

Year Round Care and Management of Greenhouse

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Abstract

Greenhouse is a type of enclosed structure roofed with glass or plastic, where generally different high value crops are grown throughout the year by controlling the climatic parameters. The abiotic factors, such as temperature, soil moisture, relative humidity, light intensity and so on can be controlled to create a micro climate suitable to the crops irrespective of seasonal variability. As compared with outdoor cultivation, pests and diseases, other abiotic and biotic stress can be avoided by growing the crops inside the polyhouse. The greenhouse system as consists of the elements like supporting structure, covering material, cooling and heating system, shading and light-supplementary system, CO₂ enrichment system, humidity regulators, cultural facilities, fertigation and automatic control system, there is need for proper maintenance for uninterrupted production. The chapter focuses on management of greenhouse during different seasons.

Keywords: Greenhouse, management, environmental control, uninterrupted production

1. Introduction

Greenhouse cultivation has expanded in recent decades which comprise four horticultural areas: floriculture, olericulture, ornamental horticulture, and pomology of these four areas, the floriculture market typically is the most prevalent contribute to the greenhouse industry (Fig. 1). Presently, progressive farmers are adopting commercial protected cultivation of high value vegetables and flowers (Maitra 2020). Production of vegetables and flowers is significantly influenced by the seasonality and weather conditions the extents of abundance and deficiency in production cause considerable fluctuations in the prices and quality of vegetables and flowers (Singh *et al.* 2015). Management practices of general greenhouse production, with a particular