







شبكة المعلومـــات الجامعية التوثيق الالكتروني والميكروفيا.



جامعة عين شمس

التوثيق الالكتروني والميكروفيلم



نقسم بللله العظيم أن المادة التي تم توثيقها وتسجيلها على هذه الأفلام قد اعدت دون آية تغيرات



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40-20 في درجة حرارة من 15-20 منوية ورطوبة نسبية من

To be kept away from dust in dry cool place of 15 – 25c and relative humidity 20-40 %









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Cairo University
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Cytogenetic Studies on in - Vitro Fertilization in Buffaloes

A thesis presented

By

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Introduction

Introduction

Buffaloes are multipurpose animals providing milk and meat. However, there is a wide gap between demand and supply of milk and meat. Massive numbers of buffaloes are taken from their breeding and sent to the slaughterhouses just after completion of their lactation leading to direct loss of valuable germplasm. Recent advances in embryo biotechnology have made it possible to recycle their germplasm to a certain extent through the technique of in vitro fertilization (IVF), where follicular oocytes from the ovaries of slaughterhouse can be retrieved, matured and fertilized in vitro with capacitated sperm. These embryos can be further transferred into the recipient animals.

The use of in vitro techniques has become a routine procedure in many laboratories for research purposes and even for large-scale production of embryos from ovaries of slaughtered animals of high genetic performance for use in commercial animal breeding. These embryos are also in demand for use in biotechnology such as transonic animal production, cloning, preimplantation diagnosis of embryos (sexing). They are also used for detection of genetic disease in oocytes or embryos before implantation occurs (*Greve*, *Madison, Avery, Callesen and Hyttel*, 1993). Moreover the