

INTRODUCTION

Flowering annual plants are widely used for decorating public and private gardens as they represent the main source of color in gardens almost all year round.

The diversity of shapes and heights makes them suitable for many landscape purposes. Also, annuals producing attractive flowers having a good keeping quality are cultivated for cut flowers production.

Flowering annuals are classified into two main groups according to their flowering season in Egypt. Winter annuals, which flower in winter, spring and summer annuals which flower in summer and early autumn.

The application of tartaric acid promote germination, vegetative growth and improve flower quality. Williams *et al* (1979) concluded that the application of L-ascorbic acid to *Pelargonium crispum* was simultaneous production of oxalic acid and tartaric acid during *P. crispum* metabolism of L-ascorbic acid.

Many investigators used plant extraction for enhanced germination, vegetative growth and flower quality of some plants but till now there's no recent work for using *Aloe vera* extract. In this study it's found that leaves of *Aloe vera* extract enhanced germination, vegetative growth and flower quality.

Growth retardants may reduce the plant height and affect both vegetative growth and flowering and to add the plant ornamental value to the treated plant.

Paclobutrazol "PP-333", ancymidol "A-Rest" are recent growth retardants used in the production of flowering pot plants. Those chemicals

are usually effective in low concentration comparing with the other growth retardants.

The present work was to study the effects of different chemicals on some important flower annuals namely.

1- *Delphinium ajacis* L.

Fam. Ranunculaceae. native to Europe, called Rocket larkspur for the narrow spike like erect racemes. A group of beautiful hardy plants grown in borders for their handsome spikes of flowers and stately stem of foliage. They are of great value for cut flower purposes as the blooms keep well. Annual or perennial, erect, branching herb **Baily (1969)**.

2- *Antirrhinum majus* L.

Ness (snapdragon) is also an annual flowering crop, the plants range from bench miniatures to 3-foot giants. Each features spikes covered with clusters of tubular flowers in an assortment of colors, some of the hybrids are the popular heat alternate Rocket and Topper varieties. Fam. Scrophulariaceae **Bailey (1969)**.

3- *Callistephus chinensis*, Ness (China Aster).

Native to china and japan, is an erect stemmed herb somewhat woody at base. The leaves are toothed broadly ovate or triangular ovate flowers are in heads with greatly multiplied, variations in size, shape and color (violet, purple blue, rose and white).Fam.composite **Bailey (1969)**.

The application of tartaric acid, leaves of *Aloe vera* extraction on seed germination to promote the germination, vegetative growth and flowering were an aim of this study. Also the effects of paclobutrazed and ancymidal were under taken in this study aiming better vegetative growth, flowering and using these plants as pots plants.