



A REVIEW

Headgear for thermal comfort of workers in farm operations

Aditya Raj, S.S. Meena, N. K. Yadav*, N. L. Panwar¹, S. K. Jain² and M. S. Khidiya³

Department of Farm Machinery and Power Engineering, College of Technology and Engineering, Maharana

Pratap University of Agriculture and Technology, Udaipur (Rajasthan) India

(Email : narendrakumaryadav27@gmail.com)

Abstract : The thermal effects of wearing headgear are intricate, and various research have looked into different facets of this subject. This review seeks to summaries the various findings in order to provide a thorough overview of the subject and to provide fresh viewpoints. Headgear makes the head more insulated, making it more problematic in warm weather, which is the subject of this review. The local skin temperature and perspiration rate are the only physiological indicators that are affected by helmets. However, the head is one of the body areas that is most sensitive to thermal comfort, directly influencing whether or not a person will wear headgear. The application of these techniques demonstrated that convection and radiation are the primary mechanisms for heat transport. The helmet parameters that are important to these heat transmission channels are examined, and recommendations are given for enhancing current headgear concepts and creating fresh concepts, which will ultimately result in more widely accepted headgear.

Key Words : Headgear, Thermal comfort, Workers, Farm operations

View Point Article : Raj, Aditya, Meena, S.S., Yadav, N. K., Panwar, N. L., Jain, S. K. and Khidiya, M. S. (2023). Headgear for thermal comfort of workers in farm operations. *Internat. J. agric. Sci.*, **19** (2) : 702-707, DOI:10.15740/HAS/IJAS/19.2/702-707. Copyright@2023: Hind Agri-Horticultural Society.

Article History : Received : 17.02.2023; Accepted : 03.04.2023

*Author for correspondence:

¹Department of Renewable Energy Engineering, College of Technology and Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur (Rajasthan) India

²Department of Processing and Food Engineering, College of Technology and Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur (Rajasthan) India

³Department of Mechanical Engineering, College of Technology and Engineering, Maharana Pratap University of Agriculture and Technology, Udaipur (Rajasthan) India