

A Spectacular Nymphalid Migration Peaks at Palar Agricultural College

A Study of Seasonal Butterfly Dynamics

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Received: August, 2024; Accepted: September, 2024; Published: October, 2024

Date and Time of Observation: 2024-07-11, from 10:30 AM to 2:00 PM

Location: Coordinates: 12.874549827365893, 78.77480805231617

Environmental Conditions

- **Temperature:** 35°C maximum, 26°C minimum
- **Wind:** West direction at 18 km/hour
- **Relative Humidity:** 52%

Insect dispersal overview

Insect dispersal refers to the movement of individuals into or out of a population. This movement can be categorized as immigration, emigration, or migration. Immigration involves the one-way inward movement of insects from one area to another, while emigration is the outward movement from a specific location. Migration is a seasonal phenomenon where insects, such as dragonflies, butterflies, locusts, and aphids, move in large numbers over considerable distances. This seasonal migration is often driven by environmental factors and plays a crucial role in the ecological balance and distribution of insect populations.

Migration Behavior

During midday on July 11, a remarkable migration of Nymphalidae butterflies was observed. The butterflies were densely

clustered around open flowers and moved collectively in a westward direction. This synchronized movement suggests a migration event influenced by environmental cues such as temperature and wind direction.

Additional Observations

Since the beginning of July, there has been a noticeable increase in the population of Pieridae family butterflies around the campus. This was followed by a rapid surge in Nymphalidae numbers, culminating in their peak on the day of observation.

Significance

Such mass migrations are essential for maintaining ecological balance and enhancing pollination dynamics in the region. Understanding these migratory patterns is vital for biodiversity conservation and supports agricultural sustainability.

Reporting Institution: Palar Agricultural College, Department of Agricultural Entomology

Report by: Dr. K. Selvam, Assistant Professor

S. No.	Common Name	Scientific Name	Family
1.	Common Crow	<i>Euploea core</i> (Cramer, 1780)	Nymphalidae
2.	Dark Blue Tiger	<i>Tirumala septentrionis</i> (Butler, 1874)	Nymphalidae
3.	Plain Tiger	<i>Danaus chrysippus</i> (Linnaeus, 1758)	Nymphalidae
4.	Angled Castor	<i>Ariadne ariadne</i> (Linnaeus, 1763)	Nymphalidae
5.	Lemon Pansy	<i>Junonia lemonias</i> (Linnaeus, 1758)	Nymphalidae
6.	Double branded crow	<i>Euploea sylvester</i> (Fabricius, 1793)	Nymphalidae
7.	Blue tiger	<i>Tirumala limniace</i> (Cramer, [1775])	Nymphalidae



கருநீலப்புலி Dark Blue Tiger”



நீலப்புலி Blue Tiger”



இரு பட்டை அரளிவிரும்பி Double branded crow”



” அரளிவிரும்பி Common crow”



”மஞ்சள் புலி Plain Tiger”



”வரி ஆமணக்கு சிறகன் Angled Castor”



எலுமிச்சை வசீகரன் Lemon Pansy'

