RESEARCH PAPER | International Journal of Agricultural Engineering | Volume 6 | Issue 2 | October, 2013 | 524–528

Effect of noise and vibration on tractor operator during tillage operation under wet and dry field condition

■ ANISA, GEETA AND VISHAL KUMAR

Received : 26.08.2013; **Revised :** 24.10.2013; **Accepted :** 25.11.2013

See end of the Paper for authors' affiliation

Correspondence to :

ANISA
Shivdam Singh Institute of Technology and Management, ALIGARH (U.P.) INDIA
Email : anisa0987@gmail.com

■ **ABSTRACT :** Ergonomics is a scientific study of relationship between man and his working environment. Physical agents are forms of energy that can harm the body when exposure takes place. Physical working capacity diminishes with age and sex. In the same age and sex group also, there are individual variations due to the weight, nutrition etc. Experiment were conducted with five dependent variables *viz.*, body temperature, blood pressure, heart rate, noise and vibration level, and three independent variables *viz.*, tillage implement, operator age group and field conditions. The tractor operator having age group of 21-30 years was found minimum physiological changes as compared to 31-40 and 41-50 years age in all tillage operations. In wet field conditions the change in physiological responses and the effect of noise and vibration on tractor operator were minimum as compared to dry field conditions.

■ **KEY WORDS :** Noise, Vibration, Tillage operation, Tractor operator

■ **HOW TO CITE THIS PAPER :** Anisa, Geeta and Kumar, Vishal (2013). Effect of noise and vibration on tractor operator during tillage operation under wet and dry field condition. *Internat. J. Agric. Engg.*, **6**(2) : 524-528.