengangkutan TBS dan buah kelapa sawit (brondolan) ke truk mempunyai kategori level sangat tinggi (skor 11). Dampak penyakit MSDs dari penurunan TBS dari pohon; *stiffness, tendinitis, fasitis plantaris*, Pada pemuatan TBS ke TPH; *tennis elbow, bursitis, fasitis plantaris*, Pengumpulan buah kelapa sawit kekarung; *stiffnes, tendinitis, carpal tunnel syndrome, spondilosis*, Penimbangan TBS dan buah kelapa sawit; *tendinitis, carpal tunnel syndrome*, Pengangkutan TBS dan buah kelapa sawit ke truk; *stiffnes, tendinitis, syndrome nyeri bahu, tennis elbow, carpal tunnel syndrome dan bursitis*.

Kunci: REBA, Kuisisioner Nordic Body Map, Musculoskeletal Disorders (MSDs), TBS

## ABSTRACT

*Manually harvested palm oil (TBS) activities are at risk for causing skeletal muscle disorders or musculoskeletal disorders (MSDs). This is because it works manually. With the condition of fresh fruit bunches (TBS) are heavy, the older the height of palm trees and environmental conditions. This study aims to determine the level of risk of harvesting workers ergonomics using REBA (Rapid Entire Body Assessment) method at PT. XYZ, as well as identify the risk of MSDs disease experienced by harvest workers from the results of the Nordic Body Map Questionnaire and re-design the work tools of the TBS harvest workers. The data were collected by observation and direct interview using questionnaire and REBA Worksheet. The REBA calculation of the level of harvesting the decrease of FFB from the tree has a high level category, (score 9), the TBS loading / collection worker to the TPH has a high level category (score 9), the crude palm oil (brondolan) (Score 11), weighing TBS and palm oil workers in TPH have moderate 7 level category (score 7), and TBS and palm oil (brondolan) transport workers to trucks have very high level category (score 11). The impact of MSDs disease from decreasing FFB from trees; Stiffness, tendinitis, plantar phasitis, On loading TBS to TPH; Tennis elbow, bursitis, plantar phasitis, collection of oil palm fruit; Stiffnes, tendinitis, carpal tunnel syndrome, spondylosis, weighing FFB and palm fruit; Tendinitis, carpal tunnel syndrome, transport of FFB and palm oil to trucks; Stiffnes, tendinitis, shoulder pain syndrome, tennis elbow, carpal tunnel syndrome and bursitis.*

**Keyword:** REBA, Nordic Body Map Questionnaire, Musculoskeletal Dissorders (MSDs), Fresh Fruit Bunches