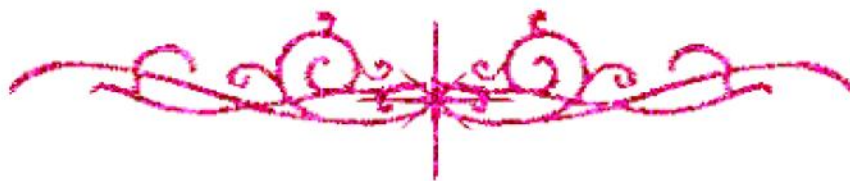


بسم الله الرحمن الرحيم





شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

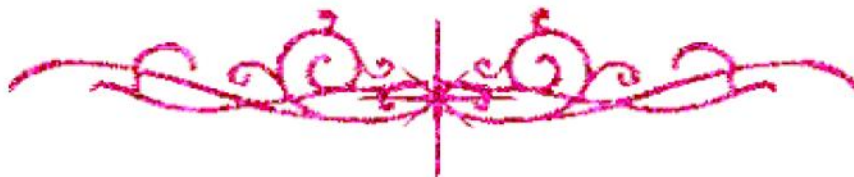
قسم

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



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار



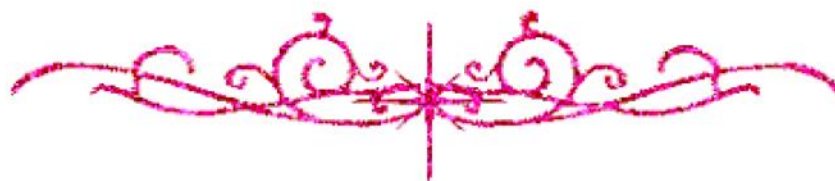


بعض الوثائق الأصلية تالفة





بالرسالة صفحات
لم ترد بالأصل





Cairo University
Faculty of Veterinary Medicine



Advanced Studies on Diagnosis and Trials for Control of *Fusarium* Infection in Cultured Nile tilapia(*Oreochromis niloticus*)

A Thesis Submitted By

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For the degree of the Ph.D.

(Aquatic Animal Medicine and Management)

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ABSTRACT

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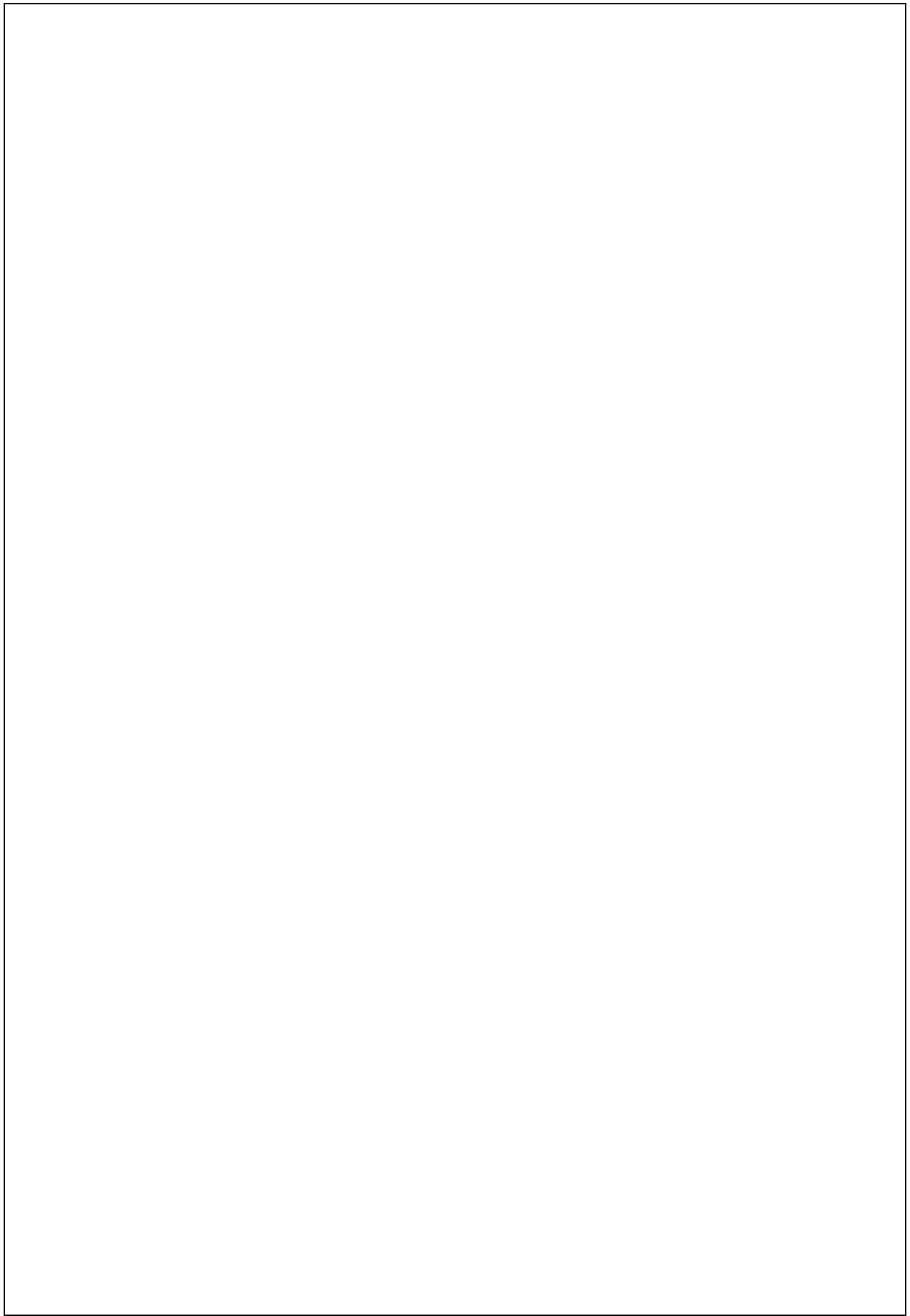
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ABSTRACT

The present study aimed to isolate and identify *fusarium* infection in naturally infected *Oreochromis niloticus*. the most common isolated *fusarium* species was *Fusarium oxysporum* , naturally infected fish showing different clinical lesions such as erosion of gills, enlargement and congestion of liver and spleen and congestion of kidney. Histopathological examination of naturally infected *Oreochromis niloticus* revealed different clinical abnormalities of gills, liver and spleen in addition to the appearance of fungal mycetoma and septated hyphae. *Fusarium oxysporum* isolated from naturally infected *Oreochromis niloticus* collected from different fish farms at different governorates in Egypt namely, El Fayum, kafr El-sheikh and Alexandria. Fish samples with a total number of 100 were collected during the period from May to October 2019. Microbial examination revealed infection with *Fusarium oxysporum* that was identified by molecular sequence analysis of the internal transcript spacer (ITS) region of their ribosomal RNA gene. The confirmed isolate of *Fusarium oxysporum*, was used in experimental infection to determine its Pathogenicity followed by a trial for treatment of clinically affected fish with Curcumin and H₂O₂. The clinical signs associated with experimental infection were exophthalmia, abnormal swimming behaviour, granuloma in different internal organs including gills, liver and spleen with enlargement of spleen and congestion of liver. Examination revealed severe pathological alteration gills, liver and spleen manifested by severe congestion of the central venous sinuses of the primary gill lamellae as well as the blood vessels of the secondary lamellae associated with lamellar edema , congestion of hepatportal blood vessels and sinusoids associated with perivascular edema and presence of variable granulomas embedded in the splenic parenchyma . Curcumin and H₂O₂ showed non significant beneficial effect as a treatment for *Fusarium oxysporum* infection in cultured *Oreochromis niloticus*.

Key words: *Fusarium oxysporum* , *Oreochromis niloticus*,Curcumin,H₂O₂.



DEDICATION

Dedicated to

My dear husband Ahmed Mahmoud

My dear father

My dear mother

My lovely children

My dear brother and sisters

Every one helps me

