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# Preliminary Survey of Butterflies in Dapoli Taluka of Ratnagiri District,Maharashtra

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## ABSTRACT

Insects play a vital role in the maintenance of essential life support systems in natural habitat is well known. Among all insects butterflies are ecologically important; the butterflies feed on the nector and are important as pollinators of flowering plants. The larval stages of butterflies feed on the leaves are the primary herbivores in the ecosystem and are important in the transfer of the radiant energy which is fixed by plants and making it available to the other organisms. The present paper incorporates 60 species and sub species distributed over 5 families of butterflies from Dapoli Taluka of Ratnagiri District. Family Nymphalidae represented 20 species followed by families Lycaenidae, Pieridae, Papiionidae and Satyridae with 18, 08, 07 and 07 species respectively

**Keywords:** survey Butterflies Dapoli Maharashtra.

## I. INTRODUCTION

The Lepidoptera, butterflies (Rhopalocera) and moths (Heterocera) are a diverse and abundant insect groups in many ecosystems, as herbivores, pollinators and prey (Janzen, 1987; Barlow and Woiwood, 1989).

In India entire Western Ghats is recognized as one of the mega biodiversity centre and 800,000 numbers of insect species are reported from India (Ray A. and Ray K., 2006). There are about 17,280 species of butterflies in the world, out of which, 1641species belonging to 394 genera have been reported from the Indian subcontinent (Varshney, 2006).

## II. MATERIALS AND METHODS

The unidentified butterflies were collected with the help of Swip-net method and then released in environment after taken the photographs. Some representative of butterflies were killed in insect killing bottle, brought to the laboratory in the Department of Zoology, Dr. Babasaheb Ambedkar College, Mahad. They were preserved with dry preservation method. The identification was done with the help of appropriate Literature (Gay, 1992; Gunathigalraj, 1998; Lefroy, 1909; Marshall, 1957; Meena Haribal, 1992, Wynter-Blyth, 1957)

**Table 1. List of Butterfly Species collected during surveys from Dapoli Taluka, Ratnagiri.**

| Family | Species |
|---|---|
| **A. Papilionidae** | |
| | 1. Graphium sarpedon |
| | 2. Graphium agammemnon |
| | 3. Papilio demoleus |
| | 4. Papilio polymnestor |
| | 5. Papilio polytes polytes |
| | 6. Princeps helenus helenus |
| | 7. Pachliopta aristolochiae |
| **B. Pieridae** | |
| | 1. Belenois aurota aurota |
| | 2. Cepora nerissa phryne |
| | 3. Delias eucharis |
| | 4. Leptosia nina nina |
| | 5. Ixias marianne |
| | 6. Hebomoia glaucippe glaucippe |
| | 7. Pareronia valeria hippia |
| | 8. Catopsilia pomona |
| **C. Satyridae** | |
| | 1. Melanitis leda ismene |
| | 2. Melanitis phedima |
| | 3. Elymnias hypermnestra undularis |
| | 4. Lethe rohria |
| | 5. Lethe europa europa |
| | 6. Ypthima huebneri |
| | 7. Ypthima baldus satpura |
| **D. Nymphalidae** | |
| | 1. Ariadne merione |
| | 2. Phalanta sp. |
| | 3. Cynthia cardui |
| | 4. Precis iphita iphita |
| | 5. Junonia almana almana |
| | 6. Jononia hierta hierta |
| | 7. Junonia orithya |
| | 8. Junonia lemonias lemonias |
| | 9. Hypolimnas bolina |
| | 10. Neptis hylas |
| | 11. Neptis jumbah |
| | 12. Pantoporia hordonia hordonia |
| | 13. Athyma ranga ranga |
| | 14. Athyma perius |
| | 15. Euthalia aconthea |
| | 16. Euthalia lubentina |
| | 17. Polyura athamas |
| | 18. Charaxes solon |
| | 19. Junonia atlites atlites |
| | 20. Kallima horsfieldi |
| **E. Lycaenidae** | |
| | 1. Curetis acuta/thetis |
| | 2. Caleta decidia/Caleta caleta |
| | 3. Jamides bochus bochus |
| | 4. Jamides celeno aelianus |
| | 5. Jamides alecto |
| | 6. Catochrysops strabo strabo |
| | 7. Leptotes plinius |
| | 8. Tarucus nara |
| | 9. Tarucus ananda |
| | 10. Zizeeria knysna karsandra |
| | 11. Zizinia otis sangra |
| | 12. Pseudozizeeria maha |
| | 13. Pithecops corvus |
| | 14. Cilastrina lavendularis puspa |
| | 15. Acetolepis puspa |
| | 16. Chitades lalus laius |
| | 17. Freyeria trochilus putli |
| | 18. Amblypodia anita |

## III. RESULTS AND DISCUSSION

The present paper incorporates 60 species and sub species distributed over 5 families of butterflies from Dapoli Taluka of Ratnagiri District. Family Nymphalidae represented 20 species followed by

families Lycaenidae, Pieridae, Papiionidae and Satyridae with 18, 08, 07 and 07 species respectively. In future concentrated efforts will be made to enlist maximum number of butterfly species so as to achieve total biodiversity of butterflies in Mahad Taluka of Raigad District.

Basistha et al., (1999) reported 56 species of butterflies from Orang Wildlife Sanctuary, Assam. Ali and Basistha (2000) reported 79 species of butterflies from Assam State Zoo-Cum-Botanical garden. Sonia and Pallot (2003) recorded 43 species of butterflies from paddy field ecosystem of Palakkad District, Kerala. Whereas in the present study in all 60 species of butterflies were reported. The present study revealed presence of diversity of host plants in the region under study. In future extensive survey will be carried out so as to study holistic profile of butterfly diversity, their host range and role in ecosystem.

## IV. CONCLUSION

During this survey, we are reported 60 species and sub species distributed over 5 families of butterflies from Dapoli Taluka of Ratnagiri District. Family Nymphalidae represented 20 species followed by families Lycaenidae, Pieridae, Papiionidae and Satyridae with 18, 08, 07 and 07 species respectively.

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