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STUDIES ON THE DIVERSITY AND ABUNDANCE OF BUTTERFLY FAUNA IN AND AROUND KASTURIBA GANDHI BALIKA VIDHYALAYA(KGBV) CAMPUS KOTHAGUDA ,MAHABUBABAD DISTRICT,TELANGANA,INDIA

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Abstract
Butterfly fauna is one of the most attractive and colorful insect in the world. The present study was carried out to understand the butterfly diversity in Kasturiba Gandhi Balikala Vidhyalaya (KGBV) School Complex Polaram Village, Kothaguda Mondal, Mahabubabad District Telangana State India from June 2024 to November 2024.A total of 23 species of butterflies belonging to 14 genera and four families were recorded from the present study. The observed butterflies family Pieridae was the most dominant among four families with(10)species(7) genera followed by Nymphalidae(10) species (4)genera Papilionidae(2) species(2) genera and Lycaenidae(1) species (1) genera. Among 23 species 2 species were found to be protected under the India Wildlife (Protection) Act,(1972).

KEY WORDS: Diversity, Fauna, Kasturiba Gandhi Balikala Vidyalaya, Protectection.

INTRODUCTION

Butterflies are more din cores groups of organisms with cosmopolitan distribution in all terrestrial ecosystem except in polar region .Butterflies are represent over 50% of the world biodiversity (Groombridge 1992).Butterflies are well document easily recognizable The and popular with the general public(De Heer et al,2005; Thamos 2005).It is graceful insect which provide economic and ecological benefits to the human society(Bubesh et al).they are well studied group throughout the world(Ghazoul.2002).Butterflies are most studied group of (Ramesh.2010) and it is strictly seasonal preferring only particular habitats(Kunte k1997).Most predominant species on the planet earth are insect nearly they account for half earths diversity (May,1992 and Kunte (2000)). Butterflies have most ecological significance among all the insects. Butterflies play an immense role in pollination, which helps to increase heterozygosity in flora or brings variations through kinds of pollen dispersion from one place to another place (Mahendra et al., 2013).

MATERIALS AND METHODS

The current study focuses on the Butterfly riches in KGBV complex in Polaram village Kothaguda Mandal Mahabubabad district, Telangana, India. It is situated 45 Km away from district head quarters.Geographycally it has an area of 3-4 acres of land mass and Latitudes 17.886694°E and Longitude 80.096282°N .
During the survey was carried out June 2024 to November 2024 o the suitable Accor by the butterfly species

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diversity in the area. the butterfly species are were found and recorded in the morning 8:00 to 12:00 am and evening 4:00 to 6:00 with help of capturing mobile camera OOPO A17 .the collected butterflies using nylon net or insect net and hand picking then after brought to the laboratory for better identification of available literature(Evans 1932,;Talbot,1939;Moore,1905;Wynter-Blyth,1957;Kehimekar,2008;Heribal 1992).

RESULTS AND DISCUSSION

A Total of species of butterflies belonging to 14 genera and four families were recorded from the study area (Table-1). Piriedae family was dominated among the with 10(43%) species belonging to 7(50%) genera, followed by Nymphalidae family comprising of 10(44%) species from 4(29%)genera ,Papilionidae with composition of 2(9%) species from 1(7%) genera (fig1and fig2).Piriedae and Nymphalidae families were the most frequently sighted group during this survey. Status of all species are categorized depending on the direct sightings during the study area which showed 15 species out 23 species(65%) were common ,3(13%)species were un common and 5species (22%) were rare .In this survey of two butterfly species Common Indian crow(*Euplioea core(cramer,1780) and* Yellow orange tip(*Ixias pyrene)* are special concern and listed in scheduled IV wildlife(Protection) Act 1972.

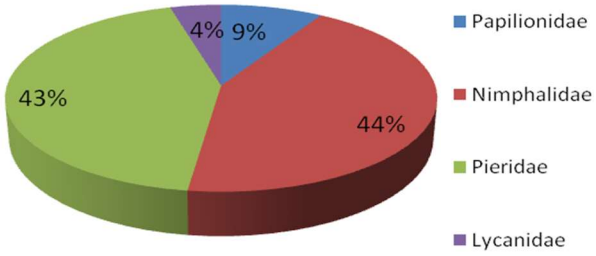

Figure-1. Family-wise composition of Butterfly species at KGBV, Polaram

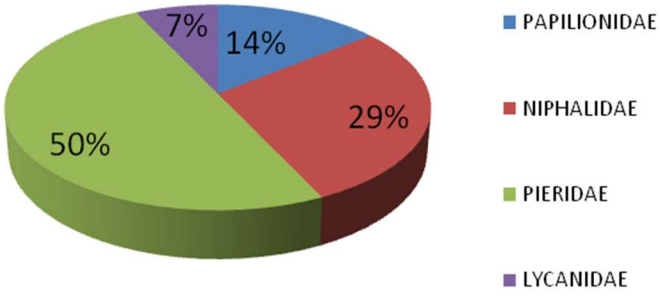

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Figure-2. Genera-Wise composition of Butterfly species at KGBV Campus Polaram, Kothaguda

Table1: **Checklist of the butterfly recorded in the study area**

Si.No	Common Name	Scientific Name	Status	WPA 1972 Status
FAMILY PAPILIONIDAE(2)				
1	Common lime	*Papilio demoleus(Linnaeus,1758)*	C	
2	Spot swardtail	*Graphiumnomius(Esper,1793*)	C	
FAMILY NIMPHALIDAE(10)				
3	Blue Tiger	*Tirumala limniace(Linnaeus,1775)*	C	
4	Plain Tiger	*Danaus chrysippus((Linnaeus,1758)*	C	
5	Common Tiger	*Danaus geutia(Cramer,1779)*	C	
6	Common Indian crow	*Euplioea core(cramer,1780)*	R	Sch IV
7	Lemon pansy	*Junonia lemonias(Linnaeus,1758)*	UC	
8	Blue pansy	*Junonia orithya*	R	
9	Pecock pansy	*Junonia almona*	R	
10	Yellow pansy	Junonia hierta	R	
11	Tawny Coster	*Acraea terpscore(Linnaeus,1758)*	C	
12	Common leopard	*Phalanta phalantha(Dury,1773)*	UC	
FAMILY PIERIDAE(10)				
13	Common Emmigrant	*Catopsilia pomana(Fabricius,1775)*	C	
14	Molted Emmigrant	*Catopsilia pyranthe(Latreille,1758)*	C	
15	Cloudless sulpher	*Phoebis sennae*	C	
16	*Spotless grass yellow*	*Eurema laeta(Bioduval)*	C	
17	Common grassyellow	*Eurema hecabe Linnaeus,1758*	C	
18	Pioneer(Copperwhite)	*Anaphaeis aurota*,Leptosia nina	C	
19	Cabbage white butterfly	*Pieris rape(linnaeus,1758)*	C	
20	Large white butterfly wales	*Pieris brassicae*	C	
21	Common Wanderer	*Pareronia valeria (Cramer)*	R	
22	Yellow orange tip	*Ixias pyrene*	UC	Sch IV
FAMILY LYCANEDAE(1)				
23	Tailess line blue	*Prosotas dubiosa*	C	

NOTE:**C**:- Common, **UC**:-Uncommon,**R**:-Rare

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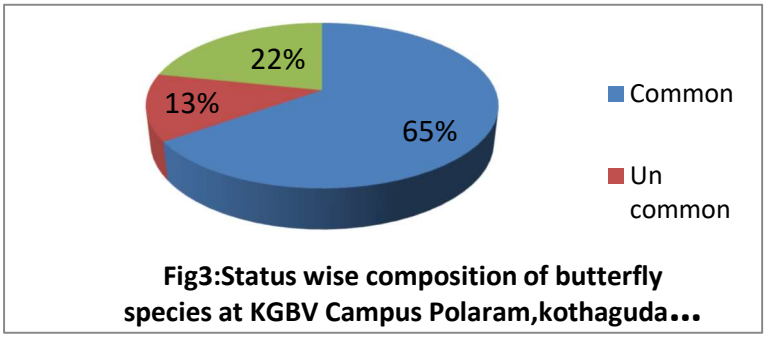

Fig3:Status wise composition of butterfly species at KGBV Campus Polaram,kothaguda...

Figure-3. Status-wise composition of butterfly species at KGBV Campus Polaram, Kothaguda

Figure-4 :Checklist of the species of butterfly recorded in the study area

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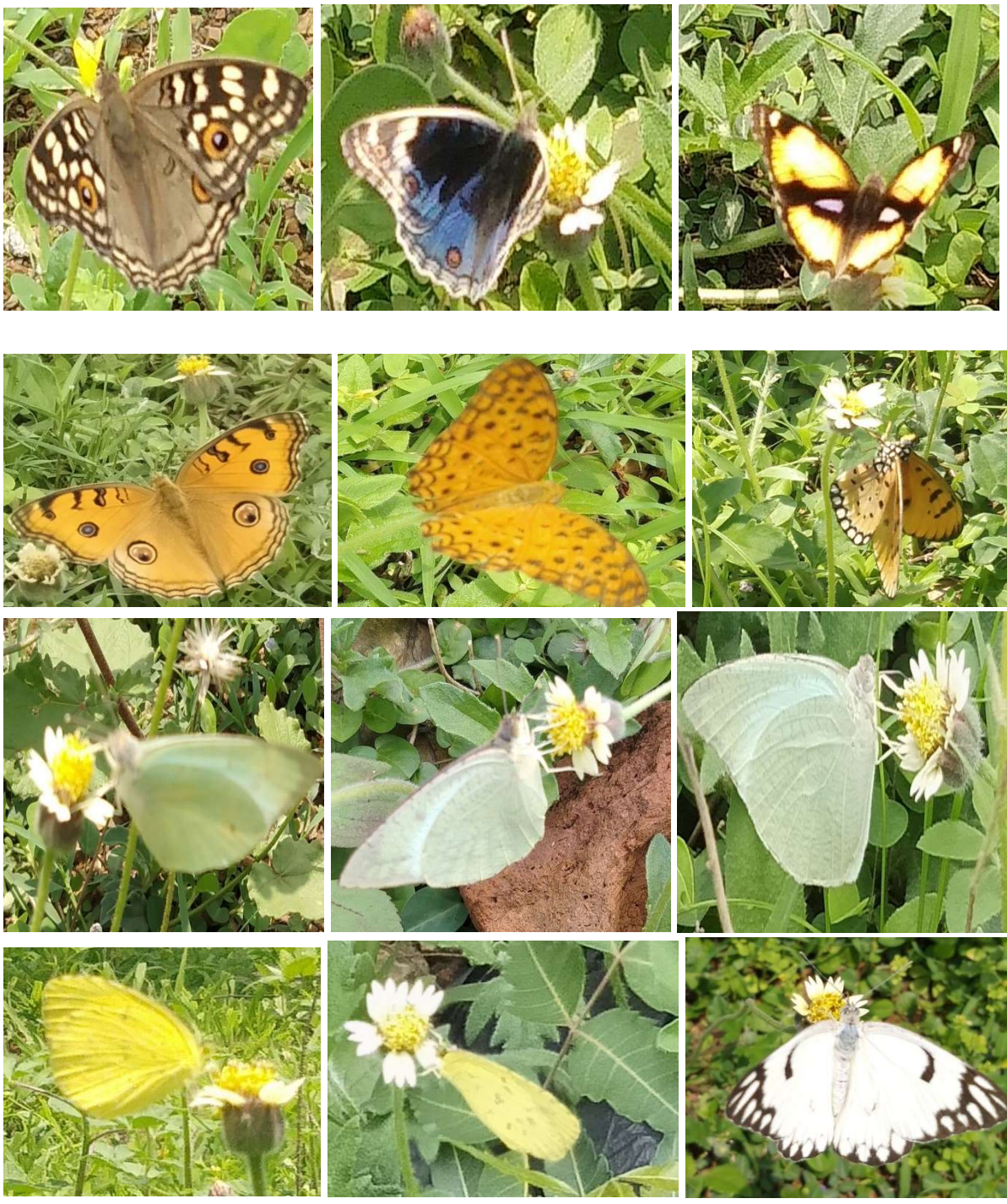

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CONCLUSION

Based on the result obtained from the study on butterfly fauna Diversity in the study area Piriedae family was found maximum in number and percentage of the species of butterfly among all the families. Common lime butterfly(*Papilio demoleus(Linnaeus,1758)* ,Common grassyellow(*Eurema hecabe Linnaeus,1758)*and Common Emmigrant(*Catopsilia pomana(Fabricius,1775)*were found in the Kasturiba Gandhi Balikala Vidhyalaya campus. It is concluded that the study area high rich in butterfly species diversity and further research could be conducted to obtain details and documentation on butterfly fauna diversity for the conservation and butterfly park.

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