Morphological description of four *Demodex* species (*D. canis, D. injai, D. cornei* and *unidentified Demodex species*) infecting dogs in Egypt and experimental trials for transmission


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In Egypt, examination of the skin scraping samples collected from 944 dogs of different breed, sex and age revealed that, 134 dogs (14.2%) were infected with mixed population of genus *Demodex* including three species; (*D. canis, D. injai* and *D. cornei*) and unidentified *Demodex species*. Morphological description and comparison studies of these three species were provided for identification purpose. The study was based on light microscope and drawing by camera Lucida microscope. The morphological description of unidentified *Demodex species* which was collected from recurrent infected demodectic dogs showed resistance for treatment was also described. Furthermore, Trials for experimental infection with *Demodex species* among dogs and laboratory animals was done. The transmission of three species of *Demodex* from naturally infected dogs to nine pups of different age was experimentally investigated and also by direct contact revealing that only two immune suppressive pups were found susceptible for *Demodex* infection.

**Keywords**: Demodex species, Morphology and Experimental infection.