

## INSECT LENS



***Leaf rolling weevil, Parapoderus submarginatus (Coleoptera: Attelabidae)***

*Parapoderus submarginatus* are small beetles of size 2-8 mm and easily recognisable by their square elytra, that does not cover the last abdominal segment. They are slow moving, but good flyers. Adults feed on leaves and buds and they develop either in leaf rolls or leaf mines, stems or flower heads.

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***Mud wasp (Hymenoptera)***

*Here wasp is bringing a caterpillar for its progeny as mass provisional feeding behaviour.*

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*Leaf webber, Eretmocera impactella (Scythrididae: Lepidoptera)*

*Leaf webber is sporadic pest of various Amaranthaceae and other food plants distributed in the Indian subcontinent. Caterpillars web leaves with white silken threads and remain hidden in folds feeding from inside.*

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***Fulgorid Bug (Fulgoridae: Hemiptera)***

*The family Fulgoridae is a large group of hemipteran insects, sometimes referred to as lanternflies or lanthorn flies, though they do not emit light.*

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***Cuckoo wasp, *Chrysis angolensis* (Chrysididae: Hymenoptera)***

*Like the cuckoo bird, cuckoo wasps will infiltrate the nests of other wasps and bees and lay their eggs alongside their hosts' offspring. Once these eggs hatch, the young cuckoo wasp's larvae will feed on food stored in the nest for the host's offspring, such as a paralysed spider or caterpillar.*

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**Giant**

**scales**



***Monophlebids (Monophlebidae: Hemiptera)***

*Monophlebids is a family of scale insects commonly known as the giant scales or monophlebids. They occur in most parts of the world but more genera are found in the tropics than elsewhere.*

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***Oleander hawk moth, *Daphnis nerii* (Sphingidae: Lepidoptera)***

*Oleander hawk moth was basking in the sun on turmeric leaf stalks. Its larvae are notably green with blue eyespots, often seen munching on nerium leaves.*

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***Red lanternfly, Kalidasa lantana (Fulgoridae: Hemiptera)***

*The red lanternfly is identified by a slender and flexible stalk-like outgrowth arising from above the tip of its snout.*

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***Red spider mite: Tetranychus sp. (Tetranychidae: Acari)***

*The red spider mites (Tetranychus sp.) spin the three-dimensional webs to protect themselves from biotic and abiotic factors and it is called as 'ballooning'. This mechanism also aids in their dispersal from plant to plant. The host plant is garden pea, Pisum sativum.*

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***Gynandromorph of tasar silk moth, *Antheraea mylitta* (Saturniidae: Lepidoptera)***

*In the environment, gynandromorph phenomenon is very rare. Here in the Tasar silk moth, left side represents female (gyn) characters whereas, male (andro) characters in the right side. Gynandromorphy is thought to occur when female egg cells develop with two nuclei- so that one nucleus contains a single Z chromosome and the other contains a single W.*

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***Rock bee, Apis dorsata (Apidae: Hymenoptera)***

*Apis dorsata* is one of the most dangerous animals of the south east Asian jungles due to their threatening defensive behaviours. However, the bees are not managed for pollination, many crops throughout southern Asia depend on rock bees for pollination viz., cotton, mango, coconut, coffee, pepper, star fruit, and macadamia.

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***Indian common club-tail dragonfly, Ictinogomphus rapax (Gomphidae: Odonata)***

*Indian common club-tail dragonfly usually perches on a bare twig facing the water, commonly found in ponds, tanks and rivers. It breeds in running and still water.*

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***The African Fig fly (AFF), *Zaprionus indianus* (Drosophilidae: Diptera)***

*Z. indianus* is considered as cosmopolitan and measures approximately 2.5 to 3.0 mm with red eyes. *Z. indianus* is a generalist that breeds on fallen fruit and fruit on the tree, but does not attack unripe and undamaged fruits.

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***Blister beetle, Mylabris pustulata (Meloidae: Coleoptera)***

*The beetle gets its name from its defensive secretion of Cantharidin, a blistering agent used in the treatment of warts, unwanted tattoos and the papules of Molluscum Contagiosum.*

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***Stalked eggs of Green Lace wing, Chrysoperla carnea***

*Single female of lace wing can produce 100–200 eggs. Eggs are laid on plants, usually near where aphids are present in more numbers. Each egg is hung on a slender stalk about 1 cm long, usually on the underside of a leaf. Eggs are distributed as they are highly aggressive and cannibalistic. Gardeners can attract these lacewings by growing companion plants viz., calliopsis (Coreopsis), cosmos (Cosmos), sunflowers (Helianthus) and dandelion (Taraxacum) dill (Anethum) and angelica (Angelica).*

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***Brinjal Epilachna beetle, Henosepilachna vigintioctopunctata (Coleoptera: Coccinellidae)***

*Henosepilachna vigintioctopunctata* is commonly known as the 28-spotted potato ladybird [https://en.wikipedia.org/wiki/Henosepilachna\\_vigintioctopunctata](https://en.wikipedia.org/wiki/Henosepilachna_vigintioctopunctata) - cite note-1 or the Hadda beetle. It feeds on the foliage of potatoes and other solanaceous crops. The larvae and adults feed on the leaves by scraping the leaf cuticle, reducing the leaf surface by skeletonising the surface area, resulting in russet browning of the leaves.

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***Leaf mining buprestid beetle, Trachys sp. (Buprestidae: Coleoptera)***

*Trachys sp.* is a beetle of the small size of 3 to 3.5 milli meters. The tiny jewel beetle mines host leaves as a larva, creating large blotches. The female lays eggs on the leaves of deciduous trees, especially elm. The larvae eat the green tissue between the upper and lower layer of the leaves making cavities called mines.

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***Red-tailed spider wasp, Tachypompilus analis (Pompilidae: Hymenoptera)***

*Red-tailed spider wasp found in most of tropical and subtropical parts of Asia. They prey on spiders from the families Sparassidae, Agelenidae, and Amaurobiidae.*

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***Crimson Marsh Glider, Trithemis aurora (Libellulidae: Odonata)***

*A very common dragonfly, yet beautiful in every way is Trithemis aurora. They are widely distributed species and found throughout the year across the Indian subcontinent and Southeast Asia. Common habitat of this marsh glider are weedy tanks and ponds, marshes, channels, and slow flowing streams and rivers in the lowlands and mid-hills.*

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***Varroa Mite, Varroa jacobsoni (Varroidae: Acari)***

*Varroa mite is a natural ecto-parasite of honeybee, Apis cerana. However, after having recently jumped from its natural host to the European honeybee, Apis mellifera and has emerged as a potential serious pest causing bee colony losses.*

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***Rock Bee, Apis dorsata (Apidae: Hymenoptera)***

*Apis dorsata* build a single, large and exposed comb under tree branches or under cliffs, instead of in cavities. They form dense aggregations at one nesting site, sometimes with up to 200 colonies in one tree. Each colony can have up to 100,000 bees and is separated by only a few centimetres from the other colonies in an aggregation.

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***Mango Stem Borer, *Batocera rufomaculata* (Cerambycidae: Coleoptera)***

*Mango Stem Borer is a serious pest of fig, mango, guava, jackfruit, pomegranate and walnut in different parts of the world. Infestation may lead to yield losses and even to the death of trees. Most damage is caused by the larvae that initially bore in the tree's sub-cortex and later move deeper into the tree.*

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***Larva of Fruit Sucking Moth Eudocimaphalonia (Erebidae: Lepidoptera)***

*The adult is an agricultural pest feed on many fruit crops by piercing its proboscis into fruits and sucks the juice. The larvae tend to feed on foliage of wild host plants of the family Menispermaceae and Fabaceae.*

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**Blister beetle, *Mylabris pustulata* Thunberg (Meloidae: Coleoptera)**

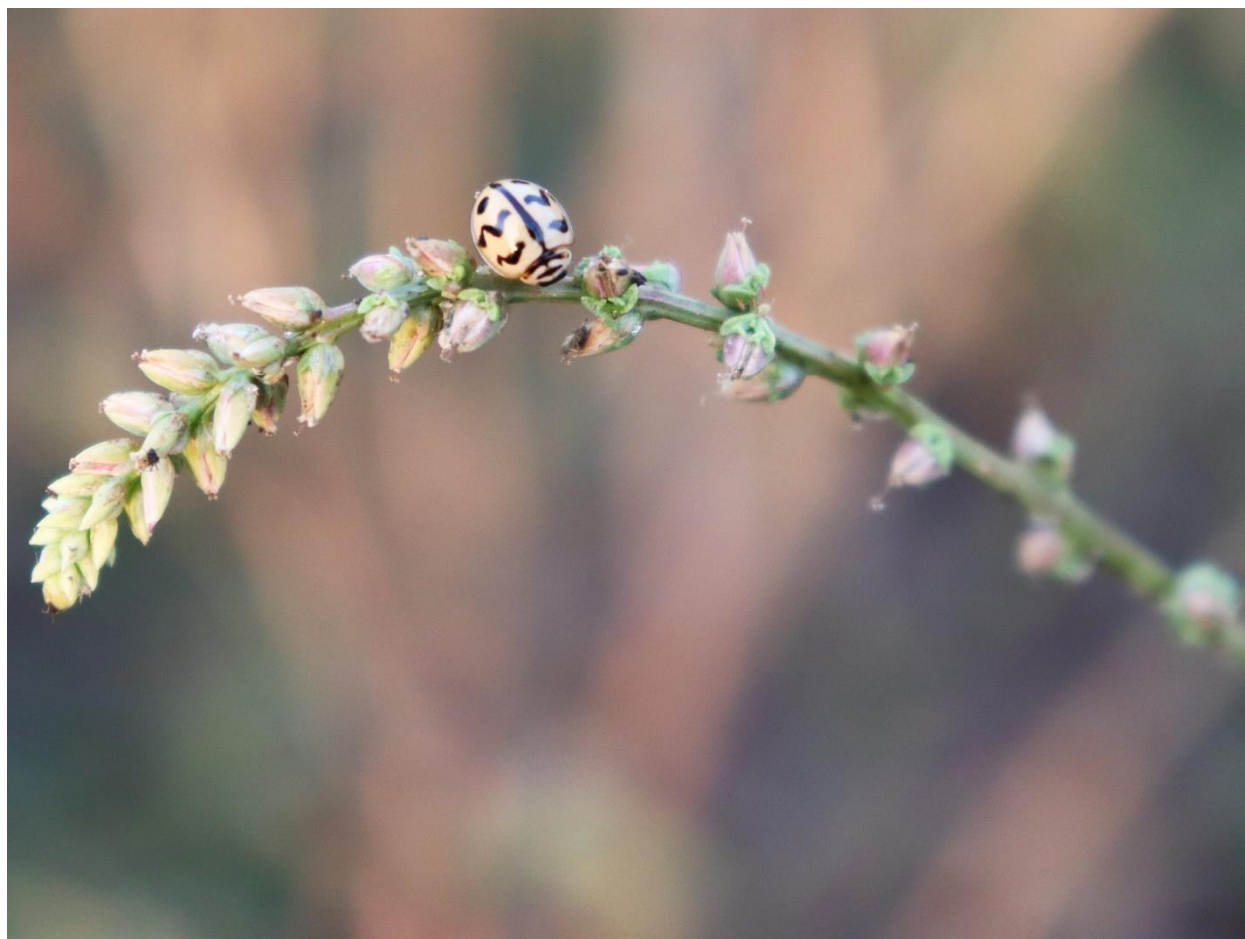
*Blister beetle, as the name are known for their defensive secretion of blistering agent, cantharidin, used in folk medicine as vesicant for treating warts.*

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***Zigzag ladybird beetle, *Cheilomenes sexmaculata* (Coccinellidae: Coleoptera)***

*These beetles are the potential predators of aphids. They survive along with prey on the weeds during the offseason. In this photo, the predator is feeding on the aphids on *Digera arvensis* Forsk.*

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