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Trials of Control of Some External Parasitic Nile tilapia Diseases with Emphasis on Preparation of vaccine against *Ichthyophthirius multifiliis*

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Abstract : The objective was experimental application of new techniques in treatment trails (Medicinal plants) and trial of preparation of vaccine against *Ichthyophthirius multifiliis*. The study was carried out on 300 specimens of cultured Nile tilapia fishes (200 fingerlings and 100 adult fish) of different sizes and body weight. They were randomly collected seasonally from areas of study. In addition to 280 infested fingerlings Nile tilapia collected live from the same ponds of study and 120 healthy fish and transported to Lab. of hydrobiology department, NRC. The clinical signs of most examined fishes revealed some abnormalities on the external body surface of heavily naturally infested Tilapia fishes, represented as asphyxia, some of them aggregated on the surface and accumulated at the water inlet of the pond.

The postmortem findings of investigated fish revealed the presence of excessive mucus, white spots were observed in different parts of the body in some infested fishes. Numerous white dots in some gill filament as well as skin of infested fishes were observed. In some cultured *Oreochromis niloticus* tilapia fishes from Alsharkia district, observed small and large yellowish encysted and excysted metacercariae in branchial cavity and on skin as yellow to green pea or pomegranate seed like and arranged in group like structure (*Clinostomum cutaneum*). The different doses of medicinal plants (*Onion* and *Neem* extract) for treatment of *Ichthyophthirius multifiliis & Clinostomum cutaneum* parasites were applied. It was found that, the previous extract with different doses were not effective against *Ichthyophthirius multifiliis* parasite. Also, *Onion* and *Neem* extract not effect on stages of fish infested with *Clinostomum cutaneum*. The result of this study proved the importance of development of protecting vaccine against *Ichthyophthiriu smultifiliis* due to lack of effective nontraditional treatments.

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