INTRODUCTION

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The world demand for woody and ornamental trees products is expected to rise sharply over the next few decades. Both Magnolia and Mulberry trees are important trees for both gardening and woody trees production, (***Magnolia grandiflora***, **L.**) is a noble evergreen tree up to 100 feet high; flowers cup-shaped, coming out of great silky-hairy buds, 6-8 in across, white fragrant. They are propagated by grafting, either by inarching or cleft or tongue-graft as well as by seeds (Bailey, 1969). However, the plants which propagated sexually commonly produced plants with high genetic variability, with very long time for producing seedlings which must be grafted for obtaining well developed seedlings like the same mother characters.

Mulberry (***Morus nigra***, **L.**) is considered an important tree rather as edible fruit, their leaves are used to feed the silkworms. It is enormously heterozygotic plant and its diploid (2N) is 28 chromosomes, but the highly polyploid numbers are found up to 308 chromosomes (Kim *et al.*, 1985). However, among the polyploids of Mulberry (***Morus nigra***, **L. var. M-5)** is the triploids, have many desirable traits, including better shoots and leaf growth and higher nutritional quality to feed the silkworms.

The recent policy of Egyptian Ministry of Agriculture is to plant Mulberry trees everywhere on the canals and drainages to resume the ancient silk industry, which was famous in the past to convert the Egyptian village to be productive rather than consumptive.

The Indian triploids var. of Mulberry (***Morus nigra*, L. var. M-5**) could be used with intensifying planting as a foliage crop and harvested by mowing methods to feed the silkworms.

To meet all those unlimited demand of Mulberry trees, tissue culture is recommended for replacing the conventional propagation methods to avoid all previously mentioned problems, as well as, to increase the number of Mulberry or Magnolia seedlings in a short time with reducing the genetic variability. Therefore, tissue culture technology is the emerging application for both Mulberry and Magnolia clonal propagation.

The ultimate goal of this investigation is to find out the best medium and medium strength and additives for plantlets regeneration, proliferation and enhancing the processes of rooting and acclimatization. Also, to produce Mulberry or Magnolia of homogenous plantlets.