## ASSESSMENT OF PHYSIOLOGICAL STRAIN IN MALE CULTIVATORS ENGAGED IN MECHANIZED PADDY THRESHING TASK USING TWO DIFFERENT TYPES OF THRESHERS

AYAN CHATTERJEE, SANDIPAN CHATTERJEE, SURJANI CHATTERJEE, SATABDI BHATTACHARJEE, TANAYA SANTRA, NEEPA BANERJEE, KUNTAL GHOSH AND SHANKARASHIS MUKHERJEE

Agriculture in India is a vital sector as it not only takes care about the nutritional requirement of more than 1.2 billion strong populations but also provides millions with earning opportunity. In the wake of climate change, both agricultural produce output and the performance of the human resources associated with agriculture are estimated to suffer. In this backdrop, a study has been undertaken to assess the physiological strain mainly in terms of cardiac response indicators to assess the extent of strain in male agricultural human resources engaged threshing (the process of loosening the edible part of cereal grain (or other crop) from the scaly, inedible chaff that surrounds it) in paddy cultivation. It has been found that the strain is significantly more when aid of an electrically driven paddy thresher is not taken. This has implication that in the wake of climate change when more rise and consequent more strain on human resources are expected, it will be better to use at least to some reasonable extent mechanized devices to combat the adverse thermal condition induced strain of the human resources for continuation of work on field without compromising on the quality of performance.

VOL. 84, NOS. 5–6