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Ergonomics Risks Assessment on In-field Collection Machinery

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Mini tractor-trailer with grabber has been commonly used for in-field collection of oil palm fresh fruit bunch (FFB) in Malaysian oil palm plantations. The presence of this machinery system has contributed in lightening the in-field collection of FFB and increasing labour productivity in the operation. This paper examines ergonomic risks on the operator of mini tractor-trailer with grabber for in-field collection of FFB in oil palm plantations. Combinations of questionnaire survey technique and direct field observations were employed in collecting the data for this study. The Standard Nordic Questionnaire was used to obtain information about the prevalence of pain in ten different body regions of the operator while working. The Rapid Entire Body Assessment (REBA) was used to evaluate body postural musculoskeletal disorder and risks associated with the task. The findings of the study indicated that working period was the dominant factor that contributes to the number of musculoskeletal disorder complaints among the operators of mini tractor-trailers with grabber during in-field collection of FFB in Malaysian oil palm plantations.

Keywords: *In-field collection, oil palm, grabber, farm mechanisation, ergonomics, musculoskeletal disorder.*

