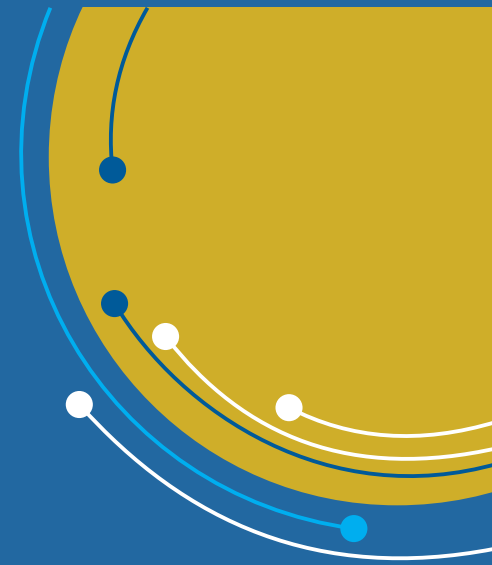
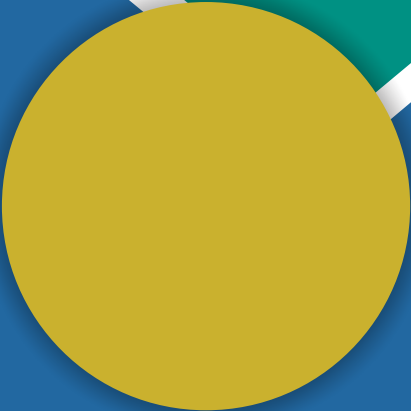


# Improved Gladiolus Corm and Flower Production Technology



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The proposed technology comprises a combination of sowing method and a bacteria based bioinoculant. It was validated for enhanced gladiolus production by comparing three different corm sowing methods i.e. as such with scales, descaled or descaled and cut into portions, along with a bacterial consortia (quorum quenching, QQ based) as plant healthcare bioproduct. The consortia treated descaled and cut half corms not only produced more number of flowers and corms but also showed more variation in terms of timing for flower emergence as compared to the corms sown by two other methods. Data were recorded for sprouting, growth parameters at 1<sup>st</sup>, 3<sup>rd</sup>, 6<sup>th</sup> leaf stage, flower emergence and number of corms harvested. Treated plants remained healthier and showed less diseases. This study proposes a novel technology for increased profitability.

## Methods & Results



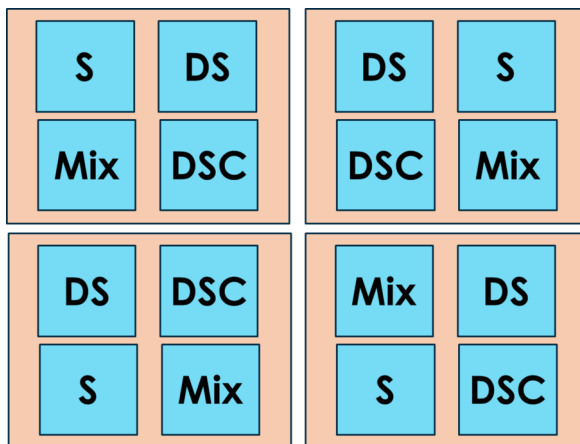
Scale (S)



Descale (DS)



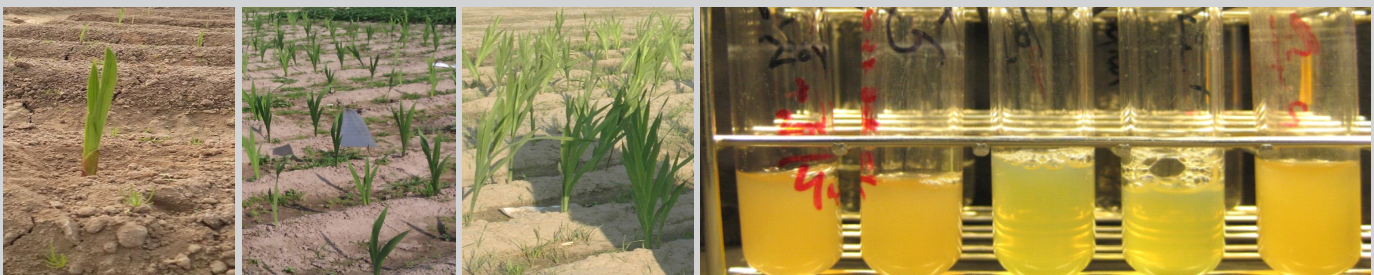
Descale and Cut (DSC)



Sowing RCBD design



Sowing 6-8 cm deep Distance 10 cm



QQ consortia application at 1<sup>st</sup>, 3<sup>rd</sup>, 6<sup>th</sup> leaf stage

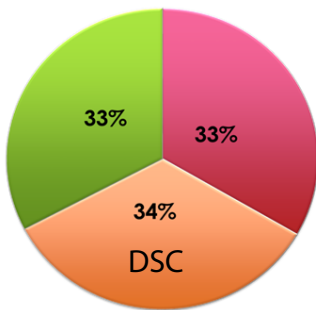
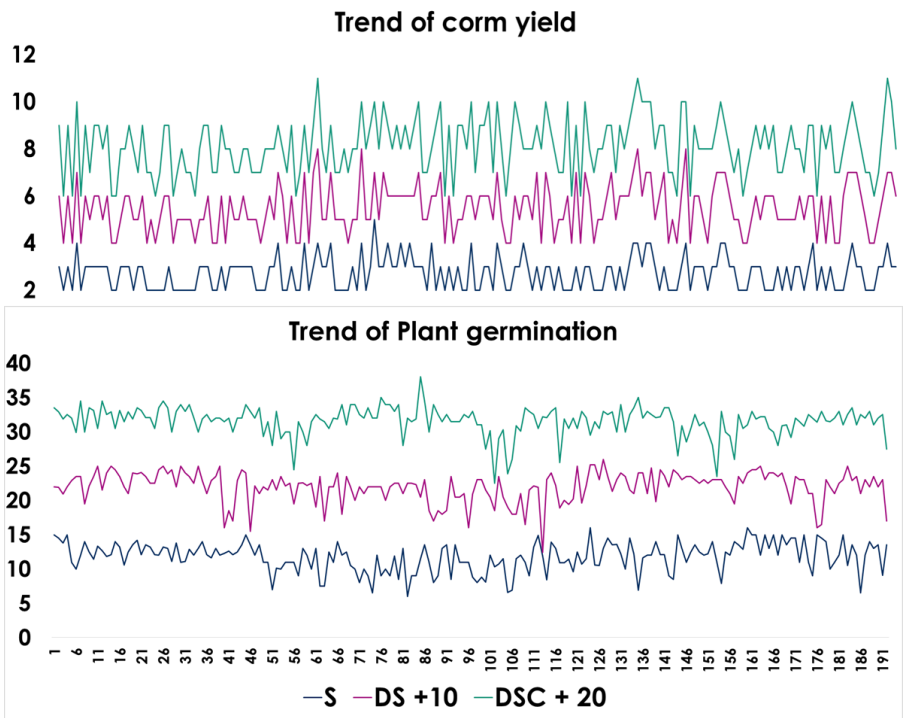


Data on plant height & number of leaves

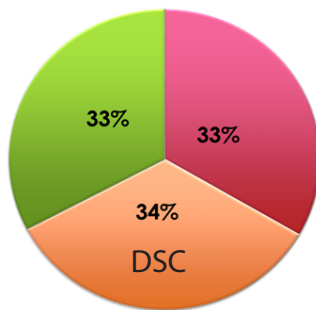


Flowers after 90- 100 days

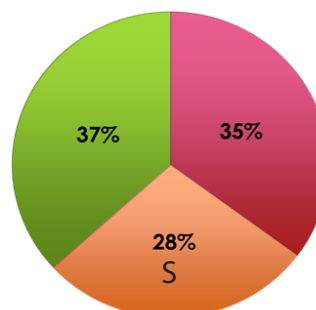
Corms 135 days



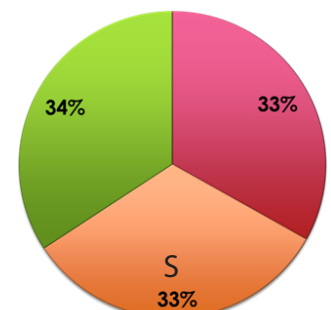
% germination



% growth



% flower yield



% corm yield

**While observing the local market trend Descale and cut corm sowing method is proposed to the farmers as it gives more variation in biological parameters in a given time**