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## SURVEY AND MONITORING OF INSECTS FAUNA OF JAMSHORO WITH THE HELP OF A LIGHT TRAP

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## ABSTRACT

During the present survey few number of insects have been describe from the Jamshoro. Mostly the Coleoptera was reported in the first week of May followed by the Orthoptera which were present is good number in second week of May. Similarly, Lepidoptera was seen in whole month of June and Dictyoptera was dominant in the month of July. However, majority of Odonata was present in the month of august. In this paper overall comparison was given.

#### 1. INTRODUCTION

Most of the insects depict typical behavior patterns. Some are diurnal i.e. active at day time. Other are nocturnal which are active at night. There are quite a few insects that photographic (They are attracted towards light) and great majority of them are pests. Light traps can be used effectively to check and monitor the activities of photographic insects. Infact, light traps are still being used for the control of lepidopteron insects. Light traps can be used in home garden situation and where power source is available on form they can be used in the field as well. Besides, where this facility is not available, petromax lamps can be used.

## 2. MATERIALS AND METHODS

Four light traps were installed in Marvi Hostel at various locations. They consisted of 200w ordinary bulbs. Bulbs were placed on plat form and switched on at sun-set each day till 01:00 p.m. All the insects that were extracted towards light source were collected with a sweep net and transferred to a killing jar and brought to laboratory for identification.

Corresponding Author: <a href="mailto:haseenasaand@gmail.com">haseenasaand@gmail.com</a> Copyright 2017 University of Sindh Journal of Animal Sciences The ones that did not fly away were handpicked and placed in jars and they too were transferred to cab. Once brought to the laboratory and insects were placed in petric dishes and sorted out into various groups, with the help of a magnifying hand lense.

#### 3. RESULTS AND DISCUSSION

Results of this study are presented in table 1. It indicates that all kinds of insects were represented in samples collected. Closer look at the data shows that Lepidoptera, Coleoptera and orthoptera were the main groups represented in the collection. This was followed by Dictyoptera. Odonata and Hymenoptera. Some of these group included pests as well. This study indicates that adult moths (Pests) are attracted towards light and if light traps are installed in the agricultural fields most of the adults would be attracted to the source of light and thus large numbers of adults could be destroyed. Once the adults are destroyed, this means destruction of females and hence their future progency. This is a safe method of managing pests.

This does not cause any damage to our environment as chemical control causes damage to our crops, environment and small farm animals (Carsen, 1962), It is important that our pest management practices ust conform to safety concerns (Elausen, 1956). Moreover, we must make concerted efforts to reduce use of insecticides (Adkissan, 1971). One alternative to this problem is to use resistant varieties to pests (Beck 1955), weather and entomophagous species also play a vital role in pest management (De Back, 1958).

## 4. CONCLUSION

Overall, these results show that there is huge diversity of insect present in Jamshoro it should be explore and extensive survey are recommended.

## 5. CONFLICT OF INTEREST

All authors have declared that there is no conflict of interest regarding publication of this article.

#### 6. ACKNOWLEDGEMENT

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Table-1 Show the distribution of various insect in different Months of the year

| WEEKLY STUDY  | ORDER       | NOS:  | SPECIES   |
|---|-------------|---|---|
| 1 <sup>st</sup> Week of May                                 | Coleoptera  | 4 Beetles of Fire Flies.                                  | Beetles. Fire Flies.                                      |
| 2 <sup>nd</sup> Week of May                                 | Orthoptera  | 5 Gross Hoppers, 2 locust, 3 cricket                      | Gross hoppers, locust, cricket.                           |
| During the whole month of June.                             | Lepidoptera | 4 Butter Flies, 4 moths.                                  | Butter Flies, Moths,                                      |
| From 15 <sup>th</sup> June to 1 <sup>st</sup> Week of July. | Dictyoptera | 6 Cockroaches   | Cockroaches.  |
| During the month Odonata August.                            | Odonata     | <ul><li>2 Dragon Flies.</li><li>2 Damsel Flies.</li></ul> | <ul><li>2 Dragon Flies.</li><li>2 Damsel Flies.</li></ul> |