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Chapter

18

Production of Melons under Greenhouse

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Abstract

India faces challenges in production of fruits due to changed climate and due to decreasing land area besides with increasing population. Now-a-days people are more concerned about their diet containing nutritious and healthy food that attains, from quality fruits. Besides higher production, quality foods production was challenging to farmers with the traditional cultivation practices. Melons have a great character for their unique flavour and sweetness. They contain 85–92% water, 0.8% protein and 6.2% other carbohydrates, 20– 30 mg% vitamin C and micro-elements, such as Zn, Fe, Ca, Mg, K and P, but due to cultivation in open fields crop is facing more challenges viz., plant growth, fruit size stunted due to less fertilizer application, unable to adapt to specific climatic conditions, melons were more prone to pests & diseases due to cultivation in winter season. The solution for all these problems can be attained by using currently evolving greenhouse technology because it can manipulates the crop to meet the characteristics of the greenhouse environment by modifying the atmosphere surrounding the crop for maximum based on its genetic potential. Yield and quality can be increased under this technology due to controlled environment. The aim of this paper is to supply more knowledge of cultivation of melons in greenhouse production for getting optimum yields along with good quality.

Keywords: Greenhouse, Water melon, Musk melon

1. Introduction

Protected agriculture objectives can be achieved practically by greenhouse technology, where the natural environment is modified by using engineering principles to achieve optimum plant growth and yields (Kiran Madhuri *et al.* 2017; Sabir and Singh 2013). Presently, progressive farmers are adopting commercial protected cultivation of high value vegetables and flowers (Maitra *et al.* 2020). The productivity of a crop is influenced not only by its heredity but also by the microclimate around it. It is