



PAKISTAN BUTTERFLY SOCIETY QUARTERLY BULLETIN



A NEWSLETTER OF
BUTTERFLIES OF PAKISTAN
ISSUE 02 - SUMMER 2024

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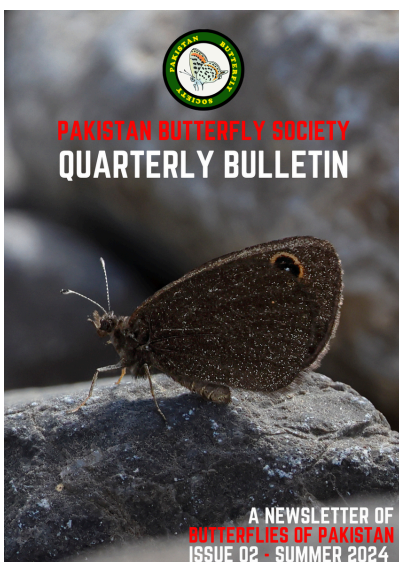
Pakistan Butterflies Society - Quarterly Bulletin (PBSQB)

Guidelines for Submissions

Pakistan Butterfly Society Quarterly Bulletin (PBSQB) is a platform dedicated to celebrating and creating awareness about the rhopaloceros diversity of Pakistan. We invite submissions from all butterfly enthusiasts, entomology students, researchers, nature lovers and writers who wish to share their insights, observations, and experiences related to butterflies and butterfly-watching in Pakistan. Here are some basic guidelines for submitting your work:

- 1. Scope:** PBSQB accepts any writing related to butterflies and butterfly-watching in Pakistan.
- 2. Language:** We encourage submissions in both English and Urdu to spread our message of butterfly conservation to a wider audience. One write-up in each issue in any of the provincial (or regional) languages may also be included.
- 3. Format:** Email submissions to pakbutterflysociety@gmail.com with Submission: [Title] in the subject line. Attach your submission as a Word document and send in relevant figures and photographs separately.
- 4. Review Process:** Our editorial team will review submissions for quality and adherence to guidelines.
- 5. Publication:** Accepted submissions will be featured in PBSQB. Contributors will be credited.
- 6. Copyright:** Contributors retain the copyright to their work but permit us to publish it.

BACKGROUND: From Urak Valley, Quetta (Balochistan) by M. Akram Awan



FRONT COVER:

Featuring Balochi Heath *Lyela macmahoni*, from Hazarganji, Quetta (Balochistan). Photographed by Salman Baloch on 10 May 2024.



BACK COVER:

Featuring Life Cycle of Plain Tiger *Danaus chrysippus*, captured by Sherbaz Khan from Baffa, Mansehra (KP).

REWILDING INDUS
Rewilding Indus (RI) is a body of like-minded individuals concerned with the crippling loss of biodiversity in Pakistan. This young initiative is a collective effort towards making a dent in Wildlife Research and Conservation in Pakistan. This Bulletin has been made possible through RI's technical support.

پاکستان بٹر فلائی سوسائٹی کے سہ ماہی جریدے میں تحاریر جمع کرانے کیلئے ہدایات

پاکستان بٹر فلائی سوسائٹی کا سہ ماہی جریدہ پاکستان کی تلیوں کے بارے میں شعور بیدار کرنے کے لئے وقف ایک پلیٹ فارم ہے۔ ہم تلیوں سے محبت کرنے والوں، علم حشرات کے طلباء، محققین اور فطرت کے دلدادہ خواتین و حضرات سے درخواست کرتے ہیں کہ وہ پاکستانی تلیوں سے متعلق اپنے خیالات، مشاہدات، اور تجربات پی بی ایس کے سہ ماہی جریدے کے توسط سے دنیا کے ساتھ شیئر کریں۔ اس جریدے میں تحاریر جمع کرانے کے لئے کچھ بنیادی ہدایات درج ذیل ہیں:

دائرہ کار: اس جریدے میں پاکستان کی تلیوں سے متعلق ہر قسم کی تحاریر شامل کی جاتی ہیں۔

زبان: پاکستان کی تلیوں کے تنوع اور تحفظ کے بارے میں شعور و آگاہی وسیع پیمانے پر پہنچانے کے لئے ہمارے جریدے میں اردو اور انگریزی دونوں زبانوں میں تحاریر شامل کی جاتی ہیں۔ موجودہ اشاعت (گرم 2024) سے ہم علاقائی زبانوں میں تحاریر کا سلسلہ بھی شروع کر رہے ہیں۔ ہر شمارے میں صوتی زبانوں میں لکھی صرف ایک تحریر شامل ہو سکتی ہے جو کہ مقامی لوگوں تک ہمارا پیغام پہنچانے میں معاون ثابت ہو گی۔

فارمیٹ: اپنی تحاریر کو مائیکرو سافٹ ورڈ ڈا کومنٹ میں لکھیں اور متعلقہ مواد (تصاویر وغیرہ) علیحدہ فائل کی صورت میں منسلک کر کے مندرجہ ذیل ایڈریس پر ای میل کریں (میل کے سبجیکٹ پاکس میں تحریر کا عنوان ضرور لکھیں):
pakbutterflysociety@gmail.com

جائزہ کا عمل: ہماری ادارتی ٹیم موصول شدہ تحاریر کے جائزہ اور ان میں مناسب ترامیم تجویز کرنے کے بعد انکی اشاعت کا فیصلہ کرتی ہے۔

اشاعت: ادارتی ٹیم کی جانب سے قبول شدہ تحاریر سہ ماہی جریدے میں مصنفین کے ناموں کے ہمراہ شائع کی جاتی ہیں اور ان میں شامل کردہ ہر تصویر کیساتھ فوٹو گرافر کا نام بھی دیا جاتا ہے۔

حقوق اشاعت: پی بی ایس کے سہ ماہی جریدے میں شامل شدہ ہر تحریر اور تصویر کے جملہ حقوق اسکے مصنف اور فوٹو گرافر کے پاس رہتے ہیں اور ہم انکی اجازت سے انکو اس جریدے میں شائع کرتے ہیں۔
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BACKGROUND: Female Dnaid Eggfly (*Hypolimnas misippus*) by M. Akram Awan



Pioneer White *Belenois aurota* feeding nectar from a Common Lilac *Syringia vulgaris* at Ziarat, Baluchistan.

See Balochistan Expedition: Exploring 'Heath'-land Butterflies on page 9-14.

Photo by Akram Awan.

Decoding Butterfly Names:

Muhammad Akram Awan

From endless expanses of the universe to quarks, the fundamental particles of an atom, we recognize everything with a name. Names are more than just labels given to different items, concepts and phenomena. They are an essential component of human civilization, which not only grant meaning and significance to objects but also convey culture, history and emotions. In biological sciences, millions of life forms are identified on basis of distinct name assigned to each species.

There are about 18000 species of butterflies in the world of which 436 are known to live in Pakistan. Every butterfly species has one or more names. These names can be of 3 main types:

(1) Scientific Names: This is the first name given to a newly described butterfly taxon (species or subspecies) in Latin, the language of scientific nomenclature. For instance, scientific name of Swat Grayling or Annie's Rockbrown is *Pseudochazara annieae* (Pages, 2007). This name is globally recognized and one specific name cannot be repeated within a single genus to ensure distinction of a particular taxon. Sometimes, two different authors unknowingly describe the same taxon with two different names. This error, when detected by other scientists, is rectified by giving preference to the oldest existing name and subsequently described names become its synonyms. For example, *Hesperia bellas* (de Niceville, 1889) is the same taxon or synonym of Zebra Skipper, *Spialia zebra* (Butler, 1888) but the earlier described name (*zebra*: 1888) is chosen for the species.

(2) Trivial Names: Trivial or English names are well-known to both specialists and the general public. Different trivial names may be used for a butterfly genus in different parts of the world, for example Sailors *Neptis* are known as 'Aeroplanes' in Australia, Grizzled Skippers *Spialia* are called 'Sandmen' in Africa and Rockbrowns *Pseudochazara* are called Graylings in the Palearctic region. Likewise, one species may have multiple trivial names like Plain Tiger *Danaus chrysippus* is also called African Monarch or African Queen and Balochi Ringlet *Ypthima bolanica* is also known as Desert Five-ring.

The primary focus of this article is on the common or English names of butterflies. Below is an overview of the factors that influence the English naming of butterflies found in Pakistan.

(i) Wing Colors and Patterns: The names of most butterflies reflect the beautiful colors and designs on their wings, often consisted of dots, dashes, lines, and ocelli, facilitating their easy identification. The Rose *Pachliopta aristolochiae* has rosy-red body and spots on its black wings. Spangle *Papilio protenor* (Figure 7.) has glistening blue scales on upper hind-wings, Orange-tips and Crimson-tips *Colotis* and *Ixias* have patches of these colors on apex of their fore-wings, Flashes *Rapala* have brightly colored upper-wings, Silverlines *Cigaritis*, *Spindasis* have fine silver lines inside brown or red bars on their under-wings, Silverstripes and Silverspots *Argynnis* have silvery-white stripes or spots on under-wings.

Rings *Ypthima* have yellow-ringed ocelli (*eye-spots*) on their wings, lines on the wings of Common Map *Cyrestis thyodamas* resemble longitudes of a globe, Eggflies *Hypolimnas* have large white oval patches on their black upper-wings.

Butterflies with wing colors and patterns that match gemstones, metals, and elements have names like Jewel Blues *Plebejus*, Jewel Arguses *Farsia*, Grass Jewels *Freyeria*, Coppers *Lycaena*, Common Onyx *Horaga onyx*, Tortoiseshells *Aglais*, *Nymphalis* and Brimstones *Gonepteryx* etc.

(ii) Wing Shapes/Body Parts: The narrow wings of Windmill butterflies *Byasa* (Figure 1.) somewhat resemble the blades of a windmill, wings of Orange Oakleaf *Kalima inachus* (Figure 2.) look like a dead leaf of oak, Blackveins *Aporia* have black wing-veins, Beaks or Snout butterflies *Libythea* (Figure 3.) have a unique nose-like projection on their head.



Figure 1. Wings of the Windmills *Byasa* look like Windmill blades specially in the pinned specimens. (Pakistan Museum of Natural History, Islamabad)



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Figure 2. Wings of Orange Oakleaf *Kalima inachus* resemble a dead oak leaf



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Figure 3. Club Beak *Libythea myrrha* showing its beak-like projection on head

(iii) Flight Patterns and Habits: Brisk and skipping flight of Swifts *Baorini* and Skippers *Hesperidae* and gliding flight of Sailers *Neptis* give these butterflies their names. Flats *Celaenorrhini*, *Tagiadini*, unlike most of the butterflies keep their wings horizontally open, Common Wanderer *Pareronia hippia*, Vagrant *Vagrans egista* and Emigrants *Catopsilia* have been named after their nomadic habits.

(iv) Habitats: Many butterflies have been named after the habitat they are mostly associated with, e.g. Grass yellows *Eurema*, Grass blues *Zizeeria* and allies, Hedge blue *Celastrina* and allies, Meadow Blues *Polyommatus*, Wall Browns *Lasiommata*, Tree Browns *Lethe*, Meadow Browns *Hyponephele*, Bush Browns *Mycalesis*, Rock Browns *Chazara*, *Pesudochazara*.

(v) Larval Food Plants: Every butterfly lays its eggs on specific plants, which its larvae will feed upon. Many times, butterflies are named in connection with these plants (known as larval food or host plants), for instance, Indian Palm Bob *Suastus gremius*, Palm Darts *Telicota*, Rice Swift *Borbo cinnara* (Figure 4.), Cabbage Whites *Pieris*, Guava Blue *Virachola isocrates*, Babul Blues *Azanus* and Castors *Ariadne*.



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Figure 4. One of the Larval Host Plants of Rice Swift *Borbo cinnara* is Rice crop



©Ackram Awan

Figure 5. Common Crow *Euploea core* has crow-like dark wings

(vi) **Animals/Birds:** Names of certain butterflies is based on their resemblances to various animals and birds for example, Common Gull *Cepora nerissa*, Striped Albatross *Appias libythea*, Zebra Blue *Leptotes plinius*, Crows *Euploea* (Figure 5), Tigers *Danaus*, *Tirumala*, *Parantica*, Common Leopard *Phalanta phalantha*, Peacocks and Swallowtails *Papilio* etc.



Figure 6. Common Mormon *Papilio polytes*



Figure 7. Glistening blue scales on hind-wings of the Spangle *Papilio protenor* gives it this name

(vii) **British Forces Ranks:** Documentation of butterflies in the Indian Subcontinent began during the colonial times when some British Army officers also took part in collection and study of our butterflies. Therefore, many butterflies found in the Subcontinent and Southeast Asia were named after army and navy ranks like Admiral *Vanessa*, *Limenitis*, Sergeant *Athyma* (Figure 8.), Lascar *Pantoporia* and Commodore *Auzakia davana*. Examples of such butterfly names outside Pakistan are Commander, Sergeant-major, Constable etc.

(viii) **Royal Titles:** Some butterflies are assigned royal names which reflect their majestic appearance and appealing beauty, like Emperors *Mimathyma* and *Dilipa*, Western Courtier *Sephisia dichroa* (Figure 10.), Rajahs and Nawabs *Charaxes*, *Polyura*, Barons and Duchesses *Euthalia*. Some other butterflies not found in Pakistan have more interesting 'royal' names, e.g. Kaiser-e-Hind, Pasha, Ebert's Mirza, Duke, Begum, Prince, Empress etc.

(ix) **People and Characters:** Some butterflies are given names of various people and characters, e.g. Arabs *Colotis*, Common Mormon *Papilio polytes* (Figure 6.), Jezebels *Delias*, Punches *Dodona*, Judies *Abisara*, Pierrots *Tarucus*, Joker *Byblia ilithyia* Common Jester *Symbrenthia lilaea*.

(x) **Mythological Creatures:** Early lepidopterists took inspiration from mythology and folklore (Greek and Roman, in particular), in naming many butterflies like Apollos *Parnassius*, Cupids *Everes*, *Luthrodes* (Figure 9.), Arguses *Aricia*, *Paralasa*, *Callerebia*, Satyrs *Aulocera*, *Karanasa* etc, Freak *Calinaga budha*, Siren *Hestina persimilis* etc. Such names add a sense of a mystique in describing the beauty of these butterflies.



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Figure 8. Common Sergeant *Athyma perius*



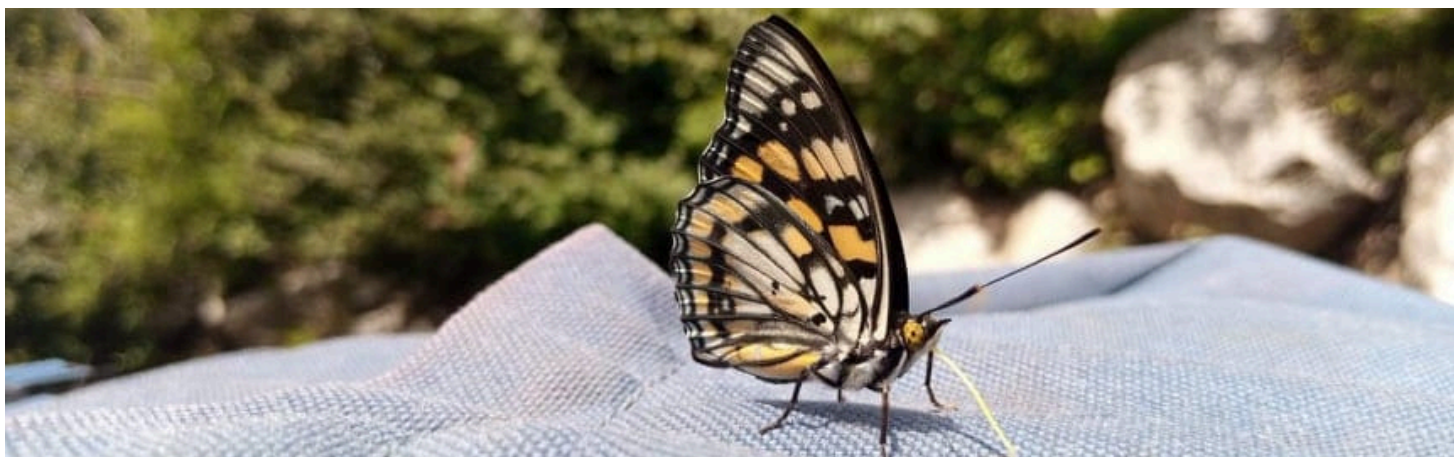
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Figure 9. Plains Cupid *Luthrodes pandava*. Cupid is Roman god of love

(3) Regional Names: These names are limited to smaller geographical regions like countries, states or provinces. Regional names of butterflies exist in many languages of the world, e.g. Croatian, Finnish, French, German, Polish, Serbian, Spanish, Swedish, Thai etc. In recent times, attempts of creating regional names in many Indian languages (Bengali, Hindi, Malayalam, Marathi, Tamil etc.) have been made. Indian Foundation for Butterflies (IFB) has recently published a booklet on Hindi Names of Indian butterflies.

Pakistan Butterfly Society (PBS) is collaborating with IFB in creating Urdu, Punjabi, Sindhi, Balochi and Pashto names of Pakistani butterflies. We are trying to represent our local culture, art and folklore characters in creating regional names of indigenous butterflies, for example Sergeants *Athyma* are named “*Kamar-band*” (due to a white band on their abdomen) and Arabs of genus *Colotis* have been named “*Sassi*” in Urdu, Punjabi, Sindhi and Balochi. Sassi is heroine of the famous folklore Sassi-Punnu, originated from Thal desert of Punjab. This name is a representation of arid to semi-desert habitat of *Colotis* butterflies.

We welcome everybody who wants to take part in this endeavor of Pakistan Butterfly Society, which aims to create awareness about conservation of butterflies among the people of Pakistan, without any language barrier. If you have any suggestions or ideas about regional names of butterflies of Pakistan, write to PBS on pakistanbutterflies@gmail.com.



©Abdurrehman Jani

Figure 10. Western Courtier *Sephisa dichroa* takes its name from a different regal individual.

Balochistan Expedition: Exploring 'Heath'-land Butterflies

Salman Baloch & Muhammad Akram Awan

Balochistan is the largest province of Pakistan covering 43.6% of the country's total area, yet it remains the least explored region when it comes to studying butterflies. The only major work on the butterflies of Balochistan was published 92 years ago by Brigadier William Harry Evans, where he enlisted 108 species from the province, but he mostly worked in the Northern parts. A German lepidopterist Wolfgang Ecklweiler visited Balochistan thrice (in 1979, 1982 and 1983) and collected many specimens which Brigadier Evans had included in his work. The specimens collected by these two Rhopalocerists are deposited in the British Museum of Natural History (London) and in the private collection of Mr. Ecklweiler. Some specimens from Balochistan are also present in Pakistan Museum of Natural History (Islamabad). One species, the Balochi Streaked Skipper *Muschampia phil* is endemic to Balochistan, and some Pak-Afghan endemics are also found only in Balochistan, on our side of the Durand Line.

Akram Awan (AA) and Salman Baloch (SB), part of the team from Pakistan Butterfly Society and Rewilding Indus, participated in an expedition to Northern Balochistan from 6th to 11th May 2024. The expedition aimed to study the butterflies of this poorly explored region, with a specific focus on 'forgotten' and range-restricted species. The team explored three main 'hotspots': Khojak top (Qilla Abdullah, Figure 1), Ziarat (Figure 2), and Quetta (including Hazarganji-Chiltan National Park and Urak Valley). Here's a summary of our findings:



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Figure 1. The historic Khojak Tunnel

Figure 2. Junipers of Ziarat

Qilla Abdullah (6 May 2024): Both team members set off (AA from Islamabad and SB from Karachi) on the evening of 5th May. Upon reaching Quetta, the capital and largest city of Balochistan, on the morning of 6th May, we traveled straight to Killi Haji Muhammad Ali Bawri, where we reached by noon. Our main destination in Qilla Abdullah was Khojak Top, which was to be covered on the next day. We decided to explore the vicinity of the Killi (village) and recorded Desert Bath White *Pontia glauconome*, Eastern Pale Clouded Yellow *Colias erate*, Pea Blue *Lampides boeticus*, Small Jewel Blue *Plebejus cf. christophi*, and Painted Lady *Vanessa cardui*.

Khojak Top (7 May 2024): Located within the Khwaja Amran subrange, an extension of the Toba Kakar Range, Khojak Hill is notable for the historical Khojak Tunnel and Sheela Bagh Railway Station. Evans discovered a small butterfly, *Arianna kwaja*, from Western Khojak slopes which is named after Khwaja Amran hills. Unfortunately, we did not come across this magnificent Pak-Afghan endemic Lycaenid during our exploration of Khojak top and surroundings. Pea Blue *Lampides boeticus*, Plain Tiger *Danaus chrysippus*, Persian Fritillary *Melitaea perseae*, and Roberts' Fritillary *Melitaea robertsi*, were documented, but then came the most unforgettable moment of our expedition when we came by the Balochi Heath *Lyela macmahoni*. SB took some beautiful pictures of it, one of which is displayed on the front cover of the current issue. These were the first photographs of this species ever taken in life form, in its natural habitat.



Akram Awan

Persian Fritillary *Melitaea perseae* from Chiltan hills



© Salman Baloch

Roberts' Fritillary *Melitaea robertsi* from Khojak



© Salman Baloch

Balochi Heath *Lyela macmahoni* from Khojak top

The Biggest Discovery: First discovered from Quetta in 1908 by Swinhoe, the scientific name of Balochi Heath *Lyela macmahoni* is dedicated to Colonel A.H. McMohan who collected the first specimens. This elusive butterfly flies from end of March to early June at an altitude of 1800 to 2700 meters, in Balochistan (Quetta, Zhob, Qilla Abdullah districts) and Afghanistan (Nangarhar to Bamyan provinces). Balochi Heath is a small blackish-brown butterfly (wing span: 35 to 40 mm) with a yellow-ringed eye-spot (ocellus) near the forewing apex. This eye-spot has a white central dot on under-side (when the wings are closed) but on upper-side it is without white dot (blind ocellus). Its flight is weak, fluttering, and close to the ground among grassy gorges and hill sides. At least 4-5 individuals of this species were seen about Khojak top.

Ziarat (8-9 May 2024): On the morning of 7th May, we set out for Ziarat, the most famous hill station of Balochistan, known for its expansive *Juniperus seravschanica* forest that stretches across 110,000 hectares of scenic highlands. This is Pakistan's largest and the world's 2nd largest Juniper forest, believed to be 4000 years old. For the next two days, we explored the places around Ziarat city, Baab-e-Ziarat, and Zizri and documented the Balochi Bee Hawkmoth *Hemaris ducalis lukhtanovi*, Pygmy Swift *Gegenes pumilio*, Plain Marbled Skipper *Carcharodus alceae*, Large Cabbage White *Pieris brassicae*, Pioneer White *Belenois aurota*, Pale Clouded Yellow *Colias erate*, Common Meadow Blue *Polyommatus Icarus fugitiva*, Dark Grass Blue *Zizeeria karsandra*, Pea Blue *Lampides boeticus*, Queen of Spain Fritillary *Issoria lathonia lathonia*, Eastern Comma *Polygonia egea undina*, and Painted lady *Vanessa cardui*.



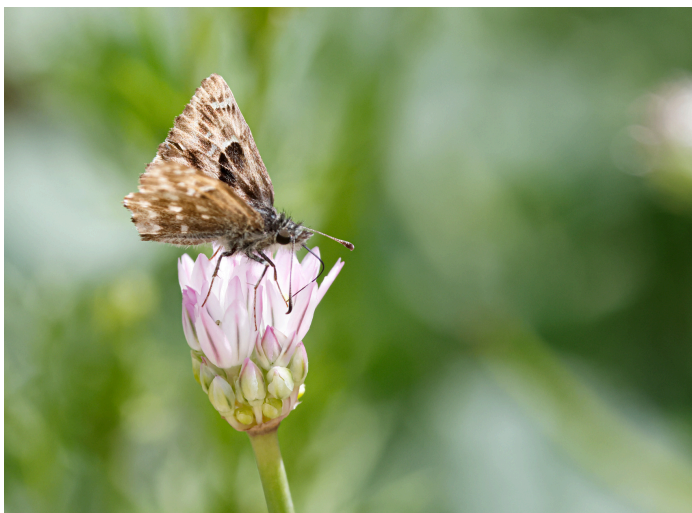
Balochi Bee Hawkmoth *Hemaris ducalis lukhtanovi*

©Salman Baloch



Common Meadow Blue *Polyommatus Icarus fugitiva*

©Salman Baloch



Plain Marbled Skipper *Carcharodus alceae* feeding on *Allium* sp.,

©Salman Baloch



Queen of Spain Fritillary *Issoria lathonia lathonia*

©Akram Awan

Hazarganji-Chiltan National Park (10 May 2024): Plain Marbled Skipper *Carcharodus alceae*, Plain Tiger *Danaus chrysippus* and Persian Fritillary *Melitaea perseae* was recorded from the Hazarganji-Chiltan National Park (Figure 3), located in the western reaches of Quetta and spanning over 28,300 hectares of natural terrain. The most frequently encountered butterfly of our trip, Pea Blue *Lampides boeticus* was flying everywhere in the National Park. And once again, the most special appearance of a female Balochi Heath *Lyela macmahoni* made our day. Quetta is where this little brown beauty was first discovered 116 years ago.



Figure 3. Map of Chiltan National Park



Figure 4. Urak Valley, Quetta

Hanna-Urak Valley (11 May 2024): Our last destination was Urak valley (Figure 4) and the orchards in its vicinity. It was a brief visit but we managed to record Plain Marbled Skipper *Carcharodus alceae*, Large and Small Cabbage Whites *Pieris brassicae* and *P. rapae*, Himalayan Bath White *Pontia endusa moorei*, Common Meadow Blue *Polyommatus Icarus fugitiva*, Pea Blue *Lampides boeticus*, Common Copper *Lycaena phlaeas stygiana*, Blue Pansy *Junonia orithya*, and Painted Lady *Vanessa cardui*.



Common Copper *Lycaena phlaeas stygiana*

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© Salman Baloch



A view of floral assemblages at Zizri, Ziarat (© Akram Awan)

Weather and Vegetation:

The weather was very balanced, neither cool nor so hot. The temperature remained between 20 and 28 degrees Celsius. Due to the delay in western depression rain and snowfall in northern Balochistan, almost all spots were lush green and full of wild flowers. Despite perfect conditions for butterfly-watching, the diversity and number of butterflies was rather low.



Papaver pavonium, Chiltan National Park

© Akram Awan



Gentiana olivieri, Chiltan National Park

© Salman Baloch



Onobrychus cornuta, Zizri, Ziarat

© Akram Awan



Pea Blue *Lampides boeticus oviposting* on a *Astragalus* sp., Urak Valley, Quetta

© Salman Baloch

Acknowledgements:

We would like to express our heartily gratitude to Rewilding Indus (RI) for organizing and funding the expedition. Our sincere thanks are also due to Mayen Khan, Dr. Tariq Wajdan Rind, Nauroz Jamali, Shoaib Tariq Baloch (Quetta), Zahoor Khan Achakzai (Qilla Abdullah), Saleh Muhammad Khan and Abdul Jabbar Khan (Ziarat) for their help, guidance, hospitality and company in the field, throughout our stay in Balochistan. We are very thankful to Waseem Ur Rahman for helping with identification of plants.

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Preliminary Checklist of Butterflies of Dera Ismail Khan District

Muhammad Ali Rajput

Introduction: The District of Dera Ismail Khan (D.I. Khan) lies on the west bank (Figure 1.) of the Indus River in the Southern Circle of Khyber Pakhtunkhwa (K.P.) Province of Pakistan. It is one of the largest districts by area in the province. D.I. Khan district is located at a crucial point in Pakistan, both culturally and politically. It is the meeting point of three provinces: Khyber Pakhtunkhwa (K.P.), Punjab, and Balochistan. D.I. Khan is bounded by eight districts: three from Punjab (Mianwali, Bhakkar, and Dera Ghazi Khan (D.G. Khan)), two from Balochistan (Sherani and Musa Khel), and three from Khyber Pakhtunkhwa (Lower South Waziristan, Tank, and Lakki Marwat).



Mudpuddling Pioneer Whites *Belenois aurota*

Habitats: D.I. Khan district also features a wide range of habitats. It lies at the boundary of the Palearctic and Oriental regions, thus possessing a great mixture of flora and fauna from both areas.

The Indus River and its wetlands form the entire eastern boundary of the district. The Chashma Right Bank Canal (CRBC), derived from the river, helps irrigate a large portion of the district (around 366,000 hectares). The distributaries of the Chashma Right Bank Canal span hundreds of kilometers within the district. The Indus River and the Chashma Right Bank Canal form the most heavily irrigated region of the district, filled with crops, orchards, towns, and villages.

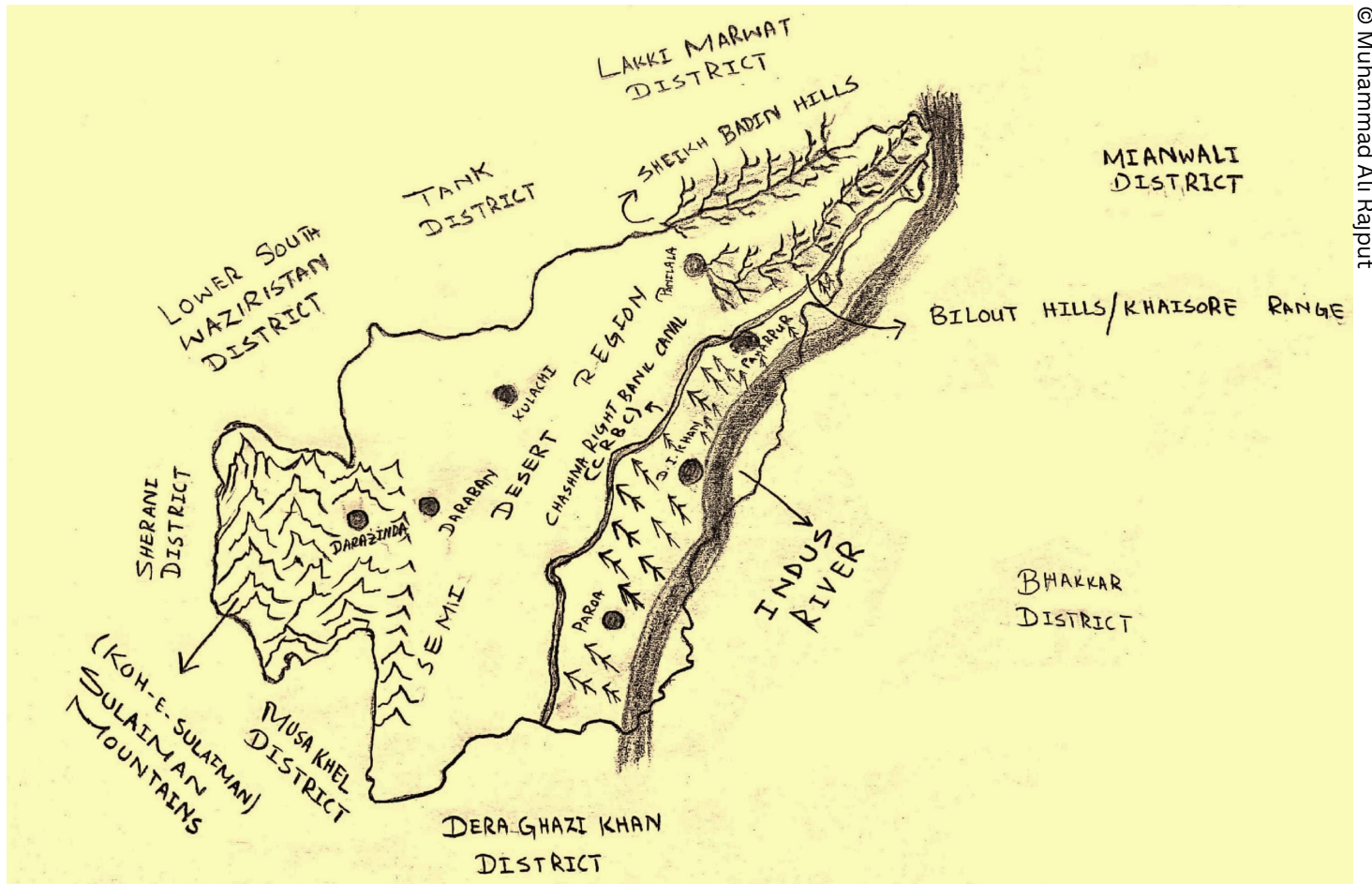


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Balochi Ringlet or Desert Fivering *Ypthima bolanica*

In the northwest, two parallel mountain ranges, the Bilout Hills/Khaisore Range and the Sheikh Badin Hills, are located. The highest point in these ranges is the Sheikh Badin Hill, with an altitude of around 1,376 meters. Both ranges are mostly barren with little water available.

Above the Chashma Right Bank Canal lies the partially cultivated plains, locally called "Damaan." Cultivation in this region depends on rain, flooding, tube wells and spate irrigation. Spate irrigation is used widely in this region. This region is also crisscrossed by flood paths originating from the mountains of the Darazinda region, South Waziristan, and Tank. The Gomal Zam Dam irrigates some of the area around Kulachi.



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Figure 1. Map of Dera Ismail Khan District

The mountainous region of Darazinda (Figure 2.) forms the boundary with Lower South Waziristan, Musa Khel and Sherani districts. These mountains are part of the Sulaiman Range and contain the highest peaks in the area. In this area lies the mighty Takht-e-Sulaiman, rising around 3,487 meters above sea level. These mountains are mostly fertile, with good vegetation cover, springs and streams.

Checklist: My younger brother, Muhammad Taha, and I have been observing the fauna of D.I. Khan for approximately six years. During this period, we have documented 48 butterfly species (Table 1). This represents a promising start, with many more species expected to be recorded in the future. This checklist is the first comprehensive record of butterflies for this district, and I hope it will serve as a valuable foundation for future research in this region.



Indian Red Flash *Rapala airbus*



Pakistani Skipper *Eogenes lesliei* also known as Leslie's Hopper



Tawny Silverline *Apharitis acamas* from Khaisore range

Discussion: The butterflies of D.I. Khan have received little to no attention in terms of research, yet this area has demonstrated remarkable diversity and potential. More skilled and dedicated efforts are needed to thoroughly document the butterfly species here. With such focused work, I am confident that the current checklist could easily double in size. Additionally, the lack of an affordable and up-to-date field guide for the butterflies of Pakistan has significantly impacted the ability to accurately identify and catalog species in this region.

Table 1. Checklist of Butterfly species recorded from Dera Ismail Khan district

No.	Species	Remarks
1	Pakistani Skipper <i>Eogenes lesliei</i>	Seen in Sheikh Badin Hills and Khaisore Range. Month: July.
2	Pale Palm Dart <i>Telicota colon</i>	Uncommon in the irrigated plains.
3	African Straight Swift <i>Parnara bada</i>	Recorded rarely in the irrigated plains.
4	Dingy Swift <i>Gegenes nostradamus</i>	Rarely recorded
5	Dark-branded Swift <i>Pelopidas mathias</i>	Uncommon in the hills.
6	White-branded Swift <i>P. thrax</i>	Rarely recorded.
7	Common Lime <i>Papilio demoleus</i>	Regularly recorded.
8	Common Mormon <i>P. polytes</i>	Uncommonly recorded in the plains.
9	Common Yellow Swallowtail <i>P. machaon</i>	Seen in the Sulaiman Mountains on the Darazinda side. Month: May.
10	Common Rose <i>Pachliopta aristolochiae</i>	A few sightings. Mostly near Chashma Wetlands.
11	Large Cabbage White <i>Pieris brassicae</i>	Regularly recorded.
12	Indian Cabbage White <i>P. canidia</i>	Common, mostly in the plains.
13	Himalayan Bath White <i>Pontia endusa moorei</i>	Rarely seen in the plains.
14	Pioneer White <i>Belenois aurota</i>	Common throughout the region.
15	Small Salmon Arab <i>Colotis amata</i>	Mostly seen on vegetation in the Hills.
16	Large Salmon Arab <i>C. fausta</i>	Mostly seen on vegetation in the Hills.
17	Blue Spotted Arab <i>C. protractus</i>	Mostly seen on vegetation in the Hills.
18	White Arab <i>C. vestalis</i>	Regularly seen.
19	Little Orange-tip <i>C. etrida</i>	Mostly seen in the partially cultivated plains region.
20	Mottled Emigrant <i>Catopsilia pyranthe</i>	Recorded a few times in irrigated plains.
21	Common Grass Yellow <i>Eurema hecabe</i>	Regularly recorded. Mostly in the cultivated plains.
22	Dark Clouded Yellow <i>Colias fieldii</i>	Regularly recorded.
23	Pea Blue <i>Lampides boeticus</i>	Regularly recorded.
24	Pierrot <i>Tarucus sp.</i>	More than one species may be present.
25	Zebra Blue <i>Leptotes plinius</i>	Uncommon.

26	Dull Babul Blue <i>Azanus uranus</i>	Rarely recorded.
27	Bright Babul Blue <i>A. ubaldus</i>	Regularly recorded in the irrigated plains
28	Dark Grass Blue <i>Zizeeria karsandra</i>	Recorded in irrigated plains.
29	Pale Grass Blue <i>Pseudozizeeria maha</i>	Regularly recorded.
30	African Grass Jewel <i>Freyeria trochylus</i>	Recorded rarely. Sandy desert and Hills. (July and August)
31	Small Grass Jewel <i>F. putli</i>	Recorded in hills and plains.
32	Gram Blue <i>Euchrysops cnejus</i>	Recorded in the irrigated plains.
33	Indian Red Flash <i>Rapala iarbus</i>	Seen rarely in plains and near Chashma Wetlands.
34	Tawny Silverline <i>Apharitis acamas</i>	One sighting in the Khaisore Range.
35	Plain Tiger <i>Danaus chrysippus</i>	Common throughout the region.
36	Common Tiger <i>D. genutia</i>	Uncommon (November)
37	Blue Tiger <i>Tirumala limniace</i>	Seen in cultivated plains near the Indus.
38	Common Treebrown <i>Lethe robria</i>	One sighting atop Sheikh Badin Hill.
39	Lesser Three-ring <i>Ypthima inica</i>	Regularly recorded. Mostly in the cultivated plains.
40	Balochi Ringlet <i>Y. bolanica</i>	Seen only in the Sheikh Badin Hills.
41	White-edged Rockbrown <i>Hipparchia parisatis</i>	Seen in the Sulaiman Mountains on the Darazinda side.
42	Indian Fritillary <i>Argynnis hyperbius</i>	Seen a few times near Chashma Wetlands.
43	Common Leopard <i>Phalanta phalantha</i>	Regularly recorded.
44	Painted Lady <i>Vanessa cardui</i>	Common throughout the region.
45	Peacock Pansy <i>Junonia almana</i>	Common in the irrigated plains.
46	Blue Pansy <i>J. orithya</i>	Common throughout the region.
47	Yellow Pansy <i>J. hierta</i>	Uncommon. Hills and plains.
48	Danaid Eggfly <i>Hypolimnas misippus</i>	Rarely seen. Near Indus River (November)

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Figure 2. Darazinda: End of KP limits and start of Balochistan province (Koh-e-Suleiman range)

زمونږ قدرتي وريشه Our Natural Heritage

عبد الرحمن او آذان كرم

Swat Rockbrown *Pseudochazara annieae*

سواتي غر پرکه

پاکستان کنبې د پتنگانو دولس ځای یا وطني نسلونه پائي چې پکنبې يو ډول پتنگ يواځې د خيبر پښتونخوا سوات سيمې کنبې موندلې کېږي- په سوات کنبې د تاليبانو راتلو نه دوه کاله مخکينې، د فرانسې شمېرنې پوهان او د پتنگانو ماهر، پروفېسر جیروم پېجز د جون مياشت په نهه ويشتمه نېټه دوه زره شپږ کنبې د کالام نه د دې نوي نسل پتنگ دريافت کړے و - د د خپلې مېرمنې اينا په نامه د دې پتنگ ساينسي نوم کېښود -



© Jérôme Pagès

The only known photo of Swat Rockbrown *Pseudochazara annieae* in its natural habitat. Kalam, Swat

د دې پتنگ کوم نمونې چې د راتولې کړې وې، هغه ئې د نړۍ په بېلابېلو مېوزيمونو کښې خوندي کړې کوم چې د نوي سپيشيز د دريافت يوه مهمه کړۍ وه - دې ميوزيمونو کښې د پارس نيشنل ميوزيم اف نيچرل هستري، د لندن برېتس ميوزيم اف نيچرل هستري او د يوکراين کيو زوولاجکل ميوزيم شامل دے -

دا په اوچتو غرونو کښې ژوند کونکي پتنگان د کالام نه علاوه بل ځاے کښې لا نه دي موندلي شوي- دا پتنگ د سطحه سمندر نه ۶۸۹۰ فته اوچت ژوند کوي - ټي-جي-رابرټس نومې ساينس پوهه په ورومبي ځل د دې سپيشيز په خپل کتاب "د بټرفلاز اف پاکستان" کښې په داسې ډول ذکر کړے چې د هغه وخت مطابق ئې د يو ډول پتنگ (سيوډوچزا تيليپهاسا) سره شريک حساب کړے وو، کوم چې وروسته ساينسي توگه غلط ثابت شو د کومې نشاندهي وروسته جبروم پيجز د خپل دريافت په دوران کې وکړه -



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Figure 1. Typical habitat of Swat Rockbrown *Pseudochazara annieae*, showing rocky terrain on a sloping track. Chukail Meadow track, Mankiyal, Swat

د اوسېدو ځاے او ماحول: څنگه چې د نوم نه معلومېږي، سواتۍ غر پرکه په غريزه سيمه کښې ژوند کوي، خصوصن په هغه ځايونو کښې چې چرۍ وي او د غر گټې او کمرې پکښې وي- کله کله د پتنگ د غر هغه اړخونه چې د شنو واښو چرۍ او ورسره لږ ډېر غريزې کمرې وي- د دې پتنگ د الوتو وخت د جون اخري ورځو نه تر اگست اولنۍ ورځو پورې وي-

پېژندنه: دا ډول نور پتنگان (راک براونز) د سواتۍ غر پرکي سره تقريبا په شکل و صورت يو شان ښکاري. خو که مونږ اوگورو نو د سواتۍ غر پرکي د نر مخکښېني څانگونو لپاسه مخ، شوخ نسواري رنگ لري او دې ته نېزېدې نورو پتنگانو شان نارنجي پته نه لري. دې نه علاوه په دې څانگ کښې دوه وړې وړې سترگې شکل ټاکي وي کوم نه چارچاپېره پيکه نارنجي رنگ دائره وي - د نر مخکښېني څانگونو لپاسه يوه نښه وي کوم ته چې سائينس پوهان (سيکس برينډ يا سيکس مارک) وائي، کوم چې شاته تورچکې نسواري رنگ او د څانگ د رگونو له وجې ډېر په مشکله په نظر راځي. دا جنسي نښه صرف د نر خصوصيت ده. د نر په ورستو څانگونو لپاسه يو توربخښې نارنجي پته تلي وي -

د ښځينې مخکښېني څانگونو رنگ په نسبت د نر، پيکه نسواري رنگ لري او لپاسه پرې د انگرېزۍ 8 شان نښه په نارنجي رنگ کښې جوړه شوې وي او دننه پکښې سترگو ډول دوه واړه ټاکي هم وي. د مخکښېني څانگونو لاندې مخ باندې دوه سترگې جوړې شوې وي چې پکښې دننه يوه يوه سپينه نقطه وي.

د ورستينو څانگونو لاندې مخ خړ رنگه وي کوم باندې کرې وړې ليکې وي. هم د دغه ليکو تر مينځه ځانې جوړې شوې وي، چې پکښې د ښکته اړخه دويم ځانه کښې يو وړوکه تور داغ وي او دننه پکښې وړوکی سپين ټاکي وي.

جسامت: که مونږ د دې په جسامت خبرې وکړو نو د نر د يو څانگ نه تر بل څانگ پورې ۵۷-۵۲ ميلي ميټر اوږدوالی وي - بل اړخ ته ماده د نر نه په جسامت کښې معمولي لويه وي، ۶۰-۵۸ ميلي ميټر تر څانگونو مينځ اوږدوالی لري -

دې خبرې ته پام پکار ده چې دا د "راک براونز" په دې سيمه واحد قسم ده - دې وجې د سواتۍ غر پرکۍ په حواله زياتره معلومات نېشته. مثال په توگه، ده د کوم ځای بوټو نه خپل خوراک ترلاسه کوي - جیروم پېجز ليکي چې تر دې وخته "تهيسټل" نومې بوټو ته د دې رجحان زيات وي، خو د دا نه ده ښکاره کړې چې د "تهيسټل" کوم نمونې - که مونږ اوگورو نو بر سوات کښې وريجکۍ او ازغکې نومې د "تهيسټل" بوټي مېلاويږي، ممکنه ده چې د هغې نه خپل رزق ترلاسه کوي. څرنگې چې معلومه ده چې دا يو نوې موندلې شوه پتنگ ده، له دغې وجې دا په کوم بوټو کښې خپل د ژوند مرحلې پوره کوي، له تر دې وخته نه ده معلوم. مثال په توگه د اگۍ اچولو نه پيشکي جوړېدو او تر د بلوغته پورې. دې سره د کالام، سوات نه علاوه نورو خوا او شا سيمو کښې د د لټون پکار ده، خصوصن د لوېديځ لور ته بالاي ډير پورې.

تشکر: د پښتو ليک او املا سمولو لپاره د محمد ايوب خان غر غر مننه -

Pakistan is home to 12 identified endemic species of butterflies. One of them is found in Swat Valley, Khyber Pakhtunkhwa. French statistician and lepidopterist Prof. Jérôme Pagès discovered this little-known species, on 29 June 2006, a couple of years before militants' invasion of the district Swat.

He named it after his wife, Annie (as in *anniae*) once it was described from specimens. The type specimens were deposited in different natural history museums, such as the National Museum of Natural History (Paris, France), the British Museum of Natural History (London, UK) and the Kiev Zoological Museum (Kyiv, Ukraine).

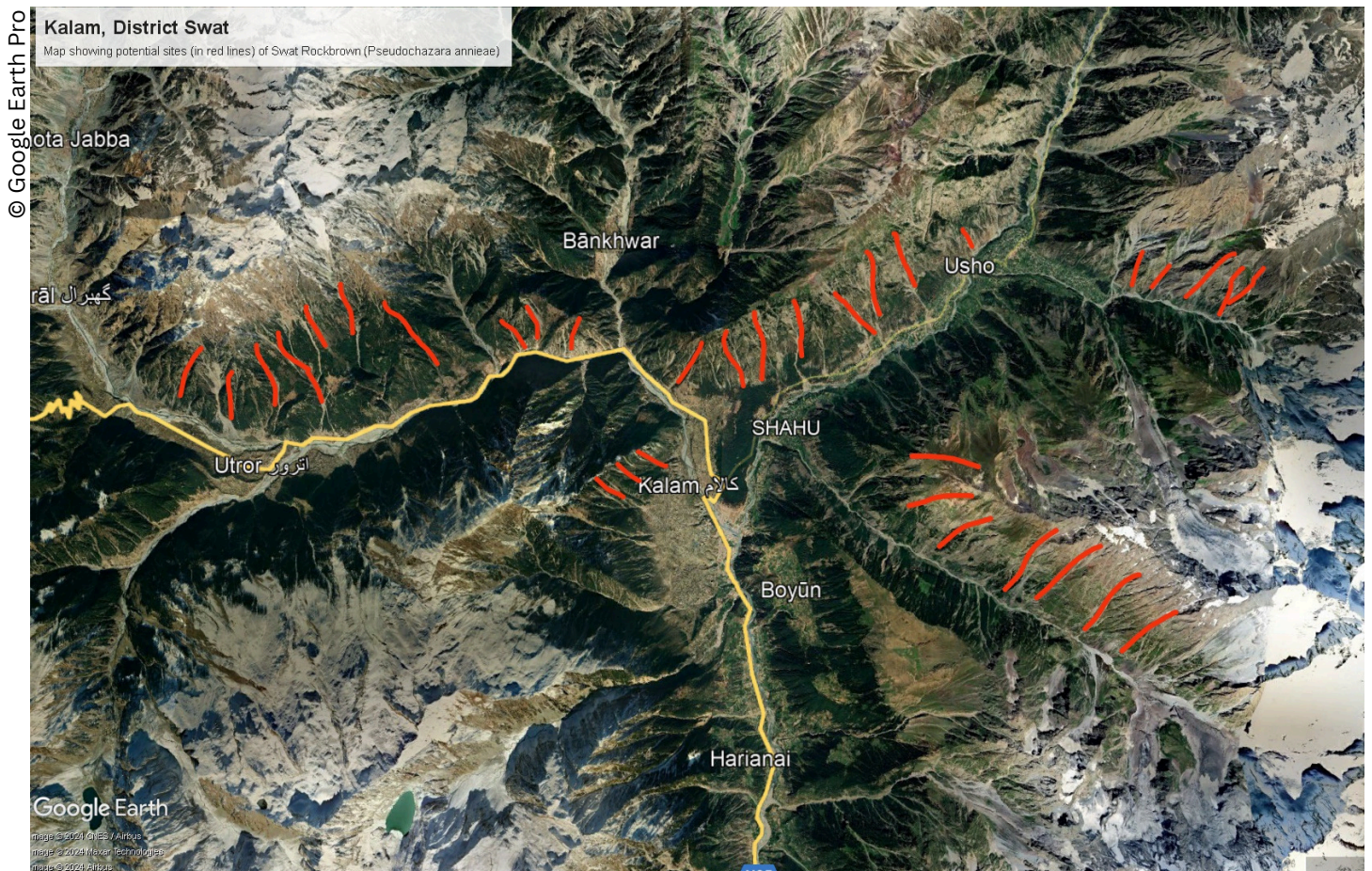


Figure 2. A map showing Swat Rockbrown *Pseudochazara anniae* type locality and potential sites for future explorations (highlighted in red lines)

This high-altitude species is only known from the type locality (where it was first discovered), Kalam, Upper Swat (See. Figure 2) at an altitude of 2100 m (approx. 6,890 ft). The type species was collected on 4th July 2006 by Jerome Pages and the species description was published in 2007. The rockbrown T.J Roberts recorded from Kalam and misidentified as *P. thelephassa* was almost certainly this species (Roberts, 2001: 105 – 106).

Size & Identification: Wingspan, Male: 52-57 mm, Female slightly larger: 58-60 mm. It is larger than other rockbrowns. Best identified from other rockbrowns (*Pseudochazara*) by viewing male's upperside of forewing which is dark brown and have no orange band, 2 sub-equal eye spots on forewings with indistinct orange edges. A blackish diagonal streak (sex brand or sex mark) across fore-wings, not very obvious against dark-brown ground color, and is broken by veins.

Hindwing has a broad dark orange band. The female's upperside of forewing is brownish with an orange figure-8 shaped pattern enclosing two eye-spots. The underside of the forewing with 2 small white dots between eye spots, grey underside hindwing has a slightly pale postdiscal area bordered by black zigzag lines and a minute eye-like spot I space two (*anal angle*). (See Fig.3).

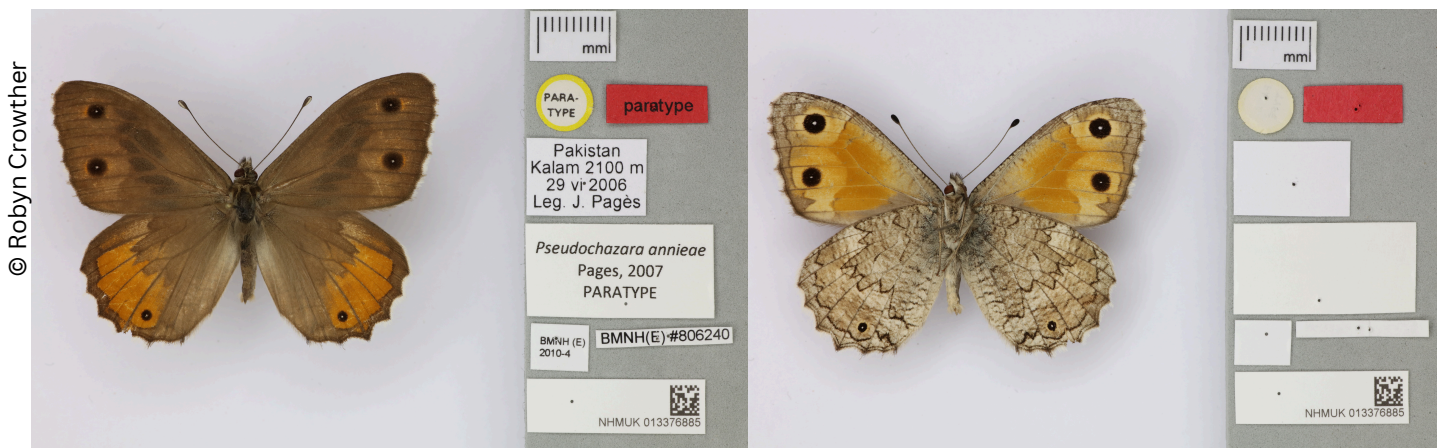


Figure 3. Specimen of Swat Rockbrown *Pseudochazara annieae* from NHMUK: (LEFT) Showing dorsal side and (RIGHT) showing ventral side.

Habitat: Prefers rocky areas and cliffs, and occasionally dwells on rock-strewn grassy slopes on mountains. It flies from the end of June to early August, attracted to thistle plants for feeding. (See Fig.1)

It is worth noting that this is the only known Rockbrown from the respective region, hence many unknown aspects related to this species are yet to be discovered. It is worth pursuing which thistle plants it gets attracted to. Besides, nothing is known about its larval life cycle and the larval host plant (s) associated with it. The species range should be re-explored in adjacent areas near the type locality, and the west till Upper Dir.

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Race against time to save Malir: A Rich Butterfly Zone

Salman Baloch

The butterflies are important pollinators for many plant species, as they feed on nectar, they transfer pollen from one flower to another, facilitating plant reproduction. This pollination is crucial for both wild plants and agricultural crops, ensuring the production of fruits and seeds. Butterflies are sensitive to environmental changes, making them excellent indicators of biodiversity and ecosystem health. Butterflies, in their larval stage as caterpillars, are a significant food source for various predators, including birds, reptiles, and other insects. Adult butterflies also serve as prey for birds and bats, integrating them into the local food web.

Malir is important for butterflies and same for the ecosystem. Malir, located in the Karachi division of Sindh, Pakistan, is known for its diverse ecosystems, which include arid regions, rivers, agricultural lands, and coastal areas. This diversity in habitats supports a variety of flora and fauna, contributing to the overall biodiversity of the region.

We started collecting biodiversity records, considering Malir a paradise for butterflies and birds. Interestingly, we found that Malir has a very unique climate that suits the ecology in a way that we can find different species of butterflies throughout the year. Butterflies are very sensitive to harsh (cold/warm) climates, but Malir's environment is well-balanced, neither too hot nor too cool.



© Zarak Baloch

A typical habitat of various species of butterflies in Malir, Karachi, Sindh

75 species of butterflies have been recorded (Table 1), with some being more active in spring, some during and after the monsoon, and others found year-round, such as various blue species, tiger species, grass yellows, painted lady, Common Rose, Mormon, Lime butterfly, Arab species, and others. Based on my experience in various ecosystems across Pakistan, I found that Malir, a semi-arid region, is another world for butterflies. This rich ecosystem and the presence of a suitable climate for butterflies indicate its richness and support for the food chain and ecology.

During the British times, irrigation improved as modern steam engines were introduced, significantly increasing the agricultural portion of the land. The local population shifted towards agriculture, which also increased vegetation and fruit trees. This helped biodiversity to prevail, as butterflies in the region adapted to this revolutionary change through their important role in pollination and supporting the food web.

This ecology of agriculture and natural green spaces suddenly started reversing after the partition of the Indian subcontinent. Karachi became the capital and economic hub for Pakistan, and the demographic change and population migration toward the city generated huge construction needs. River's sand and gravel became the basic need for construction, so the sand mining started in the Malir river from the Korangi areas and then gradually moved upstream toward the Thano region, Darsana Channa, and finally reached Kathore. River sand and gravel are the main element for refilling underground water aquifers, and sand mining impacted the water table. Between the 1970s and 1980s, it became a growing concern for experts and locals. During the 1980s, an act was passed to secure the river habitats and ban sand mining in Karachi. On the other hand, sand mining had already created a significant black money economy, in which police and brokers gained great financial power to hindering the implementation of the ban and leading to illegal mining in the Malir River. This caused a gradual shrinking of green spaces in Karachi. As there was no legislation to safeguard green spaces and fertile agricultural lands, despite being an agricultural country, large cities such as Karachi and Lahore were converting into concrete jungles. Green patches and agricultural lands were becoming housing societies. The term "development" was extremely exploited, and real estate investment became a key market, creating more and more demand. As a result, fertile land and forest lands were being grabbed, and this continues.

For example, we have recorded the Common Joker *Byblia ilithyia* (Figure 1), a rare butterfly species, at the border of Malir and Jamshoro districts. This region has now been land-grabbed by Bahria Town, and the entire area has undergone ecocide (Figure 2). Therefore, we assume that this species may be extinct from this region, as every butterfly species requires its own host-plants for reproduction, and without these host-plants, the species cannot survive. The Malir River is facing significant environmental degradation due to the construction of the Malir Expressway (Figure 3). The riverbed has been extensively excavated, severely impacting the local flora. This disruption has immediate consequences for butterfly species, which are often the first to suffer. The decline in butterfly populations triggers a chain reaction, ultimately affecting the entire ecosystem, including humans, who are an integral part of it.



© Salman Baloch

Figure 1. Common Joker *Byblia ilithyia*, Thado river, October 2020



© Salman Baloch

Figure 2. Common Joker *Byblia ilithyia* Thado river habitat before (Left) and after (Right) decimation view

This alarming situation raises concerns among urban planners, environmental activists, and experts. They warn that unplanned and uncontrolled urbanization will alter the climate and primarily affect the most environmentally sensitive species, such as butterflies. A reduction in butterfly numbers can disrupt the entire ecological chain, potentially turning Karachi into an environmental black hole, rendering it unlivable for humans.

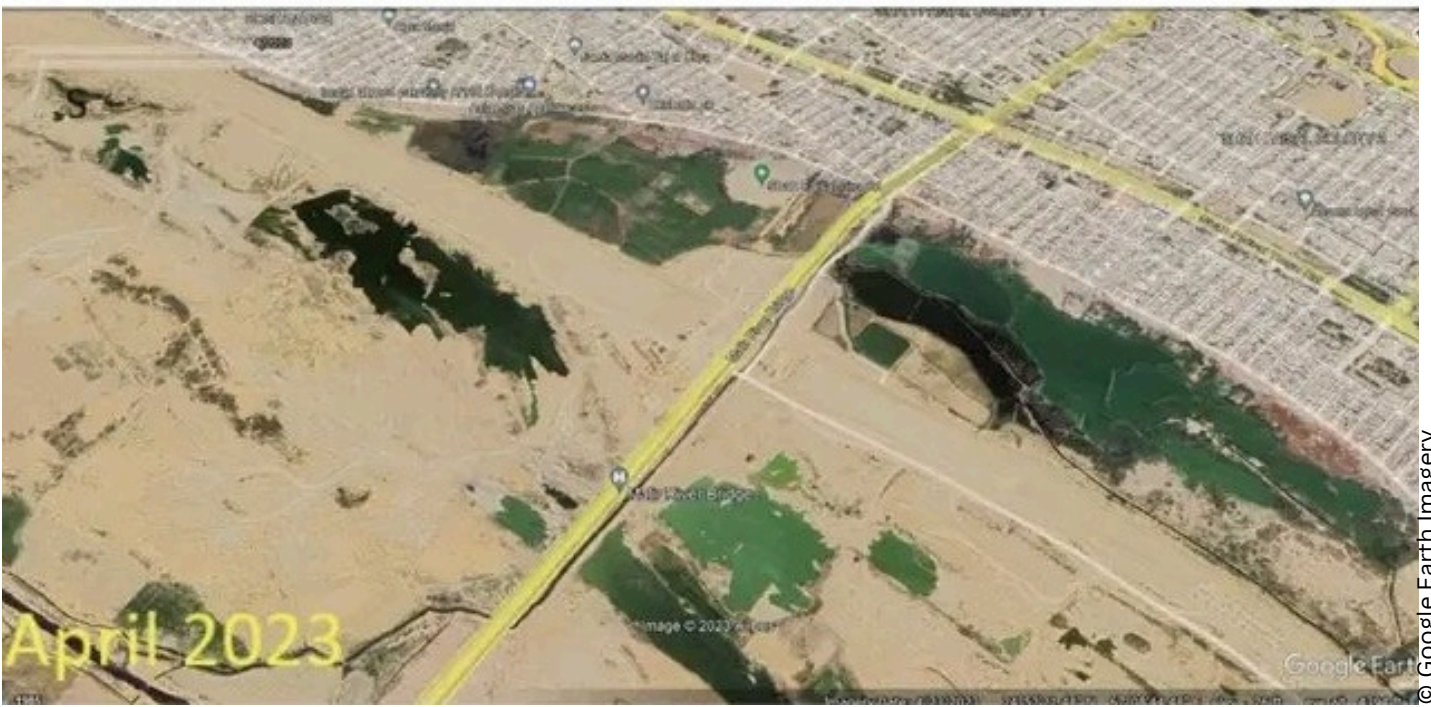
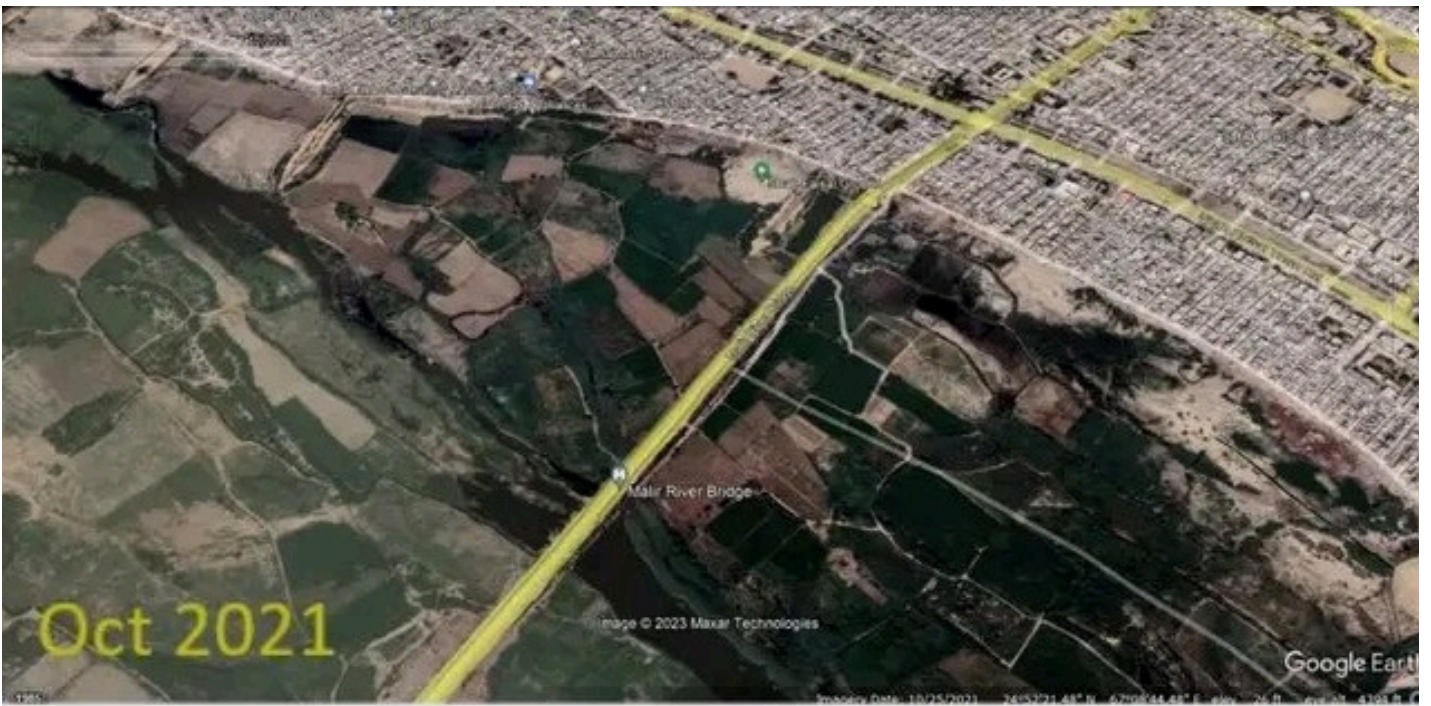
To safeguard the remaining green spaces in Malir and ensure the survival of butterflies, we must take serious measures. This includes legally designating protected areas, restoring native plants, creating community gardens, and promoting eco-friendly urban planning. These actions will help butterflies thrive, contributing to a healthier ecosystem and improving human well-being.

Table 1. Checklist of Butterfly species recorded from Malir and its surroundings

No.	Common Name	Scientific Name
1	Common Rose	<i>Pachliopta aristolochiae</i>
2	Lime	<i>Papilio demoleus</i>
3	Common Mormon	<i>Papilio polytes</i>
4	Dark Clouded Yellow	<i>Colias fieldii</i>
5	Spotless Grass Yellow	<i>Eurema laeta</i>
6	Common Grass Yellow	<i>Eurema hecabe</i>
7	Psyche	<i>Leptosia nina</i>
8	Small Cabbage White	<i>Pieris rapae</i>
9	Desert Bath White	<i>Pontia glauconome</i>
10	Large Salmon Arab	<i>Colotis fausta</i>
11	Small Salmon Arab	<i>Colotis amata</i>
12	Blue-Spotted Arab	<i>Colotis protractus</i>
13	White Arab	<i>Colotis vestalis</i>
14	Little Orange tip	<i>Colotis etrida</i>
15	Crimson-tip	<i>Colotis danae</i>
16	White Orange-tip	<i>Ixias marianne</i>
17	Yellow Orange-tip	<i>Ixias pyrene</i>
18	Common Albatross	<i>Appias albina</i>

19	Pioneer White	<i>Belenois aurota</i>
20	Common (Lemon) Emigrant	<i>Catopsilia pomona</i>
21	Mottled Emigrant	<i>Catopsilia pyranthe</i>
22	Zebra Blue	<i>Leptotes plinius</i>
23	Pointed Ciliate Blue	<i>Anthene lycaenina</i>
24	Tailless Line Blue	<i>Prosotas duboisa</i>
25	Pea Blue	<i>Lampides boeticus</i>
26	Gram Blue	<i>Euchrysops cnejus</i>
27	Plains Cupid	<i>Luthrodes pandava</i>
28	Small Cupid	<i>Chilades parrhasius</i>
29	Forget-me-not	<i>Catochrysops starbo</i>
30	Black-spotted Pierrot	<i>Tarucus balkanicus</i>
31	Indian Pierrot	<i>Tarucus indica</i>
32	Spotted Pierrot	<i>Tarucus nara</i>
33	Striped Pierrot	<i>Tarucus callinara</i>
34	Tiny Grass Blue	<i>Ziula hylax</i>
35	Lesser Grass Blue	<i>Zizina otis</i>
36	Dark Grass Blue	<i>Zizeeria karsandra</i>
37	African Grass Jewel	<i>Freyeria trochylus</i>
38	Small Grass Jewel	<i>Freyeria putli</i>
39	Dull Babul Blue	<i>Azanus uranus</i>
40	Bright Babul Blue	<i>Azanus ubaldus</i>
41	Common Copper	<i>Lycaena phlaeas</i>
42	Scarce Shot Silverline	<i>Spindasis elima</i>
43	Tawny Silverline	<i>Cigaritis acama epargyros</i>
44	Indian Red Flash	<i>Rapala iarbus</i>
45	Common Guava Blue	<i>Virachola isocrates</i>
46	Plain Tiger	<i>Danaus chrysippus</i>

47	Common/Striped Tiger	<i>Danaus genutia</i>
48	Blue Tiger	<i>Tirumala limniace</i>
49	Common Crow	<i>Euploea core</i>
50	Common Evening Brown	<i>Melanitis leda</i>
51	Common Three-ring	<i>Ypthima asterope</i>
52	Joker Butterfly	<i>Byblia ilithyia</i>
53	Common Leopard	<i>Phalanta phalantha</i>
54	Tropical Fritillary	<i>Argynnis hyperbius</i>
55	Painted Lady	<i>Vanessa cardui</i>
56	Lemon Pansy	<i>Junonia lemonias</i>
57	Yellow Pansy	<i>Junonia hierta</i>
58	Blue Pansy	<i>Junonia orithya</i>
59	Peacock Pansy	<i>Junonia almana</i>
60	Danaid Eggfly	<i>Hypolimnas misippus</i>
61	Great Eggfly	<i>Hypolimnas bolina</i>
62	Tawny Coster	<i>Acraea violae</i>
63	Brown Awl	<i>Badamia exclamationis</i>
64	Common Banded Awl	<i>Hasora chromus</i>
65	African Straight Swift	<i>Parnara bada</i>
66	White-branded Swift	<i>Pelopidas thrax</i>
67	Dark Branded Swift	<i>Pelopidas mathias</i>
68	Bevan`s Swift	<i>Pseudoborbo bevani</i>
69	Rice Swift	<i>Borbo cinnara</i>
70	Dingy Swift	<i>Gegenes nostrodamus</i>
71	Spotted Small Flat	<i>Sarangesa purendra</i>
72	Indian Grizzled Skipper	<i>Spialia galba</i>
73	Sindhi Skipper	<i>Spialia doris</i>
74	African Marbled Skipper	<i>Gomalia elma</i>
75	Indian Palm Bob	<i>Suastus gremius</i>



© Google Earth Imagery

Figure 3. Outlook of destruction caused by Malir Expressway along the river and adjoining habitat.



© Salman Baloch

Crimson-Tip *Colotis danae*



© Salman Baloch

Desert Bath White *Pontia glauconome*



Common Evening Brown *Melanitis leda*

© Sadiq Baloch



Tawny coaster *Acraea violae*

© Sadiq Baloch



Indian Pierrot *Tarucus indica*

© Salman Baloch



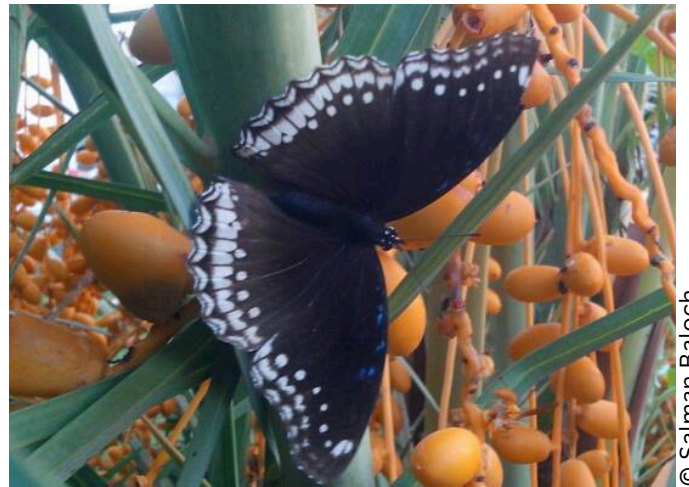
African Marbled Skipper *Gomalia elma*

© Sadiq Baloch



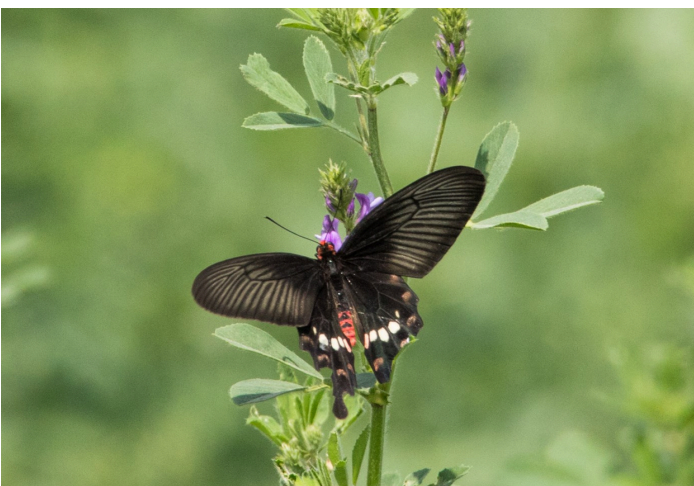
Sindhi Skipper *Spialia doris evanida*

© Salman Baloch



Great eggfly *Hypolimnas bolina*

© Salman Baloch



Common Rose *Pachilopta aristolochiae*

© Salman Baloch



Dull Babul Blue *Azanus uranus*

© Salman Baloch

کامن لاسکر تتلی کی پاکستان میں دریافت

First Record of Common Lascar *Pantoporia hordonia* from Pakistan

مریم مجید ڈار

18 ستمبر 2023 کو میں نے فارورڈ کھوٹہ ضلع حویلی (کشمیر) میں اپنے گھر کے باغیچے میں ایک تتلی کا مشاہدہ کیا جو اس سے قبل میں نے کبھی نہیں دیکھی تھی۔ یہ ایک چھوٹی سیلر سے مشابہ تتلی تھی مگر سیلر کے سفید نشانات کے برعکس اس کے پروں کے اوپری حصوں پر زرد پٹیاں تھیں جو سیلرز کی نسبت چوڑی اور کناروں سے غیر ہموار تھیں۔ تتلی کو کامن لاسکر کے طور پر شناخت کیا گیا۔ یہ تتلی پاکستان/پاکستان زیر انتظام کشمیر میں اس سے پہلے کبھی نہیں دیکھی گئی تھی۔



© Akram Awan

Common Lascar *Pantoporia hordonia*, Margallah Hills National Park, 7th November 2023

کامن لاسکر جنوب مشرقی ایشیا میں پائی جانے والی ایک عام تتلی ہے جو سری لنکا اور جنوبی بھارت (تامل ناڈو) سے لے کر شمال میں ہمالیائی ریاستوں ہماچل پردیش اور جموں کشمیر (راجوری سے کٹھوعہ) تک مشاہدہ کی گئی ہے جو پاکستانی سرحد سے زیادہ دور نہیں لہذا اس تتلی کے پاکستانی زیر انتظام کشمیر سے ملنے کے امکانات کافی زیادہ تھے خصوصاً موسم خزاں میں جب اس خطے میں بہت سی تتلیاں ہجرت کر کے دور دراز علاقوں بشمول پاکستانی حدود تک پھیل جاتی ہیں۔ اسی موسم میں تتلیاں ہمالیہ کی بلندیوں سے اتر کر اولپنڈی، اسلام آباد اور ہری پور کے کم بلندی والے علاقوں میں پہنچتی ہیں۔ یہی وجہ ہے کہ ان مہینوں میں پاکستان بٹرفلائی سوسائٹی کی ٹیمز بکثرت مارگلہ بلز نیشنل پارک کا دورہ کرتی رہتی ہیں تا کہ ایسی خوب صورت اور نایاب تتلیوں کی پاکستان میں موجودگی کو ریکارڈ کیا جا سکے۔

آزاد کشمیر کے ریکارڈ کے بعد پاکستان بٹر فلائی سوسائٹی کے ڈائریکٹر اکرم اعوان نے یہ تتلی اکتوبر اور نومبر کے مہینوں میں مارگلہ ہلز نیشنل پارک سے بھی ریکارڈ کی۔ اس دریافت سے اس امکان کو بھی تقویت ملتی ہے کہ کامن لاسکر پاکستان کے دیگر حصوں میں بھی پائی جا سکتی ہے خصوصاً سیالکوٹ سے اسلام آباد تک ستمبر سے نومبر تک کا وقت اس خوب صورت تتلی کی تلاش کے لئے بہترین ہے۔



A trail at Margallah Hills National Park, Islamabad Capital Territory (ICT)

© Akram Awan

اس تتلی کے نر اکثر نم زمین پر نمکیات کے حصول کی خاطر بیٹھے ملتے ہیں اور نر اور مادہ دونوں نیکٹر کے لئے پھولوں پر مندلاتے دیکھے گئے ہیں۔ یہ تتلی دھوپ سینکنے اور پھولوں کا رس چوسنے کے دوران اکثر اپنے پر پھیلائے رہتی ہے۔ کامن لاسکر کی اڑان سست ہوتی ہے لیکن اگر اسے چھیڑا جائے تو یہ فوراً گھنے پتوں یا درختوں میں پناہ لے لیتی ہے۔

یہ تتلی شیکاکائی، کیکر اور سرس کے پودوں پر انڈے دیتی ہے لہذا اسکو بندی میں 'شیکاکائی تتلی' کا نام دیا گیا ہے۔ اس کا انگریزی نام لاسکر برطانوی دور میں رکھا گیا تھا جو ہندوستانی ملاح کے لیے استعمال ہوتا ہے۔ پاکستان بٹر فلائی سوسائٹی کی ایک ٹیم اردو اور پاکستان کی علاقائی زبانوں میں تتلیوں کے نام تخلیق کرنے کا کام کر رہی ہے۔ پاکستان کی تتلیوں کی فہرست میں لاسکر کے اضافے کے بعد اس نوع کے مختلف اردو نام بھی زیر غور ہیں۔ اگر آپ کے پاس اس سلسلے میں کسی قسم کی تجاویز ہیں تو آپ بی ایس سے مندرجہ ذیل ای میل پر رابطہ کر سکتے ہیں:

pakbutterflysociety@gmail.com

Rarity Notes

Compiled by Muhammad Akram Awan

- Muhammad Ali photographed a Peacock Royal *Tajuria cippus* on 27th April 2024 from Jandi Chontra Bhimber district (PAJK). This is first record of this butterfly from Pakistan Administrated Jammu and Kashmir.
- Balochi Heath *Lyela macmahoni* was photographed by Salman Baloch and M. Akram Awan from Khojak top (Qilla Abdullah) on 7th May 2024 and from Hazarganji-Chiltan National Park (Quetta) on 10th May 2024. This Pak-Afghan endemic butterfly was last documented from Pakistan 41 years ago by a German Lepidopterist Wolfgang Ecklweiler, when he collected some specimens from Urak valley in May 1983. This species has never been photographed in its natural habitat (alive) before.

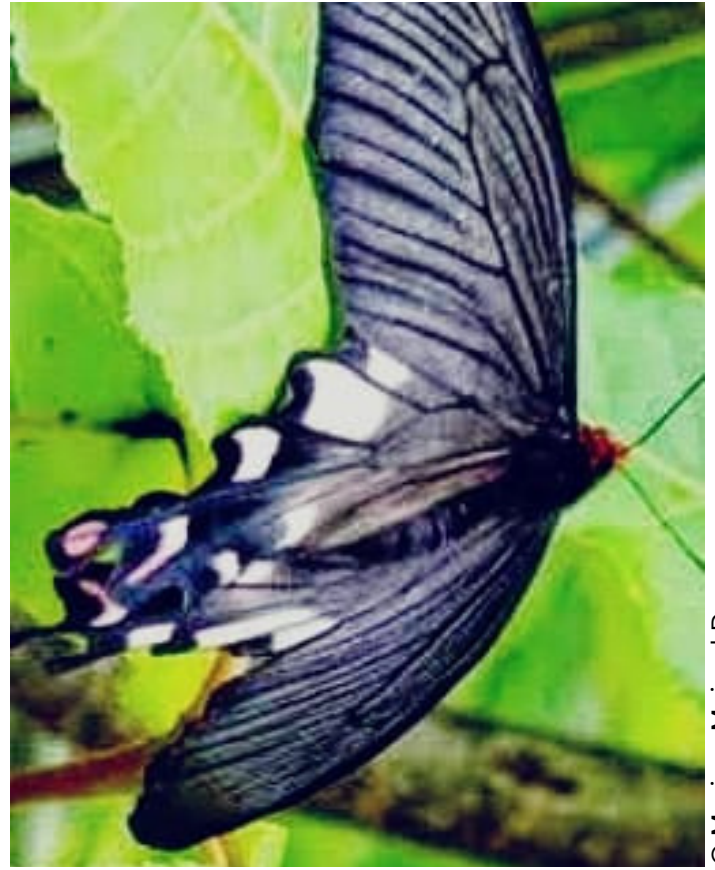


© Muhammad Ali

Peacock Royal *Tajuria cippus*, Jandi Chontra Bhimber district, Azad Kashmir - 27 April 2024

- Zulfiqar Ali Sanbhal recorded European Red Admiral *Vanessa atalanta* from Nowshera (KP) on 14th May 2024. This is 4th documented record from Pakistan and 3rd record for KP Province.
- On 17th May 2024 Muhammad Muzammil Chaudhry recorded a Common Castor *Ariadne merione* from a nursery in Kot Addu (Southern Punjab). This is first record of this species from the district and an extension of its known range to the southwest. Common Castor was known to be found up to Multan, prior to this record.
- First Common Yellow Swallowtail *Papilio machaon* of Southern KP Province was recorded by Muhammad Ali Rajput from Mughal Kot, Tehsil Darazinda, Dera Ismail Khan in May 2024. This species is known to occur in Northern Pakistan and Balochistan. (A complete checklist of butterflies of D.I.Khan district has been presented on Page 19-20 of the current issue of PBSQB.)

- Azan Karam recorded first European Red Admiral *Vanessa atalanta* of Swat district from Larkiya'n Banda, Bahrain on 23rd May 2024. This is 5th documentation of this butterfly from Pakistan and 4th record from KP Province.
- Marium M. Dar recorded first Great Windmill *Byasa dasarada* of PAJK from Haveli district on 10th June 2024. This windmill is the largest Pakistani butterfly, previously known only from Galiyat of Abbotabad district (KP). It is widespread in the Himalayas up to Northern West Bengal and Northeast India.



© Marium Majeed Dar

Great Windmill *Byasa dasarada*, Haveli district

On 1st June 2024, Muhammad Shaheer Niazi and Isha Mudassir photographed a European Red Admiral *Vanessa atalanta* from Panjpeer rocks, Kahuta, Rawalpindi district. This is the 6th record of this species from Pakistan and first record from the Punjab province.



© Azan Karam

European Red Admiral *Vanessa atalanta*, Larkiya'n Banda, Bahrain, Swat district

New to Butterfly-watching? Start Here!

Below are some relevant Links for you if you are interested in learning more about the Butterflies of Pakistan and PBS activities:

Facebook:

(Group): <https://web.facebook.com/groups/131718433700946>

(Page): <https://web.facebook.com/butterfliesofpakistan>

Linkedin:

<https://www.linkedin.com/company/pakistan-butterfly-society/posts/?feedView=all>

Twitter:

<https://twitter.com/PakButterflySoc>

Inaturalist:

https://www.inaturalist.org/observations?project_id=28750

Email:

pakistanbutterflies@gmail.com

pakbutterflysociety@gmail.com

Website:

Pakistan Butterfly Society: <https://pakbutterflysociety.com>

Rewilding Indus Library: <https://rewildinginduslibrary.org>

Pakistan Butterfly Society Quarterly Bulletin Schedule

Spring Issue: 15th March

Summer Issue: 15th June

Monsoon Issue: 15th September

Winter Issue: 15th December

Editorial Team:

Editor-in-Chief: Muhammad Akram Awan

Editors: Azan Karam, Zafeer Ahmed Shaikh



Rewilding Indus (RI) is a body of like minded individuals concerned with the crippling loss of biodiversity in Pakistan. This young initiative is a collective effort towards making a dent in Wildlife Research and Conservation in Pakistan. This Bulletin has been made possible through RI's technical support.

