THE EFFECT OF GAMMA IRRADIATION ON CERTAIN STORED PRODUCT INSECTS IN EGYPT

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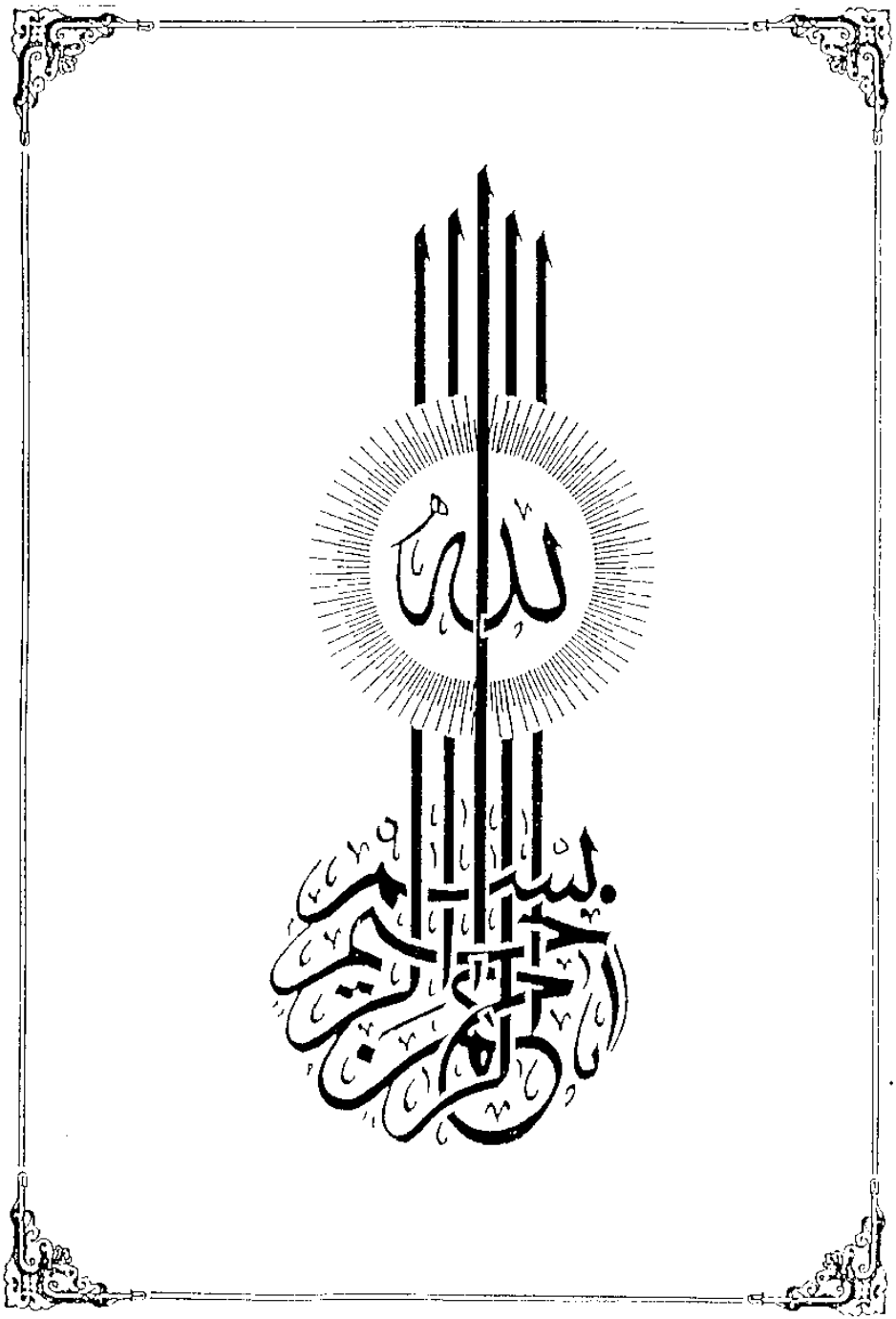

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DEDICATION

- TO THE SPIRIT OF THE FIRST TEACHER, PROPHET MOHAMMED, PEACE BE UPON HIM, AND HIS FOLLOWERS.
- TO THE MEMORY OF MY BELOVED FATHER.
- TO MY LOVED MOTHER.

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INTRODUCTION

I. INTRODUCTION

The Mediterranean flour moth, Ephestia kueniella (Zell) is one of the most destructive pests for wheat flour. It infests grain products like flour, and also many kinds of foods like dried and sugared fruits. This pest is wide spread in Mediterranean countries and is seen allover the year as long as these foods exist, and its damage is caused by its larvae which induce troubles in mills.

The continued massive and indiscriminate use of pesticides has always been accompanied by adverse effects creating a multitude of problems. Among these are; pesticide residue, development of resistance to insecticides, toxic hazards to man and animals and disruption of natural balance between the pests and their natural enemies.

The research efforts gave birth to numbers of new approaches to combat insects infesting stored products. Among of these approaches is the so-called sterilization by irradiation. The biggest advantage of this approach is that, it is quick and completely effective if proper doses are used. Another advantage of increasing importance is that this method leaves no chemical residues on the treated commodity.

However, there are many problems associated with the use of this method on large scale application.