

STUDY ON ROOF VENTILATION AND MISTING SYSTEM IN SEMICONTROLLED POLYHOUSE

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ABSTRACT : Ventilation is a process of allowing the fresh air into the enclosed area by driving out the air with undesirable properties. Temperature, relative humidity and light intensity are important parameter that governs the growth of crops inside polyhouse. The reduction in temperature after 10 min operation of misting system was noticed to be 4.93°C with open and 4.57°C with close ventilation. The relative humidity was increased by 10 to 12% after operation of mister with open ventilation and 8 to 10% with close ventilation. As the experiment was conducted in rainy season in modified north light truss semi-controlled type polyhouse with misting system at 3 hrs interval for 10 min operation with open ventilation has shown comparatively better results.

Key Words : Modified quonset polyhouse, ventilation, misting system.