INTRODUCTION

The challenge of plant and food stuff pests, especially through the recent years, against mankind and his means of life is worthy to pick much attention of the research workers to face vigorously such factors of damage. As a matter of fact, notorious phytophagous mites, insects and other injurious microarthropods and nematodes have increased in soil, on economic plants including field crops and orchards and in stored food products causing diverse distructive effects to food supply of human all over the world.

In the scope of pest control in Egypt, the overdependent usage of the conventional pesticides in pest control programmes is still the unilateral method, which reflect markedly the complete overlook of their hazardous effects on mankind and his environment. As the instantaneous killing of pest in the up-to-date concept had not been the ideal one, since the increasingly development resistance in arthropod pests against the conventional pesticides, cannot be overcome, it fall necessary to search for other kind of control alternatives or even to blend in integrational control programmes, attaining pest population management. In such concept, the durable, economically managed pest populations, must be manipulated for the safe of environment and the approach

of constructing , naturally balanced Ecosystem, in which populations of natural enemies can be raised up and prey - predator interactions take place.

Furthermore, the environmental pollution due to the extensive usage of pesticides and their inevitable injurious effects to all living benificial creatures, the occasional phytotoxicity of some chemicals to economic plants, the toxic effects of accumulated chemical compound residues in food products and the financial costs of pesticides, would not be obscured. Thus, the conventional chemical control method must be reappraised and the search for other more satisfactory control practices for the sake of mankind in the scope of preventing Agro-Ecosyatem from damage, is nowadays forcely striking. Prolyfic results of preliminary forgoing biological and ecological studies on mite predators indicate the possibility of utilizing them as participators in substantial biological and/or integrated control programmes.

Predaceous mites proved to be efficient agents in controlling phytophagous mites, microarthropod and nematode populations and having a wide range of spread on different types of plants, in litter, rotting logs, debris and ground surface. Other species were noticed to inhabit bird nests and stored food products, under various environmental conditions.

Moreover, feeding habit studies of predaceous mites indicate that they feed on a wide range of food resources. Some feeding on spider mites, others on rust mites and yet on saprophagous species. Several species appeared to be highly specialized in feeding and developing on parasitic nematodes. Other ones were recorded to feed and survive on scale insects and white fly crawlers. Although, predators exhibit a morphological adaptation of the mouth parts and appendages, some, which feed on mite eggs and other microarthropods have tiny edentate chelicerae while the others owe large multidentate ones which enable them of attacking large preys. Also, massive chelicerae of some species could be an adaptation to attack large and hard bodied insects.

Not only species having chelate chelicerae are able to attack preys but also those having stylet-like ones, showed surprisingly, an adaptation of pedipalps, forming a thumb-claw complex, which enable them to be highly, efficient predators of mites and microarthropods.

The purpose of the present study is to explore and survey the existance of predaceous species within the Egyptian fauna, as a preliminary step towards utilizing them in biological control programmes. Also, the great injuries of pesticides, in damaging Ecosystem and causing environmental pollution must be put in consideration.