

Glossary

If you need to research a word not listed below do please let me have the results. If old terms have been replaced by newer ones, I'd like those as well. The idea is to only have to struggle once!

- Aculea** = small spines on the wing which raise overlying scales to give a coarse appearance
- Aedeagus** = tube-like organ of the male genitalia laying between the valves, often adorned with spines and useful to in determining the species
- Ampula** = a process rising from the sacculus
- Amselma** (plural 'amselmata') = secondary sexual scale tufts on the thorax (Niculescu (1977))
- Androconial Scales** = thick, modified scales present in the fringe of some moth species
- Anellus** = membranous covering of the aedeagus
- Antemedian** = before the middle, ie a fascia, marking or feature before the middle
- Antemedial Spot** = orbicular stigma
- Antennae** = formed of scape, pedicel and flagellum
- Antrum** = a chamber or cavity formed from part of the ostium in some species
- Apex, apice, apical, apically** = furthest point from the body or point of attachment, tip of the wing between the costa and termen
- Apical Streak or Spot** = a wedge- or dash-shaped marking extending from the apex of the wing; a spot or patch of scale at the apex
- Appendix bursae** = a secondary swelling attached to the bursa copulatrix (which is then called the corpus bursa)
- Autapomorphic characters** = are derived characters that are unique to an end group (in our model, perhaps a bunch of twigs). Autapomorphic characters are found in only one member of the group and define that group. They are never shared by other groups. The "group" can be, for example, a family, genus or even an individual species. When you instantly recognise a long-lost relative from his distinctive nose, you are using an autapomorphic character peculiar to your family. It is a derived character - from a common ancestor, but no other family has it (though to be a true autapomorphy then ALL members of your family must possess it). Trace the tree back far enough and you will find the one individual that first demonstrated that character. If you find someone else who has it then they MUST be related - if they do not have it they are not part of your group though they may be related further down the tree - look for synapomorphies). [*Colin Plant*]
- Basal basally, basad** = closest to the body; towards the body or point of attachment.
- Basal patch** = a marking on a wing closest to the thorax
- Basal Streak** = a wedge- or dash-shaped marking extending from the thorax. "Shoulder-knot".
- Bursa copulatrix** = in the female genitalia, the bag-like structure connected to the ductus bursa, used to store sperm. It is often adorned with spines and useful in determining the identification of a species
- Caudal** = 'tail', towards the tail end
- Cell** = an area between two main veins in the wing extending from the thorax to just beyond the middle of the wing. The part furthest from the thorax is called the disc, where there are sometimes circular or oval markings, such as the reniform stigma.
- Chaetosema** = a group of sensory hairs on the head, near the ocellus
- Cilia, cilium, fringe** = scale or scales resembling hairs, a row of which usually border the wings, or adorn the antennae or other organs
- Claspers** = valves in the male genitalia, or last pair of prolegs in larva
- Clavus** = a process arising from the sacculus of the male. See *Mesapamea* (for example)
- Collar** (crown) = scales at the rear part of the head
- Compound eye** = these may be 'clean' or have a scattering of hairs or lashes
- Coremata** = specialised structure on the underside of the male abdomen. They have different origins, so are not homologous, and the term 'coremata' has been applied to a wide range of scent brushes or hair pencils
- Corpus bursae** = bursa copulatrix, when an appendix busae is present
- Costa, costal, costad** = forward or leading edge. Of the wing, between the body and termen
- Costal Blotch** = patch of scales on the costa
- Coxa** = top part of a leg between the thorax and trochanter
- Cremaster** = structure on the anal end of a pupa, usually consisting of a number of bristles or hooks used to anchor the pupa to silk
- Crenulate** or **Crenate** = having a notched or indented edge where the troughs are wider than the tips
- Crochets** = tiny hooks and spines found on larva's prolegs, used for gripping
- Crown** = collar
- Cubital Pecten** = a row of hair-like scales on the hindwing near the base, arising from the cubital vein
- Cucullus** = in male genitalia, the end of the valva, often necked and rounded and bearing spines
- Cuiller** = finger-like process rising from base of male valva, especially *Agonopterix* sp.
- Culcita** = "among pyralid workers the term 'culcita' is being phased out. Horak (1997. Invertebrate Taxonomy 11, 333-421) states: "Secondary sexual scale tufts on the thorax have been termed 'amselma' (plural 'amselmata') by Niculescu (1977) and those on the 8th segment 'culcita' by Amsel (1956), but as such names imply homology they are not in common usage. The term 'scale complex' is applied to the sclerotised frame and the associated scale tufts of the 8th abdominal segment". Later, Simonsen & Roe (2009. Zoologischer Anzeiger) recommend using the term 'composite scale brushes'. I would suggest that this is adopted." [Thanks to Martin Honey for this]
- Dentate** = (of a line or edge) toothed or strongly serrated
- Disc** = part of the cell furthest from the thorax, where there are sometimes circular or oval markings, such as the reniform stigma
- Discal Spot** = marking or markings on the wing at the disc.
- Disco-cellular Spot** = discal spot
- Distal distally, distad** = away from the body or point of attachment
- Diverticulum** = A narrowing of the bursa copulatrix leading to an additional swelling
- Dorsal, dorsally, dorsad** = the upperside (of the abdomen) or towards the upperside of a structure
- Dorsal Blotch** = patch of scales on the dorsum of the wing

Dorsum = rear or trailing edge (of the wing), between the body and tornus
Ductus seminalis = duct between the bursa copulatrix and bulla seminalis
Editum = (Pierce) a small, finely spined prominence below the ampulla, on the costal side.
Emarginate = having a notch in an edge
Epiphysis = modified spine on the foreleg tibia which acts as a grooming organ
Eye-cap = in microlepidoptera a modified scape forming a dish- or fan-shaped start to the antennae. Its presence or absence is a good diagnostic clue
Falcate = having a hooked tip
Femur = third segment of the leg
Fibula = a buckle or clasp
Flagellum = third part of the antennae and may be simple or be clothed in hair-like scales
Frenulum = a stout hair or hairs at the base of the costa of the hindwing, which links it to the forewing.
Fringe – (cilia) the row of hair-like scales bordering the wing
Frons = front part of the head (face)
Fulvous = reddish brown, tawny
Gnathos = in male genitalia, a hardened part of the vinculum near the uncus, which supports the anal tube
Hamus = sclerotised 'hook' on the wing in some male pyralids. See *Pyraloidea* 1 (p.9).
Harpe = in male genitalia, the hardened clasping organ on the inner face of the valva
Haustellum (proboscis) = 'tongue', may be short, long, naked or clothed with scales
Interspaces = patches of scales between strigulae
Intrioitus vaginae = part of the ductus bursae attached to the ostium
Juxta = in male genitalia, a hardened plate-like structure between the valves which supports the aedeagus
Labial palps = organs arising from just below the compound eye, usually with three segments and clothed with scales. Together with the maxillary palps, their layout and build can give clues to family identification
Lamella antevaginalis = a hardened plate partially surrounding the ostium
Lamella postvaginalis = a hardened plate partially surrounding the ostium
Maxillary palps = organs arising from just in front of the labial palps, sometimes conspicuous, sometimes apparently absent, usually clothed with scales and sometimes folded in the more primitive families, partially obscuring the eye. Together with the labial palps, their layout and build can give clues to family identification
Medial medially, median = middle; the central area (medio-distal = away, more distant from, the middle)
Median = medial, middle
Mesothorax = central segment of the thorax
Metothorax = last segment of the thorax
Micropyle = the central opening of the egg
Ocellus = 1/ markings, usually spots or short dashes, in an area of the wing near the tornus known as the spiculum. 2/ light-sensitive organs situated above the compound eye
Oligophagous = having a limited range of food
Orbicular Stigma = a marking lying between the reniform stigma and the thorax, usually circular in shape
Ostial Plate = a hardened plate surrounding the ostium
Ostium = in female genitalia, the external opening
Palps = organs on the head of the adult. See Labial and Maxillary palps
Pecten = tuft of scales sometimes present on the scape, sometimes useful as a diagnostic feature
Pedicel = second part of the antennae, between the scape and flagellum
Pollex (Razowski) = the small 'turret' between the bristle and the valva, a sort of hardened extension
Polyphagous = having a wide range of food
Porrect = pointing straight forward
Post-median = beyond the middle, ie a fascia, marking or feature beyond the middle
Pre – before, ie pre-apical spot lies before the apical spot
Proboscis = haustellum, the 'tongue'
Prolegs = 'false' legs on middle and terminal segments of a larva's abdomen
Prothorax = first segment of the thorax
Proximal = towards the body or point of attachment
Pulvinus (Razowski) = a pronounced group of hair-like setae on the valva
Reniform Stigma = an oval or kidney-shaped mark on the forewing at the disc
Reticulate = a fine, speckled pattern
Saccus = in male genitalia, the lowest part of the vinculum
Sacculus = in male genitalia, dominant part of the base of the valva, often adorned with spines
Scale-tooth = a tuft or tufts of scales in the cilia. These give a distinctive shape to resting prominent moths and to members of the *Epermeniidae*, and are also a feature of the plume moths
Scape = first part of the antennae, which may be simple, have a row of bristles forming a pecten, or be expanded to form an eyecap
Sclerite = hardened part of the body forming a plate
Scobinate = with a roughened surface, as though rasped
Scutulum ('shield') ?descriptive, two references found:
 1/ a small triangular wedge visible on the back part of the sterigma (*MBGBI* volume 4 (2) figure 27: f and p.106 couplet 6(4) in females);
 2/ refers to the dorsal blotch on the forewing (*The scientific names of the British Lepidoptera* by A.M. Emmet, p.117 under 1184)
Seta = stiff hair or bristle
Sinuate = having a gentle 's'-shaped curve or curves
Socius = paired extensions of the vinculum
Spiculum = an area of the forewing near the tornus, especially evident in the tortrix moths where it is usually oval in shape, outlined by metallic-blue scales, and containing dark dashes or spots
Spiracle = breathing pores along the body
Spur = spine found on the legs, sometimes modified into a grooming organ (Epiphysis)
Sternum = ventral part of the body

Stria – fine streak or line. Sometimes these mark as outlines the positions of other features such as fascia.

Strigula/Strigulae = fine marking(s) on the costa or dorsum of the forewing

Strigulate = covered with fine streaks

Sub-basal = near the base of the wing, markings or a fascia not connected to the base of the wing but close to it.

Sub-terminal = just inside the termen: a fascia, line or other features which are near the termen but are further towards the base or body

Synapomorphic characters = are shared characters that define a GROUP of species with a common ancestor. The character MUST have been derived from that common ancestor (i.e., not acquired later). At a very simple level, the possession of scales is a synapomorphic character of the Lepidoptera - they ALL have it and they originated with the first "Proto Lep". Each group will have its own synapomorphic characters that have been derived from a branch

of the tree, but they will also share synapomorphies with bigger branches nearer the trunk of the tree. Synapomorphies are the basis of animal and plant classification - they are grouped to form "clades" and the study of the structure of clades and the relationship between them is called "cladistics". [*Colin Plant*]

Tarsus = segments of the leg between the tibia and claws

Tegula = a flat plate between the thorax and forewing, forming a 'shoulder'

Tergite = segment of abdomen

Termen, terminal, terminally = outer edge of wing, often carrying the fringe or cilia

Terminal = termen

Tibia = fourth part of the leg

Tornal Spot = a patch of scale at the tornus

Tornal Streak = a wedge- or dash-like mark extending from the tornus

Tornus, tornal = at the junction of the termen and dorsum

Trochanter = part of the leg between the coxa and femur

Truncate = has a squared-off ending

Uncus = top part of the vinculum, sometimes forming a large hooked or curved structure

Valva, valvae or informally 'valves' = the large clasping parts of the male genitalia

Ventral, ventrally = the underside, usually relating to the abdomen

Vertex = area between antennae and collar

Vinculum = the large central ring-like part of the male genitalia