1. ABSTRACT

Arthropods all over the world are very important because they act as the main reservoir of pests and pests are the main cause of destruction. Particularly, in Egypt, arthropods are the most abundant arthropods and particularly are the most characteristic cultural heritages in the world; therefore we must protect and guard against them. As a result of this, a main risk is associated with the conservation of the museum collections from pests taking in consideration the effect of pests on the museum and the environment. IPM (Integrated Pest Management) is a project applied in different museums that aims to protect archaeological collections safe from the microorganisms and the pest damage. The goal of this step is to compare between these different areas and to make a survey on Laboratories area and storages area. We chose the percentage of insect pests’ existence. In order to obtain a complete blocking of insects, collecting and analyzing data was important after application of the action plan to make a survey on Laboratories area and storages area. This paper focuses on the laboratories area (B) and the storages area (C) as they contain a large number of artifacts. We made a comparison between the start and the end of the project after implementation of the action plan.

2. INTRODUCTION

The Grand Egyptian Museum – Conservation Center has a large amount of arthropods which are very dangerous and guard against any risk. One of the important risks is the biological damage which is caused by pests that include Insect pests and Microorganisms (bacteria – fungi). Specialty insects pests – GEM – CC is located in a desert area which can increase the percentage of pest insects existence; therefore there is a group in GEM – CC is responsible for insect pests control IPM group in (Anoxia Lab or fumigation using inert gaseous as N2 gas).

3. METHODS and MATERIALS

3.1. MATERIALS

Stereo microscope with max. Magnification 94 x, Sticky traps, Photographic, Thick brushes, Aluminum sheets, Aluminum taps, Optron traps and Sticky mats.

3.2. Methods

The action plan began with dividing conservation center into three areas (ASBC): in figure (3). We used sticky traps which is the least preferred to be used in museums. We distribute and collect these traps monthly according to the drawer where each sticky traps is placed. The percentage of pest insects is determined by collecting traps monthly, identification, classification and making a survey for the insects that were found inside traps. Not only adult insects are found but also other development stages like larvae, pupae and emerging adults. In order to obtain a complete blocking of insects, collecting and analyzing data was important after application of the action plan to make a survey on Laboratories area and storages area. We noticed that the CC has a large number of insects found in traps, so they made a well planned program and take in consideration that it should be relevant to the needs of the museum and the environment. In the total number of all insects and also in the total number of hazard insects from 2011 to 2012 especially in May and June 2012 and also in the total number of hazard insects from 2011 to 2012 applies the IPM project in GEM-CC with the help of the Hygiene officials to increase the awareness against the pests and remove all plants immediately from corridors. Traps beside doors have the same problem. This may be because of keeping these doors open for a long time. We can use advanced methods. Being updated with new information, we can use advanced methods. Being updated with new information, we can use advanced methods.

4. RESULTS

After application of the action plan there was a noticeable decrease in the total number of all insects and also in the total number of hazard insects from 2011 to 2012 and also in the total number of hazard insects from 2011 to 2012 applying the IPM project in GEM-CC to laboratories area and storages area.

5. CONCLUSION

After application of the action plan there was a noticeable decrease in the total number of all insects and also in the total number of hazard insects from 2011 to 2012 applying the IPM project in GEM-CC to laboratories area and storages area.

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