Mirror of Research in Veterinary Sciences and Animals
MRVSA/ Open Access DOAJ

TYPE Research Article
PUPLISHED 5 August 2023
Doi: http://dx.doi.org/10.22428/mrvsa-2023-00121-02

MACROSCOPIC FEATURES OF ARABIAN CAMELS (DROMEDARIES) EYES

Karima Akool Al Salihi *[1], Khaleel Iman Mousa [2], Abass Omran Abass [3], Abdullah Husan Jabar [3]

[1] Department of Internal and preventive veterinary medicine/ College of Veterinary Medicine/ Al Muthanna University / Iraq. https://orcid.org/0000-0002-5698-2678
[2] Department of Anatomy/ College of Veterinary Medicine/ university of Baghdad
[3] Faculty of Medical and Health Technique / Sawa University, Iraq.

OPEN ACCESS
Corresponding Author :
Email. kama-akool18@mu.edu.iq

https://orcid.org/0000-0002-5698-2678

ARTICLE INFO
Received: 10.04.2023
Revised: 15.07. 2023
Accepted: 25.07.2023
Publish online: 05.08. 2023

*Corresponding author:
karima Akool Al Salihi: Email address: kama-akool8@mu.edu.iq

CITATION

Al Salihi Karima Akool, Khaleel Iman Mousa, Abass Omran Abass, Abdullah Husan Jabar. (2023). Macroscopic features of arabian camels (Dromedaries) eyes. MRVSA. 12 (1): 45-52. **Doi: http://dx.doi.org/10.22428/mrvsa-2023-00121-02**

COPYRIGHT

© 2023 Al Salihi Karima Akool, Khaleel Iman Mousa, Abas Omran Abass, Abdullah Husan Jabar.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY NC). The use, distribution or reproduction in other forums is allowed, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

ABSTRACT

Camel's visual system (Camel's eye) displays a high specific degree of development related to the arid environment. It has unique structures necessary to adapt to the windblown desert and sharp night vision. This study aimed to describe the macroscopical features of a clinically healthy dromedary's eye. Six pairs of camel eyes were collected from the Al-Muthanna province abattoir. Complete macroscopic anatomy and description were done, all observations were reported, and all samples were kept in 10% formalin for further histological study. The camel's eye appeared circular, fully osseous, and bulging laterally. The eyeballs were situated at an identical distance among the nuchal ridge and premaxilla. The long cilia were found on the upper eyelid with a tuft of long cilia and the third eyelid situated dorsally to the medial eye canthus. The outer fibrous membrane comprises an opaque sclera that is outspread in the front of the cornea and covered by thin, transparent conjunctive. The ciliary body was located behind the iris and near the lens. The lens appeared as a transparent, biconvex structure inside the eyeball, while the frontal cavity of the eyeball was filled with intraocular fluids. The muscles in the ciliary body revealed a very open iridocorneal angle. The retina was composed of nerve tissue that outlined the back of the eye. In conclusion, macroscopic ocular features of Arabian camels showed a high degree of development with specific structures associated with adaptation to the arid environment. The authors continue doing the second part, the histological features of the Arabian camel eye.

Keywords: Desert, Camel's eye, Retina, Cornea, Ciliary body, Lens.

http://dx.doi.org/10.22428/mrvsa-2022-00121-02

Attribution-Noncommercial (CC BY-NC)
This license lets others remix, adapt, and build upon your work non-commercially, and although their new works must also acknowledge you and be non-commercial, they don't have to license their derivative works on the same terms.