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شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم



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التوثيق الالكتروني والميكروفيلم

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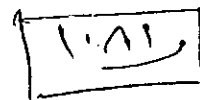
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ECOLOGICAL — TOXICOLOGICAL STUDY
ON HARMFUL AND USEFUL BIRDS
IN EGYPTIAN CROPS

THESIS

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INTRODUCTION

INTRODUCTION

Birds damage thousands tons of cereal grains worth million of pounds annually in Africa. Birds depredation in agricultural crops are not new but they are increasingly in conflict with man's interests. Losses of East Africa alone exceed U.S. \$ 15 M annually (Elliot and Beasley, 1979; Kitonyo and Allan, 1979; Bruggers, 1980).

In a country like Egypt, with a limited cultivated area, food insufficiency is the major problem that faces the overgrowing human population. The Egyptian Government started to solve this problem by the reclamation of desert lands

Recently in Egypt, the house sparrow, Passer domesticus niloticus is considered the most economic vertebrate pest in the agricultural land, particularly in the newly reclaimed areas.

El-Deeb (1991) recorded that the birds damage to repinning stage of wheat, horse beans, barley, sunflower and sorghum reached to 20.68, 2.76, 1.50, 21.03 and 35.60%, respectively and the highest birds damage was occurred at the newly reclaimed areas. Other bird species damage field crops, vegetables and fruits during the different stages of plant, such as crested lark, Galereda cristata and starling, Sturnus vulgaris.

The dangerous of these harmful bird species is due to their gregarious habits, large numbers and distribution pattern (Bruggers, 1980).

The successful protection of a crop from excessive loss to bird in any particular situation will depend, to a large extent, on the quality of the information available on that situation. Regular monitoring of such events as weather, cropping practice, natural vegetation cycles, noxious bird populations, and crop damage levels will usually enable bird damage control specialist to choose the method of protection best suited to the situation with a minimum of trial and error (Michal and Raymond, 1987).

To alleviate this problem, the efficacy of bird control techniques should be tested as a part of integrated crop protection (ICP) research programmes and conducted under different agroecosystems (Mark et al., 1989).

In this context, priority should be given to the methods which have the least impact on ecosystems, stability and natural balance (Paul et al., 1981).

The selection of a pesticide in concrete conditions depends on the specific composition of the pests,