



Distribution and composition of butterfly species of the Soya bean plant campus, Ujjain Madhya Pradesh, India

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Abstract

Distribution and composition of butterfly species of the soya bean plant campus Ujjain was studied. A total of 146 butterflies with 19 species belonging to five families recorded from Soya bean plant campus Ujjain, during the period from 2014 and 2015. Nymphalidae was the most abundant family with 8 species followed by Lycaenidae with 4 species followed by Pieridae and Papilionidae have 3 species each followed by Hesperidae with only 1 species. *Eurema hecabe* is very common species belong to family Pieridae followed by *Catopsilia pyranthe* belong to family Pieridae than *Junonia lemonias* belong to family Nymphalidae.

Keywords: distribution, butterfly, species.

Introduction

Butterflies are found all over the world and found in all types of environments hot and cold, dry and moist, at sea level to the high in the mountains. Most of butterfly species, however, are found in tropical areas, especially tropical rainforests. Many butterflies migrate to avoid adverse environmental conditions; Butterfly migration is not well understood. Butterflies are very interesting subject of insects for the study. Butterflies are taxonomically and ecologically well known argued by Mihoci et al. in 2011. They are pollinators which assure reproduction and survival of plants that are used by many other living organisms like as source of food, reproductive areas and medicine, their presence reflects the absence of other organisms and changes in physical and chemical

environment argued by Mohagan and Treadaway in 2010. Butterflies are most popular and famous group and these occupy vital position in the ecosystems and their occurrence and diversity are considered as good indicators of the health of any given terrestrial habitat by Aluri and Rao in 2002.

Materials and Methods

The present study has been carried out for a period of two year from 2014 and 2015. Photographs of butterflies were done with the help of digital camera (Nikon 7000). The recorded butterflies are identifies with the help of photographs by using standard books of Wynter-Blyth, 1957, Kunte (2000) and Kehimkar (2008).

Results and Discussion

In Soyabean plant campus 146 butterfly recorded with 19 species, these species are *Junonia lemonias* (lemon pansy) with 12 individuals, *Junonia hierta* (yellow pansy) with 4 individuals, *Junonia almana* (peacock pansy) with 2 individuals, *Danaus chrysippus* (plain tiger) with 8 individuals, *Euploea core* (common crow) with 3 individuals, *Melanitis leda* (common evening brown) with 1 individuals, *Ariadne merione* (common castor) with 4 individuals, *Phalanthia phalanthia* (common leopard) with 1 individuals, *Eurema hecabe* (common grass yellow) with 63 individuals, *Catopsilia pyranthe* (mottled emigrant) with 22 individuals, *Ixias marriane* (white orange tip) with 2 individuals, *Papilio demoleus* (lime butterfly) with 8 individuals, *Graphium doson* (common jay) with 2 individuals, *Graphium agamemnon* (tailed jay) with 3 individuals,

Chilades parrhassius (small cupid) with 1 individuals, *Tarucus nara* (striped pierrot) with 6 individuals, *Zizina otis* (lesser grass blue) with 2 individuals, *Arthropala bazalus* (powdered oakblue) with 1 individuals and *Hasora chromus* (common banded awl) with 1 individuals. The most abundant family is Nymphalidae with 8 species these are *Junonia lemonias*, *Junonia hierta*, *Junonia almana*, *Danaus chrysippus*, *Euploea core*, *Melanitis leda*, *Ariadne merione*, *Phalanthia phalanthia* than family-Lycaenidae with 4 species these *Chilades parrhassius*, *Tarucus nara*, *Zizina otis* and *arthopala bazalus* than family- Pieridae with 3 species these are *Eurema hecabe*, *Catopsilia pyranthe*, *Ixias marriane* and family - Papilionidae with 3 species these are *Papilio demoleus*, *Graphium doson*, *graphium agamemnon* than family-Hesperiidae with 1 species (*Hasora chromus*).

Table 1. Butterfly species recorded from Soyabean plant campus Ujjain.

S.No.	Common name	Scientific name	No. of individuals
Family- Nymphalidae			
1.	Lemon pansy	<i>Junonia lemonias</i>	12
2.	Yellow pansy	<i>Junonia hierta</i>	4
3.	Peacock pansy	<i>Junonia almana</i>	2
4.	Plain tiger	<i>Danaus chrysippus</i>	8
5.	Common crow	<i>Euploea core</i>	3
6.	Common evening brown	<i>Melanitis leda</i>	1
7.	Common castor	<i>Ariadne merione</i>	4
8.	Common leopard	<i>Phalanthia phalanthia</i>	1
Family- Pieridae			
9.	Common grass yellow	<i>Eurema hecabe</i>	63
10.	Mottled emigrant	<i>Catopsilia pyranthe</i>	22
11.	White orange tip	<i>Ixias marriane</i>	2
Family- Papilionidae			
12.	Lime butterfly	<i>Papilio demoleus</i>	8
13.	Common jay	<i>Graphium doson</i>	2
14.	Tailed jay	<i>Graphium agamemnon</i>	3
Family- Lycaenidae			
15.	Small cupid	<i>Chilades parrhassius</i>	1
16.	Striped pierrot	<i>Tarucus nara</i>	6
17.	Lesser grass blue	<i>Zizina otis</i>	2
18.	Powdered oakblue	<i>Arthropala bazalus</i>	1
Family- Hesperiidae			
19.	Common banded awl	<i>Hasora chromus</i>	1

Figure 1. Family wise representation

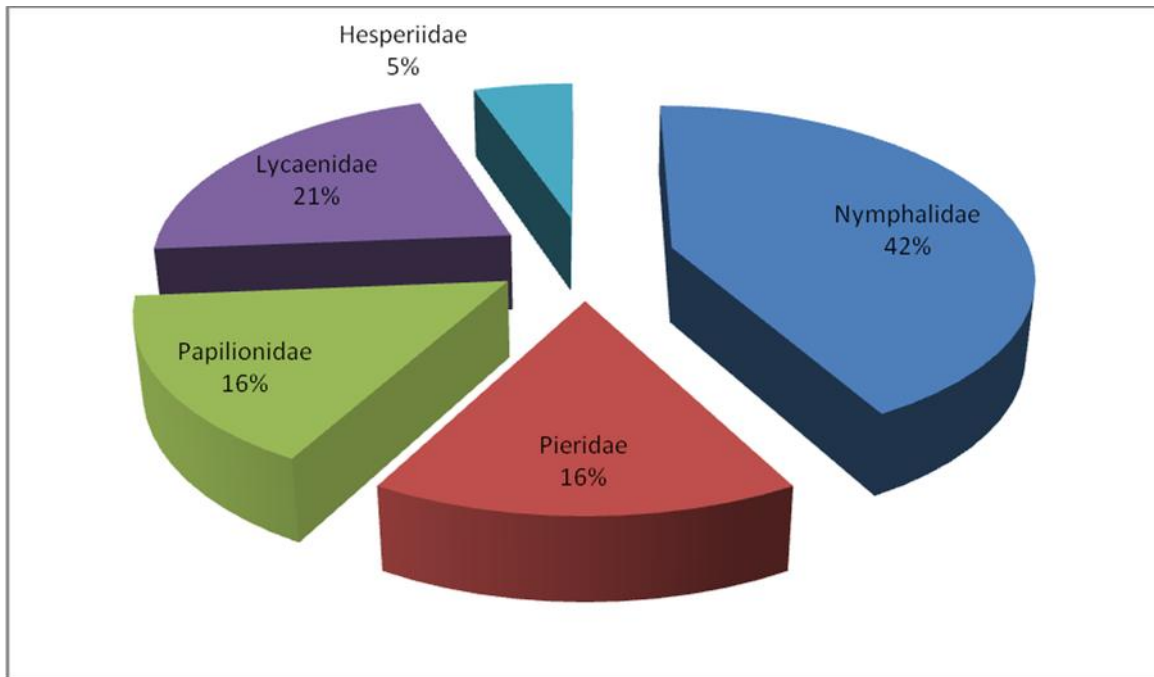


Plate 1. Photographs of butterfly species recorded from Soya bean plant campus Ujjain.



Graphium agamemnon
(Tailed jay)



Ixias marianne
(White orange tip)



Arthropala bazalus
(Powdered oakblue)



Phalantha phalantha
(Common leopard)



Danaus chrysippus
(Plain tiger)



Graphium doson
(Common jay)



Zizina otis
(Lesser grass blue)

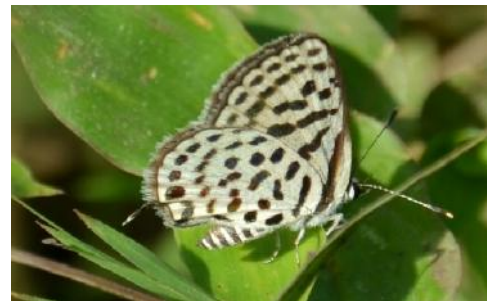


Euploea core
(Common crow)

Plate 2. Photographs of butterfly species recorded from Soya bean plant campus Ujjain.



Junonia almana
(Peacock pansy)



Tarucus nara
(Striped pierrot)



Junonia lemonias
(Lemon pansy)



Ariadne merione
(Common castor)



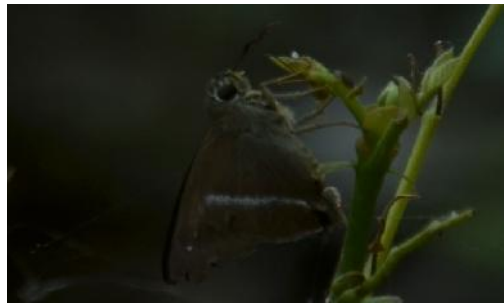
Catopsilia pyranthe
(Mottled emigrant)



Junonia hierta
(Yellow pansy)



Eurema hecabe
(Common grass yellow)



Hasora chromus
(Common banded awl)

Plate 3. Photographs of butterfly species recorded from Soya bean plant campus Ujjain.



Papilio demoleus
(Lime butterfly)



Chilades parrhassius
(Small cupid)




Melanitis leda
(Common evening brown)

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