



A scientific approach has been made to document the sthalavrikshas and its associated butterflies occur in the temples of Tamil Nadu. During the study 1165 temples were surveyed in the state and 112 plant species are under worship.

### Materials and Methods

Capture of butterflies is restricted in temple premises. Hence VES, (Visual Encounter Survey) was conducted during the survey. Photos were taken for unidentified species and were later identified using the descriptive catalogue Sathiyamurthy (1994) and field guides Gunathilakaraj *et al.*, (1998) and Kunte, (2000). The study was conducted during 2002-2006, in about 1165 temples located in various parts of Tamil Nadu and the adjoining Puducherry state. The GPS coordinates of the exact Latitude, Longitude and Altitude of the temples were also recorded.

**Table-1:** Butterflies recorded in temples

S No	Common Name	Scientific Name	WPA 1972	Endemism
	I. PAPILIONIDAE			
1	Common Rose	<i>Pachliopta aristolochiae</i>		
2	Common Mime	<i>Chilasa clytia</i>	Sch. I	
3	Common Mormon	<i>Papilio polytes romulus</i>		
4	Crimson Rose	<i>Pachliopta hector</i>	Sch. I	SI,SL
5	Common banded Peacock	<i>Papilio buddha</i>		
6	Lime butterfly	<i>Papilio cemeleus</i>		
7	Tailed Jay	<i>Graphium agamemnon menibes</i>		
8	Common blue bottle	<i>Graphium sarpedon</i>		
9	Blue Mormon	<i>Papilio polymnestor</i>	-	PI,SL
	II. PIERIDAE			
10	Common Gull	<i>Cepora nerissa nerissa</i>	Sch. II	
11	Common Jezebel	<i>Delias eucharis</i>		
12	Yellow Orange Tip	<i>Ixias pyrene sesia</i>		
13	White Orange Tip	<i>Ixias Marianne</i>		
14	Common Emigrant	<i>Catopsilia crocale</i>		
15	Common Grass Yellow	<i>Eurema hecabe simulate</i>		
16	Spotless Grass Yellow	<i>Terias laeta</i>		
17	Lemon Emigrant	<i>Catopsilia Pomona</i>		
18	Mottled Emigrant	<i>Catopsilia pyranthe</i>		
19	Pioneer	<i>Anaphaeis aurota</i>		
20	Common Wanderer	<i>Pareronia valeria</i>		
	III. NYMPHALIDAE			
21	Joker	<i>Byblia ilithyia</i>		

Sthalavrikshas and other plant specimens were collected and identified on the basis of Flora of the Presidency of Madras (Gamble, 1986) and Flora of Tamil Nadu (Nair and Henry, 1983) and (Henry *et al.*,1987; 1989).

### Results and Discussion

Most of the temples in Tamilnadu are ancient with enormous space hence have their own *Nanthavanams* (Temple Garden) where apart from *Sthalavriksha* species a number of other plants also available that attract large number of butterflies to the temple premises. During the study, a total of 52 species of butterflies belonging to five families were recorded (Table 1). Maximum number of species (n=13) belonging to the family Hesperidae followed by Pieridae and Nymphalidae (n=11), Papilionidae represented by nine and Lycaenidae eight species.

22	The Chocolate Pansy	<i>Precis iphita iphita</i>		
23	Common Leopard	<i>Phalanta phalantha phalantha</i>		
24	Common Castor	<i>Ariadne merione merione</i>		
25	Angled Castor	<i>Ariadne ariadne</i>		
26	Blue Pansy	<i>Junonia orithya</i>		
27	Yellow Pansy	<i>Junonia hierta</i>		
28	Grey Pansy	<i>Junonia atlites</i>		
29	Danaid Eggfly	<i>Hypolimnas misippus</i>	Sch. I & II	
30	Common Nawab	<i>Polyura athamas</i>		
31	Peacock Pansy	<i>Junonnia almana</i>		
	IV. LYCAENIDAE			
32	Common Pierrot	<i>Castalius rosimon rosimon</i>	Sch. I	
33	Pale Grass Blue	<i>Zizeeria maha ossa</i>		
34	Common Silver Line	<i>Spindasis vulcanus vulcanus</i>		SI, SL
35	Bright Babul Blue	<i>Azanus ubaldus Cramer</i>		
36	Red Pierrot	<i>Talicauda nyseus nyseus</i>		
37	Zebra Blue	<i>Syntarucus plinius</i>		
38	Gram Blue	<i>Euchrysops cnejus</i>	Sch. II	
39	Tawny Coster	<i>Acroea violae</i>		
	V. HESPERIIDAE			
40	Common Evening Brown	<i>Melanitis leda leda</i>		
41	Common Tree Brown	<i>Lethe rohria</i>		
42	Common Bush Brown	<i>Mycalesis perseus typhlus</i>		
43	Cladeye Bush Brown	<i>Mycalesis patnia</i>		
44	Tamil Catseye	<i>Zipoetis saitis</i>		
45	Dark Blue Tiger	<i>Titumala septentrionis dravidarum</i>		
46	Plain Tiger	<i>Danaus chrysippus chrysippus</i>		
47	Striped Tiger	<i>Danaus genutia genutia</i>		
48	Blue Tiger	<i>Tirumala limniace exoticus</i>		
49	Common Crow	<i>Euploea core core</i>	Sch. IV	
50	Glassy Blue Tiger	<i>Parantica aglea aglea</i>		
51	Common Banded Awl	<i>Hasora chromus</i>		
52	Brown Awl	<i>Badamia exclamationis</i>		

PI - Peninsular India, SI- South India; WPA 1972 - Wildlife Protection Act 1972; Sch. I - Scheduled I; Sch. II - Scheduled II; Sch. IV - Scheduled IV; IS - Endemic to Indian Sub Continent; SL - Sri Lanka

Almost all the butterfly species found in temples directly depend on the host and nectar yielding plants eg., *Capparis* spp. for Common Gull and White Orange Tip. The milk weed butterflies mostly depend on *Calotropis* sp., *Ficus* sp. and *Nerium* sp. These plants are important for its life history events

and these plants are common in the temples. Temples maintained by Archeological Survey of India have well maintained lawns and flower gardens and thus forms ideal grounds for various butterflies. *Madapalli* (exclusive kitchen to make deities food offerings) waste attracts certain butterflies too. A group of

Angled Castor (*Ariadne ariadne*) were  
 puddling Madapalli waste (Plate-1) was

observed in Sri Pattiswarar temple at Perur  
 (Figure -1).



Angled Castor feeding in Madapalli waste



Danaid Eggfly



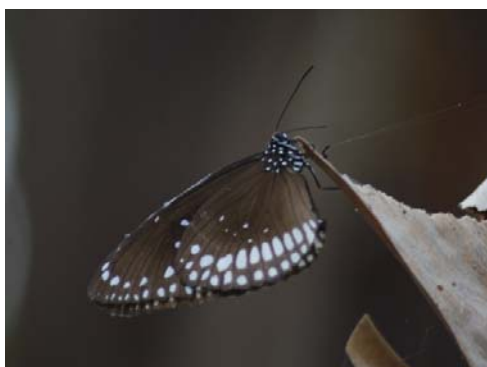
Common Gull



Common Pierrot



Blue Mormon



Common Crow

**Fig.1:** Important Butterflies Recorded in Temples

Of the 1165 temples surveyed during the study 328 have *Aegle marmelos* trees as sthalavrikshas, which ensures food source for Common Mormon and Lime Butterflies. *Cassia fistula* is regarded as sthalavriksha tree in 23 temples and it feeds Mottled Emigrant butterflies. *Cadaba fruticosa*, *Capparis divaricata*, *Capparis zeylanica* and other

*Capparis* spp. plants are the main food source of the Pieridae butterflies. Common Gull, Yellow Orange Tip, Pioneer and Common Wanderer butterflies are regular visitors to the flowers of these plants. Mottled Emigrant butterflies are found frequently visiting the flowers of *Cassia fistula* plants. Common Pierrots preferred the flowers of *Ziziphus* spp.





and Common Nawab was noted to make recurrent visits to the *Albizia lebbek* plants. Brown butterflies for instance Common Evening Brown, Common Tree Brown and Common Bush Brown mostly depended on the grasses found in temple Nandavanams. The Pansy butterflies i.e., Blue Pansy, Lemon Pansy and Yellow Pansy were observed to frequently visit *Barleria* spp. found in the temple premises and Nandavanam.

#### Conclusion

Of the 52 species recorded in temples three species namely Common Mime, Crimson Rose and Common Pierrot are protected under Scheduled I of Wildlife Protection Act 1972 (amended in 2002). Other species in the Scheduled lists are Common Gull in Scheduled II, and Common Crow in Scheduled IV. Blue Mormon is endemic to Western Ghats. Common Silver Line is endemic to south India and Crimson Rose is endemic to south India and Sri Lanka. Butterflies play a vital role on pollination and seed setting in several plants species. Temple premises of Tamil Nadu acts as a safe abode and important feeding ground for several butterfly species.

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