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TECHNOLOGY VERIFICATION ON POSTHARVEST  
VASELIFE OF GLADIOLA AND AFRICAN  
DAISY USING SUGAR SOLUTION

THESIS

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Indang, Cavite  
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TECHNOLOGY VERIFICATION ON POSTHARVEST  
VASELIFE OF GLADIOLA AND AFRICAN  
DAISY USING SUGAR SOLUTION

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## A B S T R A C T

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The study was conducted from December 1990 to January 1991 at the laboratory room of the Research Building of the Don Severino Agricultural College, Indang, Cavite. Its objectives were to determine the effects of glucose on the vaselife of gladiola and african daisy and to determine the best level of glucose that can lengthen the vaselife of gladiola and african daisy.

African daisy and gladiola were used in this study. These were immersed in the prepared solution with dissolved glucose required per treatment for vaselife evaluation. Seven treatments were divided randomly with three replications. The different treatments used were: Treatment 1 - control/no sugar; Treatment 2 - 250 grams of glucose per 500 ml  $H_2O$ ; Treatment 3 - 500 grams of glucose per 500 ml  $H_2O$ ; Treatment 4 - 750 grams of glucose per 500 ml  $H_2O$ ; Treatment 5 - 1000 grams of glucose per 500 ml  $H_2O$ ; Treatment 6 - 1250 grams of glucose per 500 ml  $H_2O$ ; Treatment 7 - 1500 grams of glucose per 500 ml  $H_2O$ ;

Results of the study showed that  $T_7$  (1500 grams of glucose per 500 ml  $H_2O$ ) of gladiola took six days to full bloom. High level of glucose content increased the longevity of cutflowers, as well as the turgidity of tissues. The greater floret opening and size due to the action of glucose content was obtained from  $T_3$  (500 grams of sugar per 500 ml  $H_2O$ ) of gladiola.

It was found out that number of days from immersion to full bloom, number of days from immersion to wilting, number of days from immersion to softening of the stem, percentage of flowers wilted from immersion to termination and size of florets increases with an increase in the levels of glucose dissolved in water.

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by

REMEDIOS P. CROOX

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INTRODUCTION

Two of the most popular cut flowers used in local and international cut flower industry are African daisy (Gerbera Jamisonii, Hook) and Gladiola (Gladiolus sp.). Statistics has ranked gladiola second to roses among the first ten ornamental cut flowers traded in Luzon. (Cubarubia, 1970).

Gladiolus is an ornamental plant which belongs to the family Iridaceae. It has spikes of flowers and sword shaped leaves. Gladiolus has wide range of colors, and the predominating colors are pink, orange