

Constraints in cotton cultivation and suggestive measures

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Abstract

Owing to low plant density, Indian cotton yields are low. Cotton damage is repeatedly caused by jassids, aphids, whiteflies and others. Biodiversity is a significant factor for preserving the sustainability of cotton. Intercropping with crops of legumes is beneficial. Proper efforts should be made to make quality quality seeds available to farmer at a fair price. For this to be done, the public and private sectors should come forward. In order to grow hybrid seeds, the cost should be decreased. The network of seed villages should be encouraged to ensure cheap and quality seed supply. Desi varieties are strong and suitable for difficult conditions with low inputs. Short duration Desi varieties under high density planting can provide good yields.

Keywords: Biodiversity, Desi species, network, quality seed, short duration, sustainability

INTRODUCTION

Cotton is one of the most important fibre crops in India as well as the world. It plays a big role in the country's industrial and agricultural economy. It supplies the basic raw material to the cotton textile industry (Reddy, 2019). In terms of cotton, biodiversity is a significant sustainability indicator. Around the world, around 500 recognised varieties of cotton are found. Varieties have been produced to fit geographical conditions and include many interesting features and characteristics, such as coloured cotton, stapled cotton, extremely long and fine, and indigenous or wild cotton (Textile Exchange, 2011).

CONSTRAINTS

It is a belief that a large variety of insects are affecting the cotton crop. A number of insects are repeatedly causing damage to cotton such as jassids, aphids, whiteflies and others (Kranthi, 2015).

The use of fertilizer is among the highest in the world for cotton. There is a decline in soil health due to continuous use of fertilizer and the crop does not respond well to fertilizer use (Kranthi, 2015).

Compared to other nations such as China, the United States Brazil, Mexico and Australia, Indian yields are low due to low plant density (Kranthi, 2015).

Diseases and insect pests affect cotton crops more and cause nutrient deficiencies due to monocropping. Cotton grown on the same land as a single crop results in insect pests and diseases. From June to May, cotton is grown in large parts of India all year round. By growing in repeated cycles, cotton sown in the area is harmed by insect pests such as mealy bugs and pink bollworms (Kranthi, 2015).

The key issues are the diverseness of cotton varieties, unauthentic seeds, more use of low quality and adulterated insecticide chemicals and misuse of pesticides. This leads to reduced yields and other social problems in some high yielding areas of Andhra Pradesh. Due to heavy rainfall, the