Polyhouse Farming: An Integrated Approach to Organic Farming

Authors : Promila Dahiya, Kiran Singh

Abstract : Indian agriculture has come a long way from being an era of frequent droughts and vulnerability to food shortages to becoming a significant exporter of agricultural commodities. Polyhouses are essentially microcosms aimed at providing physical environment suitable for the survival and growth of plants with high degree of temperature, humidity and carbon dioxide. The present study was conducted in 21 districts of Haryana State to review Polyhouse farming is an alternative farming in Haryana State to fulfil the needs of population byminimum use of land, water and energy. The information regarding number, area and type of polyhouses and subsidy provided by Govt. of India and Haryana on polyhouse farming was collected from respective district horticulture offices of Haryana State. Four different types of polyhouses were studied during work viz., Hitechnology polyhouse (Hi-tech), Anti-Insect Net Shade House (AINSH), Naturally Ventilated Polyhouse (NVPH) and Walk-In-Tunnel (WIT).In study it was found that in walk-in-tunnel (WIT) and natural ventilated polyhouses (NVPH) the temperature was 69.54% and 52.29% higher and the humidity was 96.37% and 85.19 % higher in comparison to open farming in the months of January and May. No significant different was found in temperature, humidity, dust, solar radiation and CO2 level between open and anti insect net shade house (AINH). In Hi-tech polyhouse, the environment was totally controlled by computer and was not found to much strenuous. Health status of workers was checked by doctor, and it was found that in polyhouse farming workers were more prone to problems of allergy and asthma.

Keywords : polyhouse, unfavorable climate, walk-in-tunnel, psychological aspect
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