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# بسم الله الرحمن الرحيم



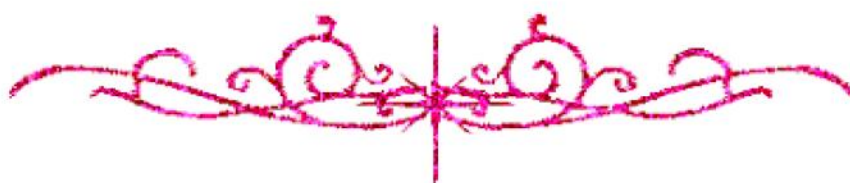
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شبكة المعلومات الجامعية



# شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



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شبكة المعلومات الجامعية

# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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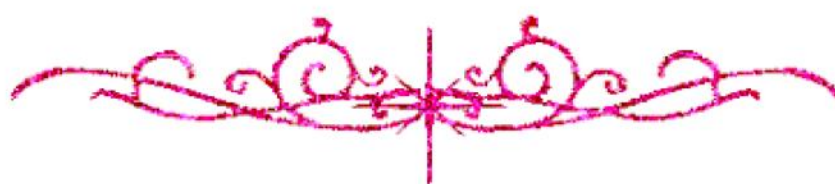
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**بالرسالة صفحات  
لم ترد بالأصل**



# STUDIES ON REARING TECHNOLOGY OF EARLY INSTARS OF SILKWORM, *Bombyx mori* L.

by

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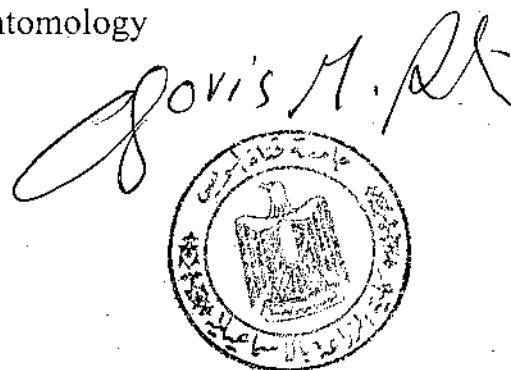
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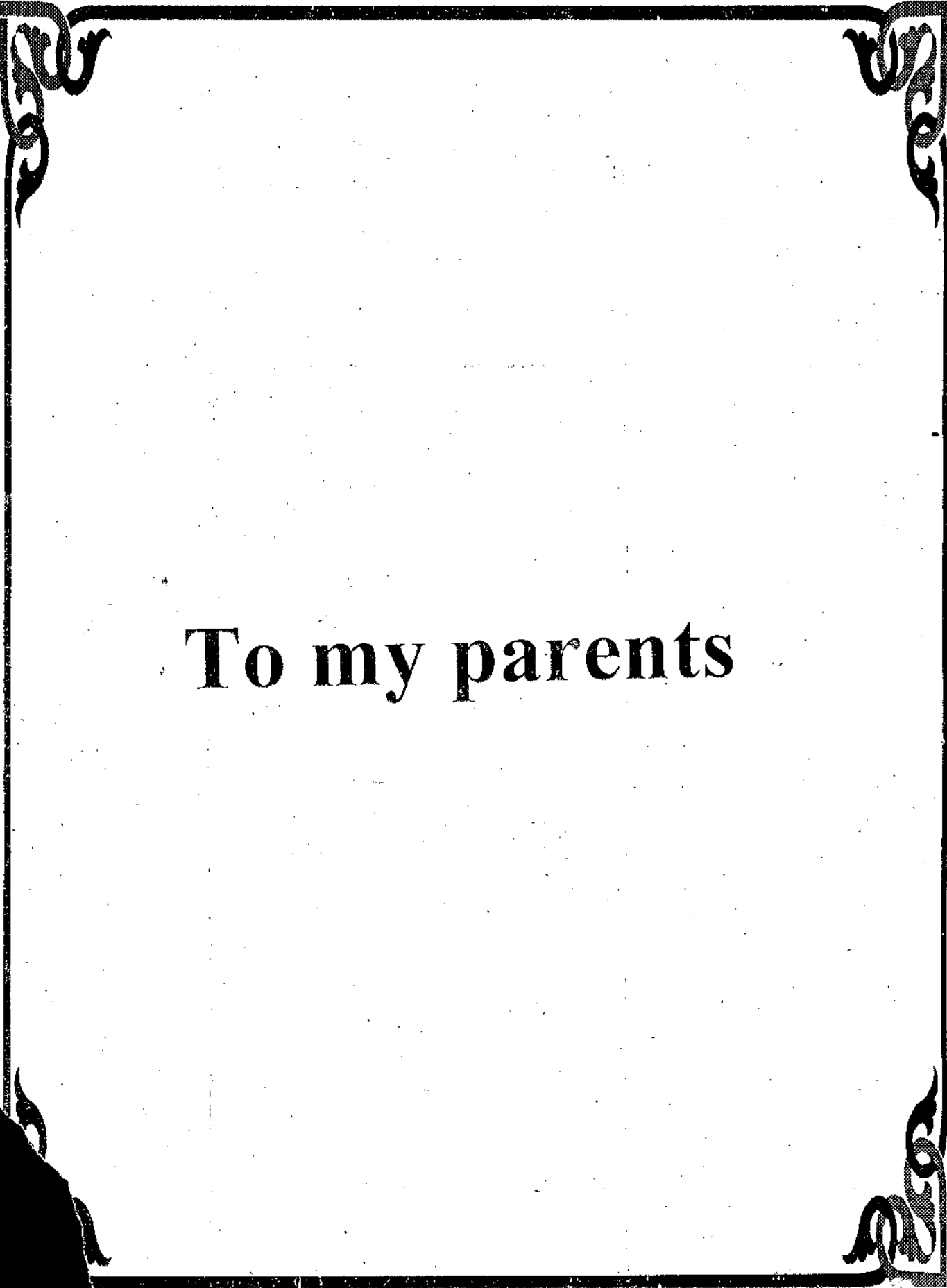
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**To my parents**

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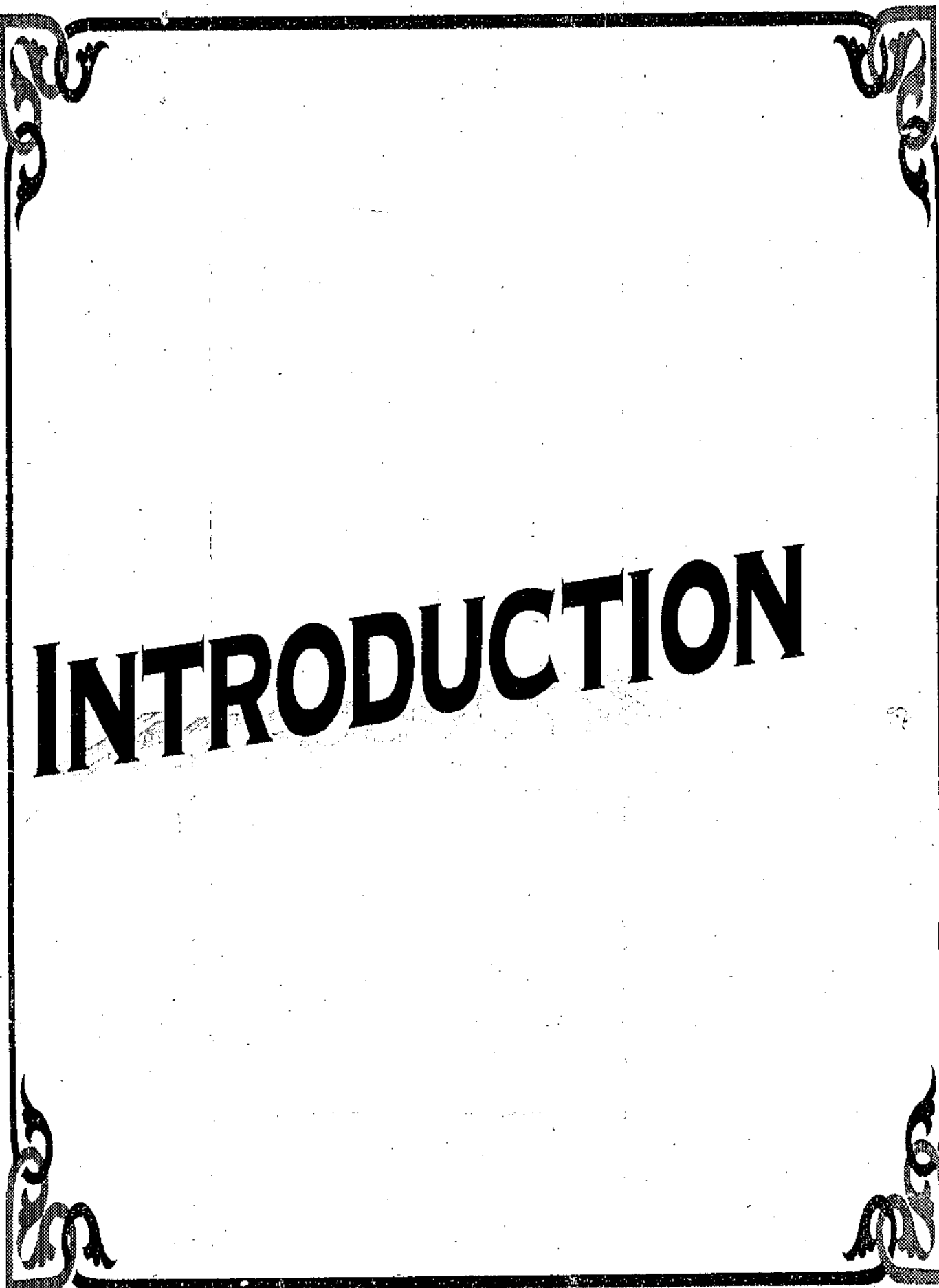
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# INTRODUCTION

## INTRODUCTION

Sericulture is one of important agriculture industrial branches.

In Egypt, sericulture status revealed that there is a big gap between the present production status and the needs of markets which is clearly shown by the quantities of imported raw silk (71.011 tons) and our local production (8.25 tons) in 1998, Sayed and Mohamed, (1999).

One reason of this problem in Egypt is the fact that sericulture still depends on the traditional practices, which caused more losing in larvae especially in the early instars, because of its high sensitivity to rearing factors.

Traditional rearing is a common practice to rear the early instars of silkworms up to the advanced stages in the farms, but that rearing method involved a lot of time.

Therefore a new method was devised in which collective rearing of only the early instars is carried out in different centers, after, which the larvae were dispatched to various farmers for rearing up to the advanced stages. This type of rearing called cooperative rearing and it has many advantages, for examples, the labour force is reduced to 50 per cent per individual rearing and from the technical point of view, through cooperative rearing a better stability of sericulture operation can be expected. At the early instars the rearing conditions greatly affect the sericulture operation. Some of these conditions are quality of mulberry leaves, temperature and humidity, so, rearing in boxes has been practised widely Aruga (1994).

In the light of these considerations, early instars of the silkworm *Bombyx mori* L. were reared with the main objectives focused on the effects of:

---

Mulberry leaf varieties, mulberry leaf quality, larval destiny, rearing boxes types, relative humidity and light regime.

Also, on certain potential biological, biometrics and productivity aspects as well. These biological aspects include :

Larval duration, mortality percentage, pupal duration, adults longevity.

Where as biometrics and productivity include:

Larval fresh weight, silk gland biometrics, cocoon, cocoon shell weight and silk ratio, pupal fresh weight, adult weight and fecundity.

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