سامية محمد مصطفى

شبكة المعلومات الجامعية

# بسم الله الرحمن الرحيم


سامية محمد مصطفى

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# التوثيق الالكتروني والميكروفيلم

سامية محمد مصطفى

شبكة المعلومات الجامعية

# جامعة عين شمس

## التوثيق الإلكتروني والميكروفيلم

# قسم

## نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات

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# بعض الوثائق الأصلية تالفة

سامية محمد مصطفى



# بالرسالة صفحات لم ترد بالأصل

# SOME ANATOMICAL STUDIES ON THE NASAL CAVITY OF THE DONKEY

*By*

**Hazem Shaker Abdel Rahman Hamoda**

*(B.V.Sc., 1995)*

**A Thesis**

**Presented for the Degree**
**of M.V.Sc. (Anatomy & Embryology)**

*Under Supervision of*

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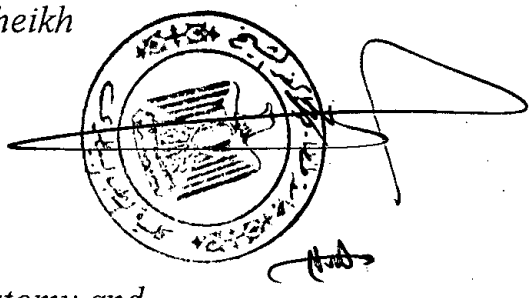

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# Approval Sheet

This is to approve that the dissertation entiteled " **Some anatomical studies on the nasal cavity of the donkey.**and presented by/ Hazem Shaker Hamoda to Tanta University for the degree of M.V. Sc.(Anatomy&Embryology) has been approved by the examining committee .

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بسم الله الرحمن الرحيم

"سبحانك لا علم لنا

إلا ما علمتنا إنك

انت العليم

الحكيم"

صدق الله العظيم

البقرة - آية ٣٢

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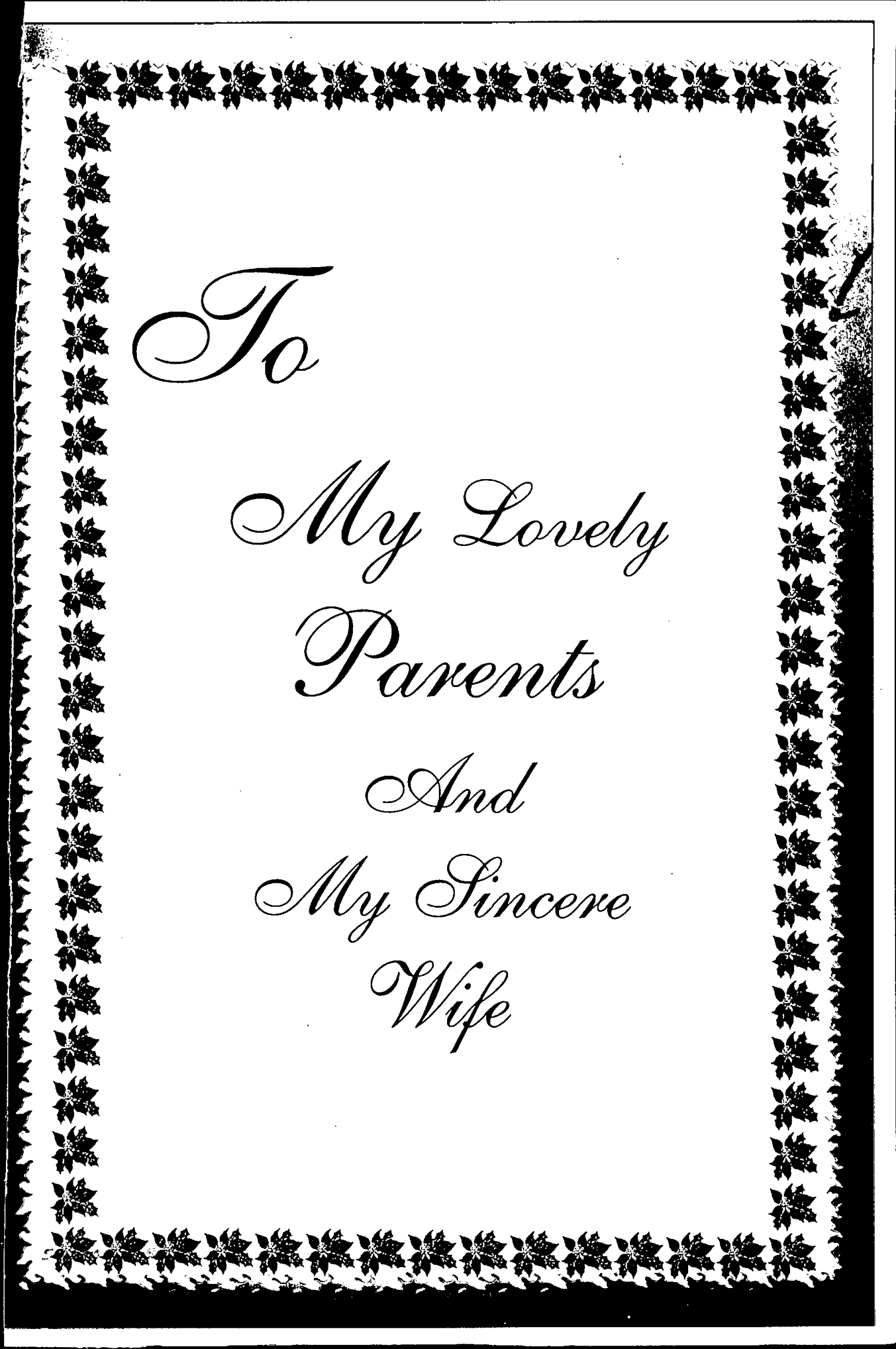
To
My Lovely
Parents
And
My Sincere
Wife

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# INTRODUCTION

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The donkey (*Equus asinus* Africanus) is one of the equine species which is widely spread in Egypt and commonly used by the farmers in their daily work and for riding purposes.

The nasal cavity of the donkey may be exposed to many affections which need medical and/or surgical interference based upon the anatomical knowledge of these important parts of the body.

The available literature concerning the anatomical studies of the nasal cavity and paranasal sinuses of the donkey are very few compared with the importance of this animal in the daily life of the Egyptian.

Therefore this work was planned to study the detailed description of the nasal cavity with its different parts as well as the locations of the paranasal sinuses and their communications with the nasal cavity. In addition to determination of the proper seats of trephining as a treatment of the sinus affections.

This work is necessary and justified from the medicolegal and surgical points of view.

# REVIEW OF LITERATURE

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**Nasal cavity (Cavum nasi):**

Generally, the shape and size of the nasal cavity vary according to the species. In the horse, it is less roomy than might be supposed from the exterior due to the reverse crown of the cheek teeth and the extensive development of the paranasal sinus system specially the maxillary. In the ox, it is incompletely divided by the nasal septum which does not reach the floor caudally. In the pig, it is very long, (**Hillman, 1975 and Nickel, Schummer and Seiferle, 1986** In the dog, **Evans (1993)** stated that the nasal cavity conforms the shape of the face.

**Nostrils (Nares):**

The nasal cavity opens to the exterior by the nostrils which vary in shape, size, supporting boundaries and motility in different species. In equines, the nostrils are crescent in form due to the deficiency of the lateral support. They are divided by the alar fold into the dorsal false nostril and the ventral true one, **Chauveau and Arloing (1891), El-Hagri (1967), Sisson and Grossman (1969), Hare (1975) and Sehummer *et al.* (1986).**

**Hare (1975)** added that, the nostrils are placed obliquely, so that, they are closer together ventrally than dorsally. They are bounded by the medial and lateral wings which meet dorsally and ventrally to form the angles or commissaries. The lateral wing is thin, concave and formed from skin enclosing muscles and fibrous tissue, the medial wing is convex dorsally and concave ventrally, it has a cartilaginous base.

**Schummer *et al.* (1979)** in horse, reported that the nostrils are semilunar in outline during normal breathing, and become circular when