



# **'EFFECT OF WATER EXTRACTS OF SOME MEDICINAL PLANTS ON CELL DIVISION AND NUCLEIC ACIDS CONTENT'**

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بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

وَتَرَى الْمَلَائِكَةَ حَافِّينَ مِنْ حَوْلِ الْعَرْشِ يُسَبِّحُونَ  
بِحَمْدِ رَبِّهِمْ وَقُضِيَ بَيْنَهُم بِالْحَقِّ وَقِيلَ  
الْحَمْدُ لِلَّهِ رَبِّ الْعَالَمِينَ ..

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## **Ph. D. THESIS**

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**This Thesis has not previously been  
submitted for a degree at this or at  
any other university**

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## INTRODUCTION

Plants and plant products play an important role in the life of everyone. We look to the plant for a large number of our drugs and to their constituents for the chemical synthesis of a large number of important organic chemicals which are daily used in pharmacy and medicine.

The medicinal plants contain these chemicals in the tissues of most organs (roots, seeds, leaves, bark, wood, flowers and fruits). These chemical compounds include alkaloids, glucosides, volatile oils, fats, resins, gums ... etc. These compounds have a physiological effect on the human body.

The medicinal properties of plants were discovered very early. In fact, the use of plants for treating diseases dates back for at least four thousand years. One of the earliest references to the medicinal use of plants was found in the *Ebers papyrus*, discovered in the old Egyptian tombs in 1873, dating from approximately the sixteenth century B.C. It describes more than 700 herbal remedies including many which are familiar to-day. Many of the medicinal herbs of the Egyptians seem to have been chosen primarily for their aromatic properties. pleasant smells were believed to expel the evil-vapours of disease.

By the start of the present century many hundreds of medicinal plants are fully recognized, pure drugs have been already isolated from them and prescribed in the pharmacopoeias of the world.

The use of plant extract instead of synthetic drugs in the treatment of some diseases increased progressively. Many investigators made trails to test the mode of action, toxicity, physiology and cytology of some plant ex-