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Chapter **27** 

## **Cultivation of Gladioli under Polymulching**

Monisankar Bera

Center for Smart Agriculture, Centurion University of Technology and Management, Paralakhemundi,
Odisha- 761211

\*Corresponding author: monisankar2010@gmail.com

## Abstract

Gladiolus is one of the most economic cut flower after tulips in India. In the recent years poly mulch has been experiencing in increasing dramatically in agriculture throughout the world. The poly mulch can reduce soil moisture losses, manage the soil temperature, restrain the growth of weed pressure, prevent the plant pests, and control the soil chemical and physical properties. More research required on the effect of poly mulches on gladioli growth and yield, microclimate modifications, soil ecology.

Keywords: Gladiolus, polymulch, advantages, microclimate

## 1. Introduction

Gladiolus word came from gladiolus and its generic name gladioli (plural). Gladius is a *Latin* word and its meaning is sword, because leaf formation likes a sword. Gladiolus also called "queen of bulbous flowers". Commonly it also named as Sword Lily of family of *Iridaceae*. It is a plant of the iris family with sword shaped leaves and spike of brightly coloured flowers. Corms are used for growing of gladiolus. It is originated in tropical and South Africa. In India the gladiolus farming was first introduce by Mr. Charles Gray during the 19<sup>th</sup> century.

Protected cultivation is one of the revolutionary ways for realizing optimum yields over a decade amid the challenges like globalization of markets, shrinking cultivable lands and climate change. This is the technique wherein the microclimate around the plant is controlled fully or partially to protect the crop from adverse conditions and presently it is catching up in tropical countries for high value flower and vegetable cultivation (Maitra *et al.* 2020). Mulching is one of the potential protected cultivation