

Study on effect of SNP as holding solution on vase life of cut *Gladiolus* cv. Candyman in comparison to AgNO_3

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ABSTRACT: An experiment was conducted to compare the effect of Silver Nano Particles [SNP] with Silver Nitrate [AgNO_3] on post-harvest quality and characteristics of gladiolus cut flower as holding treatment. Different concentration of SNP and AgNO_3 were tested for standardizing the best holding solution in order to enhance the vase life of gladiolus cut flower. SNP has shown a significant effect in enhancing the different parameter and in all vase life in comparison to AgNO_3 . Holding solution supplemented with SNP has a significant effect on maximum average solution uptake, time taken to new floret opening, longevity of first floret, less number of microbial count and enhanced vase life with the minimum loss of fresh weight. Treatment H₅ containing 50ppm SNP + 2% Sucrose has enhanced the vase life and maintained the quality of cut flower significantly over the other holding treatments.

Key Words: Silver Nano Particles (SNP), Silver Nitrate (AgNO_3), microbial count, *Gladiolus*, postharvest management.