

# بسم الله الرحمن الرحيم



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شبكة المعلومات الجامعية التوثيق الالكتروني والميكرونيلم





## جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

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# EFFECT OF IODINE AND SELENIUM SUPPLEMENTATIONS ON ANESTROUS COWS AND BUFFALOES

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B.V.Sc. Degree (Cairo University, 1988)

For the degree of M. V. Sci. (Theriogenology)

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### Dedication ....

To the spirit of my late Father To my Mother, Brothers, Wife and Sons

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#### ACKNOWLEDGMENTS

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### INTRODUCTION

### INTRODUCTION

Normal reproductive performance of buffaloes and cows guarantees continuous supply of animals proteins represented in meat and milk for human consumption in our country. Ovarian inactivity constitutes one of the main problems that disturb the infertility of both buffaloes and cows. It has been incriminated for 6-15% of infertility cases in buffaloes (El-Wishy and Ghoneim, 1994) and 17.2% in cows (El-Naggar, Osman, Farrag and Shehata, 1985). Both buffaloes and cows in rural areas are fed on imbalanced diets in summer and mainly on berseem (Trifolium alexandrinum L.,) in green season which rarely satisfy the mineral requirement necessary for ovarian activity.

Moreover, the bioavailability of minerals may also be affected by high calcium contents of berseem, and presence of other plants such as goitrogenic plants e.g. Brassica species of plants, such as rape, kale, cabbage and turnip, which affect the bioavailability of two types of goitrogens, thiocyanates and goitrin (Underwood, 1977). Although the role of iodine in treatment of ovarian inactivity has been investigated before, the role of Selenium and/or vitamin E treatment of ovarian inactivity received a little attention. The aim of this study was to:-

- 1- Judge the efficacy of intrauterine irrigation with lugol's iodine as routine treatment regime still used nowadays for treating ovarian inactivity.
- 2- Compare between the intrauterine irrigation of lugol's iodine and oral administration of potassium iodide as a source of iodine.
- 3- Investigate the role of either vitamin E solely or both selenium plus vitamin E together in treatment of ovarian inactivity in cows and buffaloes.

- 4- Study the efficacy of both combinations of vitamin E plus selenium and iodine together in treatment the inactivity problem.
- 5- Study the effect of season on the response of buffaloes and cows with ovarian inactivity to different treatment trials.

