

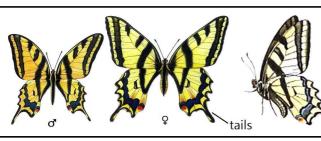


LEBANON BUTTERFLY MONITORING SCHEME (LBMS)



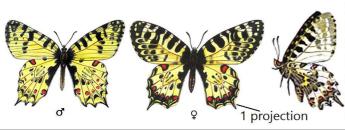






#### Tiger swallowtail (Papilio alexanor)

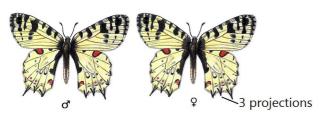
Big, one of the largest, 60-70 mm, yellow with black markings, distinct tails on hindwings. Mnemonic: **BYBT**, **Big Yellow & Black Tailed**Flies: April-August, Flight Pattern: gliding & hovering, Habitat: low to medium heights, sunny hills, scrub, meadows, woodlands
Associated Plants: Ferula tingitana, Heptaptera crenata, Scaligeria cretica, Centranthus ruber



#### Eastern festoon (Allancastria cerisyi)

Big, looks like tiger swallowtail but smaller and lacks long tails on hindwings, 50-60 mm. Mnemonic: **BYBN**, **Big Yellow & Black Not tailed** Flies: March-July, Habitat: mainly lower elevations, sunny hills, meadows, farmland, river valleys

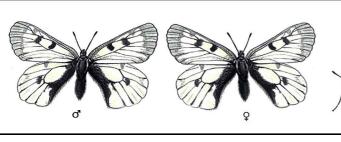
Associated Plants: Aristolochia altissima, A. billardieri, A. maurorum, A. parvifolia, A. scabridula



#### Lebanese festoon (Allancastria deyrollei)

A **BYBN** butterfly, but differentiated from eastern festoon by being larger, lighter, and with 3 hindwing projections instead of 1, 60-80 mm Flies: April-June, Habitat: medium to higher altitudes, plains, steppes, mountain valleys

Associated Plants: Aristolochia bottae, A. poecilantha, A. scabridula, A. maurorum

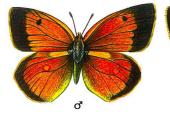


#### **Clouded Apollo** (Parnassius mnemosyne)

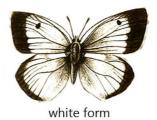
**Brimstone** (Gonepteryx rhamni)

Big, white, larger than green-veined white, wings rounded and semitransparent, looks silvery at distance, 50-70 mm, Mnemonic: **BWNR**, **Big White Not tailed Rounded wings**Flies: April-August, Flight Pattern: slow, Habitat: all types and altitudes

Associated Plants: Corydalis solida, Astragalus, Vicia, Carduus, Centaurea

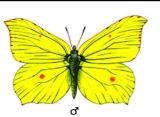


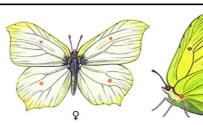




**Lebanon clouded yellow** (*Colias aurorina*) Big, reddish-orange, unmistakable, larger than coppers, 53-55 mm, Mnemonic: *BRB, Big Red* with *Black borders* 

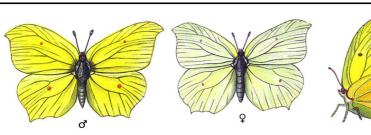
Flies: May-July, white form June/July, Habitat: all types, prefers dry areas, steppes, fields Associated Plants: *Astragalus* 





# Big, bright yellow, underside slightly greenish, 52-64 mm, females lighter (not different species!), leaf-shaped wings, Mnemonic: **BYLW**, **B**ig **Y**ellow with **L**eaf-shaped **W**ings Flies: May-October, Habitat: all types and altitudes Associated Plants: *Rhamnus*, *Carlina*, *Cirsium*, *Carduus*,

Associated Plants: Rhamnus, Carlina, Cirsium, Carduus, Stachys, Ajuga, Primula, Taraxacum, Pulicaria, Centaurea, Origanum, Silene, Prunella, Vicia



**Powdered brimstone** (Gonepteryx farinosa)

A **BYLW** butterfly, slightly larger and lighter than brimstone, female pale bluish-white, 55-64 mm Flies: June/July, Habitat: low to medium heights, hills, meadows, scrub, woodland margins Associated Plants: *Paliurus spina-christi, Ziziphus, Rhamnus, Phlomis fruticosa* 

(Note: drawings not drawn to scale, refer to wing sizes for approximate dimensions)

Drawings derived from A Field Guide to the Butterflies of Lebanon and the Middle East and Butterfly Gardening in Lebanon.

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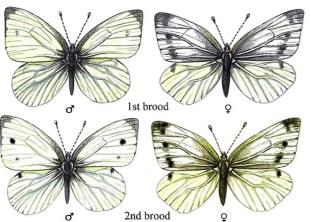


LEBANON BUTTERFLY MONITORING SCHEME (LBMS)









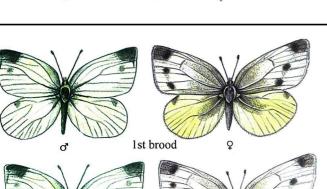


# Green-veined white (Pieris napi)

Vicia, etc.

Medium-sized, white, common and unmistakable, slight differences between broods (less grey and more black in 2nd), refer to expert to distinguish with other nonrecorded white species, 32-52 mm

Flies: March-October, Habitat: all except highest peaks Associated Plants: Alliaria petiolata, Arabis, Brassica rapa, Capsella bursa-pastoris, Cheiranthus cheiri, Crambe, Diplotaxis tenuifolia, Lepidium virginicum, Raphanus, Sinapis, Sisymbrium officinale, Thlaspi arvense, Stachys, Ajuga, Ranunculus, Cardamine, Stellaria, Pulicaria, Senecio, Silene, Cirsium, Carduus,



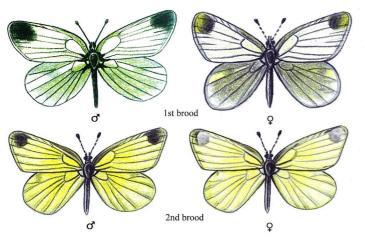
2nd brood



#### **Mountain small white** (*Pieris ergane*)

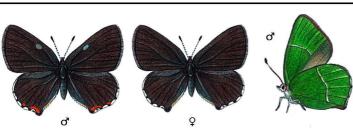
Medium-sized, white, common, smaller than green-veined white with more pointed forewings and black tips and less black on underside, 2nd brood greyish, 34-50 mm

Flies: April-September, Habitat: medium heights, dry stony areas, thickets, mountain valleys, scrub Associated Plants: *Isatis tinctoria*.





Eastern wood white (Leptidea duponcheli)
Medium-sized, white, common, resembles greenveined and mountain small whites but smaller, more silvery, and forewing tips rounded, 2nd brood yellowish with less markings, 34-42 mm Flies: April-July, Habitat: all except highest peaks Associated Plants: Dorycnium, Lathyrus aphaca, Onobrychis cornuta



#### Green hairstreak (Callophrys rubi)

Small to medium-sized, distinct unmistakable green underside observable when butterfly perches, 25-34 mm

Mnemonic: SDG, Small Dark with Green side

Flies: March-June, Habitat: all types

Associated Plants: Dorycnium, Hedysarum, Lotus, Helianthemum, Rhamnus, Arbutus, Ribes, Genista, Cytisus, Colutea, Erica, Rubus, Vicia,

Crataegus, Sambucus, etc.

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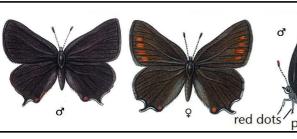


LEBANON BUTTERFLY MONITORING SCHEME (LBMS)









#### Ilex hairstreak (Satyrium ilicis)

Small to medium-sized, dark, larger than green hairstreak but lacks green underside, red spots on underside, 32-36 mm, Mnemonic: SDR, Small Dark with Red spots on underside

Flies: May-August, Habitat: low to medium heights, oak forests, meadows, fields, scrub, heaths

Associated Plants: Quercus, Thymus, Origanum, Sedum, Rubus,

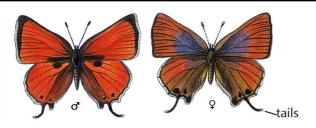
projection Sambucus



## Orange-banded hairstreak (Satyrium ledereri)

Small to medium-sized, lacks the hindwing projection of Ilex hairstreak, lighter underside with orange band, 28-34 mm, Mnemonic: **SDO**, **S**mall **D**ark with **O**range band on underside Flies: June-August, Flight Pattern: like all hairstreaks, close to ground, Habitat: low to medium heights, dry stony places, steppes

orange band Associated Plants: Atraphaxis, Prunus, Mentha, Astragalus



#### Pomegranate hairstreak (Deudorix livia)

Small to medium-sized, unmistakable coppery-red, distinct from coppers and vernal coppers by having hindwing tails, 30-40 mm, Mnemonic: SCT, Small Coppery-red with Tails

Flies: all year round, Flight Pattern: like all hairstreaks, fast and close to ground, Habitat: low to medium heights, farmland, groves Associated Plants: Punica granatum, Acacia, Eriobotrya japonica, Allium, Heliotropium

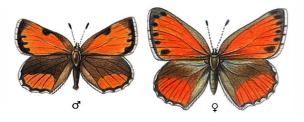


#### Turkish vernal copper (Tomares nogelii)

Small to medium-sized, dark brown and orange, darker than Syrian vernal copper with lighter undersides, don't confuse with hairstreaks with which it often flies! 30-32 mm

Flies: May-July, Flight Pattern: like hairstreaks, direct and close to ground, Habitat: all except highest peaks, in pastures, steppes, pine forests, scrub

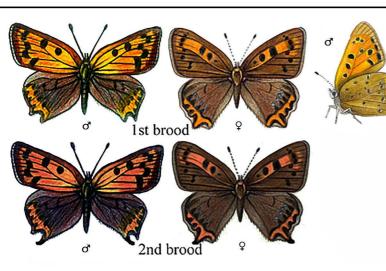
Associated Plants: Astragalus, Cistus



#### **Syrian vernal copper** (*Tomares nesimachus*)

Small to medium-sized, like Turkish vernal copper but slightly lighter brown with more orange on uppersides and darker undersides, 28-34 mm

Flies: May-July, Flight Pattern: like hairstreaks, fast, direct, and close to ground, Habitat: all except highest peaks, in pastures, steppes Associated Plants: Astragalus



#### **Small copper** (*Lycaena phlaeas*)

Small, unmistakably copper or reddish-orange with dark brown hindwings and many black spots, 2nd brood darker and often tailed, 22-36 mm, an SCB

Flies: February-October, Habitat: all types, look under pines Associated Plants: Oxyria digyna, Polygonum aviculare, Rumex acetosella, R. conglomeratus, R. crispus, Hedera helix, Taraxacum, Rubus, Senecio, Achillea, Origanum, Pulicaria, Ranunculus, Bellis, Carduus, Cirsium, Hieracium, Scabiosa, **Pinus** 

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LEBANON BUTTERFLY MONITORING SCHEME (LBMS)







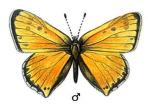




## **Lesser purple-shot copper** (Lycaena asabinus)

Small, unmistakably copper or golden-orange on wings with small black dots and narrow black marginal band, 25-31 mm, an SCB Flies: May-July, Habitat: upper heights, mountain slopes and streams, gorges

Associated Plants: Rumex, Acantholimon, Mentha





#### Golden copper (Lycaena ochimus)

Small, bright copper or golden-orange wings, pale greyish undersides with faint markings, don't confuse with other coppers! 30-32 mm, Mnemonic: SCB, Small Copper Butterfly Flies: June-September, Habitat: higher altitudes, dry slopes, pastures

Associated Plants: Polygonum aviculare, Rumex crispus, Acantholimon



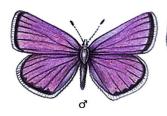




#### **Fiery copper**(*Lycaena thetis*)

An SCB, males with coppery-red wings, many black spots in females, 30-34 mm

Flies: July/August, Flight Pattern: fast, Habitat: upper heights, steppes, mountain valleys and slopes Associated Plants: Acantholimon, Thymus, Origanum, Mentha, Eryngium







#### **Northern blue** (Lycaeidas idas)

Small, males silvery-blue to violaceous blue, like many blues don't confuse females with hairstreaks or browns, 25-34 mm, Mnemonic: SBB, a Small Blue Butterfly Flies: March-August, Habitat: all types Associated Plants: Lotus corniculatus, Genista, Melilotus

albus, Trifolium pratense, Cercis siliquastrum







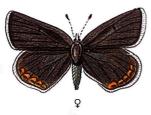
#### Zephyr blue (Plebejus pylaon)

An SBB, males light violaceous blue, females dark brown, 28-34 mm

Flies: May-July, Habitat: medium to higher altitudes, pastures, meadows

Associated Plants: Astragalus angustifolius, A. echinus

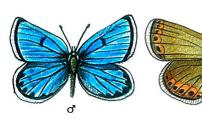






#### **Geranium argus** (Eumedonia eumedon)

Small, dark, don't confuse with hairstreaks, males and females brown with row of pale orange dots on hindwings, 25-30 mm, Mnemonic: SDB, a Small Dark Blue butterfly, i.e. an argus Flies: May-August, Habitat: higher altitudes Associated Plants: Erodium trichomanifolium, Geranium cinereum, Crepis, Lathyrus, Vicia



#### Starry-backed blue (Aricia dorsumstellae)

An SBB, males sky-blue, females brownish with orange marginal bands, 25-30 mm

Flies: May/June, Habitat: highest altitudes, mountain slopes, cliffs, gorges

Associated Plants: Erodium trichomanifolium, Vicia canescens

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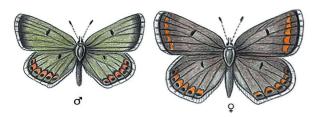


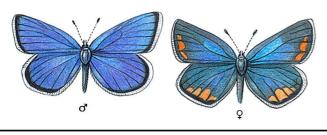
LEBANON BUTTERFLY MONITORING SCHEME (LBMS)

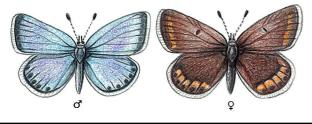


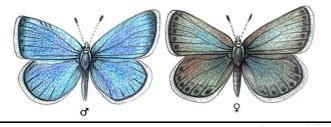


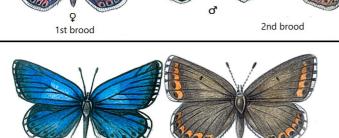


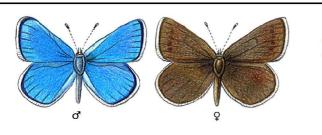












#### Lebanese blue (Aricia bassoni)

An **SDB**, males dark greenish-grey, females with orange marginal band, don't confuse with hairstreaks or Geranium argus, 28-30 mm

Flies: May, July, & September, Habitat: higher altitudes, mountain streams and slopes

Associated Plants: Erodium cicutarium, Eryngium, Mentha

#### Eastern mazarine blue (Polyommatus bellis)

An SBB, larger than other blues, males light blue, females blue with distinct orange marginal bands on wings, 30-42 mm Flies: April/May, Flight Pattern: like many blues, flight weak and indirect, often close to ground, Habitat: medium to high altitudes, pastures, stony slopes

Associated Plants: Lotus corniculatus, Melilotus officinalis, Trifolium pratense

#### Baby blue (Polyommatus isauricoides)

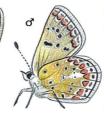
An SBB, small to medium-sized, males silvery-blue while females brown, don't confuse with starry-backed blue which is larger and has more distinct underside markings, 25-35 mm Flies: May-August, Habitat: higher altitudes, mountain slopes stony steppes, scrub

Associated Plants: Astragalus, Mentha

#### **Cedar Mountain blue** (*Polyommatus ellisoni*)

An SBB, males bright blue, females silvery-brown, 25-35 mm Flies: June/July, Habitat: higher altitudes, mountain slopes, gorges, thickets

Associated Plants: Vicia canescens, V. tenuifolia



Chapman's blue (Polyommatus thersites) An SBB, males bright violaceous-blue, females brown with orange marginal band, 28-30 mm

Flies: April-August, Habitat: upper heights, stony slopes, scrub, meadows, pastures Associated Plants: Onobrychis caput-galli

Lebanese Adonis blue (Polyommatus syriaca) An SBB, males bright blue, females brown, refer to expert to distinguish between this species and other blues, 30 mm

Flies: May-August, Habitat: higher altitudes, mountain slopes, cliffs, stony places

Associated Plants: Coronilla libanotica, C. varia

#### **Green-underside blue** (Glaucopsyche alexis)

An SBB, males with sky-blue wings, underside green, don't confuse females with hairstreaks or Geranium argus! 27-36 mm Flies: April-June, Habitat: all types except highest peaks Associated Plants: Calicotome villosa, Coronilla varia, Cytisus, Genista, Lathyrus pratensis, Medicago sativa, M. lupulina, Melilotus officinalis, Onobrychis, Pisum, Spartium junceum, Trifolium pratense, T. repens, Astragalus, etc.

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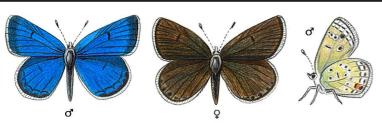


#### LEBANON BUTTERFLY MONITORING SCHEME (LBMS)









#### Odd-spot blue (Turanana endymion)

An SBB, males deep blue with black marginal bands, females bluish-brown, don't confuse females with hairstreaks or Geranium argus! 20-32 mm Flies: May-July, Habitat: medium to higher altitudes, mountain valleys and slopes

Associated Plants: Acantholimon, Thymus, Crataegus,

Medicago sativa







Niobe fritillary (Argynnis niobe)

Big, unmistakable, orange with black spots and markings, females duller, 41-64 mm, Mnemonic: BOBB, a Big Orange & Black Butterfly

Flies: May-August, Flight Pattern: fast, close to ground, Habitat: all types, pastures, meadows, scrub, look on ground where it frequently basks

Associated Plants: Viola odorata, Plantago lanceolata

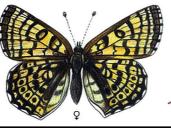






Queen of Spain fritillary (Issoria lathonia) A BOBB, orange with large round black spots, distinguished from the Niobe by being smaller and having pearly underwing spots, 35-50 mm Flies: March-October, Habitat: all types at upper heights Associated Plants: Viola odorata, Medicago sativa, Anchusa azurea, Borago officinalis, Rubus, Mentha







## Glanville fritillary (Melitaea cinxia)

A **BOBB**, orange-yellow, black markings distinctly "striped," females lighter and larger, 37-52 mm Flies: April-August, Habitat: all types Associated Plants: Achillea, Plantago lanceolata, P. major, Viola, Veronica, Corynephorus, Lotus, Taraxacum, Hieracium, Armeria



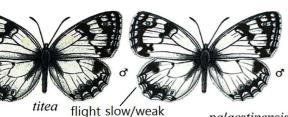


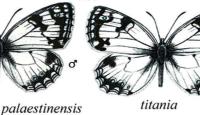
#### Toadflax fritillary (Melitaea didyma)

A BOBB, males brightly reddish-orange, females duller and larger, 35-50 mm

Flies: March-October, Habitat: all types, look on ground might be basking

Associated Plants: Anarrhinum orientale, A. orontium, Plantago lanceolata, P. major, Dianthus, Phlomis, Linaria, Veronica, Teucrium Levantine marbled white (Melanargia titea)





Big, white with unmistakable black markings, easily distinguishable from green-veined whites and other whites, different subspecies, 55 mm, Mnemonic: BWB, a Big White & Black butterfly, Flies: April-August, Habitat: all types, pastures, scrub, steppes, ruderal areas, meadows Associated Plants: Poa. Centaurea. Carduus







Freyer's grayling (Neohipparchia fatua)

Medium-sized, males dark brown, females slightly lighter, conspicuous eyespots on wings, 30-34 mm, Mnemonic: **BDBE**, a **B**ig **D**ark **B**utterfly with **E**yespots Flies: May-October, Habitat: low to medium heights, stony places, woodlands, thickets, olive groves, scrub Associated Plants: Poa, Festuca

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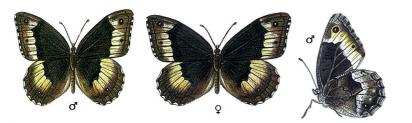


LEBANON BUTTERFLY MONITORING SCHEME (LBMS)



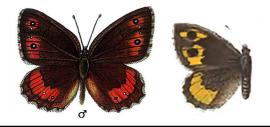






**Rock grayling** (Hipparchia alcyone) A **BDBE**, big, unmistakable, dark brown with distinct yellowish-white bands on wings, 46-60 mm

Flies: June-August, Habitat: all except highest peaks, in stony slopes, thickets, pine woods, heaths, meadows Associated Plants: Arrhenatherum elatius, Brachypodium pinnatum, B. sylvaticum, Bromus, Holcus lanatus



Klug's tawny rock brown (Pseudochazara pelopea) A BDBE, dark brown with red or orange bands that become wider in the hindwings, 50-54 mm Flies: June-August, Habitat: higher altitudes, stony mountain slopes, cliffs, gorges, steppes Associated Plants: grasses, Cirsium, Carduus

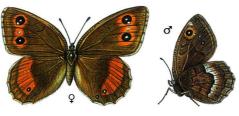


**Turanian rock brown** (*Pseudochazara telephassa*) A BDBE, dark brown with distinct orange bands, like Klug's but smaller, band not interrupted, and duller undersides, 42-45 mm

Flies: May-July, Habitat: all types, especially at medium altitudes, mountain meadows, steppes

Associated Plants: grasses, Dianthus, Echinops, Lavandula





**Great sooty satyr** (Satyrus ferula) A BDBE, unmistakable, males blackishbrown, females lighter with orange marks, 50-60 mm

Flies: June-August, Habitat: medium to higher altitudes, cliffs, pastures, meadows Associated Plants: Festuca valesiaca, Stipa







**Dusky meadow brown** (Hyponephele lycaon) A BDBE, smaller, males and females dark brown but lacking orange bands, with unmistakable orange spot on underside of forewing, pale underside hindwing, 36-40 mm

Flies: June-August, Habitat: all except highest peaks Associated Plants: Poa annua, Aira







**Oriental meadow brown** (Hyponephele lupinus) A BDBE, larger than the dusky meadow brown, wings golden-brown with distinct black markings, 40-50 mm

Flies: June-August, Habitat: upper heights, mountain slopes, pastures, thickets, cedar forests Associated Plants: Poa annua, Stipa parviflora







**Lattice brown** (Kirinia roxelana)

A **BDBE**, one of the largest browns, males dark brown with orange forewing patches, females larger with more conspicuous orange, 55-60 mm Flies: April-September, Flight Patterns: as all browns, flies short distances and then perches, look in shades of trees, Habitat: low to medium heights Associated Plants: Brachypodium

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LEBANON BUTTERFLY MONITORING SCHEME (LBMS)













#### **Oberthur's grizzled skipper** (*Pyrgus armoricanus*)

A skipper, small, wings light golden brown, undersides whitish, 24-28 mm, Mnemonic: SAB, a Small Active Butterfly, or skipper Flies: May-August, Habitat: all except highest peaks, in pastures, waysides, thickets, meadows, slopes Associated Plants: Potentilla reptans, Helianthemum nummularium, Fragaria, Thymus, Achillea

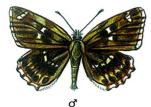






#### Kiki's skipper (Spialia phlomidis)

A SAB, unmistakably dark brown with rows of white spots, undersides yellowish-brown, 28-30 mm Flies: May-July, Flight Pattern: as all skippers, fast and close to ground, Habitat: all types, stony slopes, grasslands, meadows, steppes, scrub Associated Plants: Convolvulus libanoticus, C. lineatus, Dianthus







**North African skipper** (*Carcharodus stauderi*) A SAB, distinct dark brown or reddish-brown wings with black and white spots, 25-35 mm Flies: March-October, Habitat: all types, stony slopes, pastures, valleys, riverbeds Associated Plants: Marrubium vulgare, Stachys







#### **Millet skipper** (*Pelopidas thrax*)

A SAB, but big and larger than other skippers, distinctly yellowish-brown or dark brown with small white or yellow dots, hooked antennae, and pointed wings, 42-51 mm Flies: May-July, September/October, Habitat: low to medium heights, riversides, grassy places, farmland, woodlands Associated Plants: Imperata cylindrica, Oryza

Note: details and images of all Lebanese species can be obtained online from LEPIDOPTERA LIBANOTICA/Butterflies and Moths of Lebanon at www.butterflies.spnl.org

Any questions or concerns? Any butterfly you're not sure of? Or need any confirmation and validation? Please call or email Husein Zorkot, Lepidopterist and Butterfly Expert, LBMS founder, and BG & P manager Email: huseinspnl@gmail.com

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