PHOTOGRAPHIC
GUIDE TO COMMON
MOSQUITOES
OF FLORIDA

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QUICK GUIDE TO MOSQUITO GENERA—larvae

**AEDES / OCHLEROTATUS**

- Siphon present with pecten
- ONE hair tuft beyond pecten
- Anal segment not completely ringed by saddle, or if ringed, not pierced by ventral brush
- Usually sits on top of water resembling a twig, swims in a ‘stiff’ manner
- Artificial container or treehole habitat (occasionally bromeliads)

**ANOPHELES**

- Abdomen has palmate hair
- Siphon absent
- Usually sits on top of water resembling a twig, swims in a ‘stiff’ manner
**COQUILLETTIDIA**

- antennae have 2 short bristles
- siphon pointed with teeth
- saddle does NOT have precratal setae
- found on roots of aquatic plants

**CULEX**

- comb scales in more than one row
- siphon present with pecten
- TWO or more hair tufts beyond pecten
- move very quickly - any habitat
DEINOCERITES

lateral head pouches

only has 2 small, bud-like gills

only found in saltwater crab holes

MANSONIA

antennae with 2 long bristles

siphon pointed with teeth

saddle has precratal setae

found on roots of aquatic plants
**ORTHOPODOMYIA**

- reddish color, with dark black head and siphon
- 2 rows of comb scales

**PSOROPHORA**

- siphon present with pecten
- ONE hair tuft beyond pecten
- anal segment completely ringed by saddle, which is pierced by ventral brush
**TOXORRHYNCHITES**

- head quadrate
- large, dark, robust mosquito
- lateral plate on segment VIII

Predatory on other species

**URANOTAENIA**

- head longer than wide
- head has 4 stout spines
- segment VIII has plate with row of teeth
**WYEOYIA**

- Cream colored body, entire length of intestine brown and visible

- Found in bromeliads

**CORETHRELLA**

- Triangular head

- Small, orange-pink color

- Not a mosquito, a predator of small mosquito larvae
QUICK GUIDE TO MOSQUITO GENERA—adults

**AEDES / OCHLEROTATUS**

has postspiracular setae, no prespiracular setae

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**ANOPHELES**

palps are as long as the proboscis
**COQUILLETIDIA**

- No prespiracular or postspiracular setae
- Wing scales large, speckled light and dark
- 1st tarsal segment has median pale ring

**CULEX**

- Antenna about the same size as the proboscis
- No prespiracular or postspiracular setae
- Legs dark, no bands
**DEINOCERITES**

- Antennae longer than proboscis

**MANSONIA**

- Antennae have white scales at flagellomere joints
- Wing scales large, light and dark, ends of scales blunt, cut-off
- Apex of abdomen blunt, cut-off
- Hind legs have narrow basal bands
- Postspiracular setae present
**ORTHOPODOMYIA**

- Scutum has narrow lines of pale scales.
- Large light and dark scales on wings.
- Hindlegs have white apical and basal bands.
- No prespiracular or postspiracular setae.

**PSOROPHORA**

- Has prespiracular and postspiracular setae.
- Has apical abdominal bands.
**TOXORHYNCHITES**

very LARGE, colorful mosquito

![Image of a very LARGE, colorful mosquito](image)

long, strongly recurved proboscis

![Image of a very LARGE, colorful mosquito with long, strongly recurved proboscis](image)

**URANOTAENIA**

end of proboscis swelled

![Image of URANOTAENIA with end of proboscis swelled](image)

iridescent blue scales on thorax

![Image of URANOTAENIA with iridescent blue scales on thorax](image)

iridescent blue scales on wing

![Image of URANOTAENIA with iridescent blue scales on wing](image)
**WYEOMYIA**

- Proboscis dark, palps very short.
- Line down side of abdomen separating light and dark scales.
- Wings dark scaled.
- Legs dark.
**Aedes aegypti**

- Strong, black hooks on sides of thorax
- Pitchfork-shaped comb scales in 1 row
- Pupa paddles have 'stubble'
AEDES

**Aedes aegypti**

- Scutum has lyre-shaped silvery-white scales
- Palps have silvery-white scales at the tips
- Clypeus has white scales
- Proboscis is dark
- Wing scales are dark
- Legs have white basal bands
Aedes albopictus

- tiny hooks, or no hooks on side of thorax
- straight thorn-like comb scales in 1 row
- pupae paddles are ‘hairy’
**Aedes albopictus**

- **clypeus** is black
- **scutum** has one silvery-white stripe down the middle
- **palps** have silvery-white scales at the tips
- **wing scales** are dark
- **legs** have white basal bands, tarsal segment 5 is entirely white
**AEDES**

- Side hairs on abdominal segments III—V double or triple
- Anal segment not completely ringed by saddle
- Upper and lower head hairs have multiple branches
- Thorn-like comb scales in roughly 2 rows
- 4 gills; longer than anal segment, all the same length
- Pecten teeth not evenly spaced, last tooth more widely spaced

**Aedes vexans**
AEDES

Aedes vexans

- Abdomen has pale basal bands with an inverted 'V'-shaped notch
- Palps and proboscis dark
- Wing scales dark
- Legs have narrow basal bands
ANOPHELES Anopheles crucians

hairs #0 & #2 on segments IV & V multi-branched

head hair #3 multibranched

palmat e hairs on abdomen
ANOPHELES

Anopheles crucians

- Palps have white rings
- Proboscis dark
- Apical pale patch on wing
- Costal margin dark
- 3 dark patches on 6th vein
- Legs dark, sometimes with pale 'knee' spots
Anopheles quadrimaculatus

- **Head hair #3**: Multibranched
- **Hair #0**: Single and smaller than hair #2 on segments IV & V
- **Palmate hair on abdomen**
ANOPHELES

Anopheles quadrimaculatus

- Frontal tuft has pale setae
- Palps predominantly dark, no rings
- Knob of halter dark scaled
- Wing scales light and dark, arranged in 4 distinct dark spots
**ANOPHELES**

**Anopheles walkeri**

- Frontal tuft has dark setae only.
- Palps have narrow white rings.
- Knob of halter pale scaled.
- Wing scales entirely dark, sometimes with 4 darker spots (similar to, but less distinct than An. quadrimaculatus).
Coquillettidia perturbans

- Proboscis has a wide light-scaled band.
- Palps 'speckled' with light and dark scales.
- Wings speckled with light and dark scales; wing scales broad, rounded on end.
- Prespiracular and postspiracular setae absent.
- Hind legs have white basal bands.
- 1st tarsal segment has a medial pale ring.
CULEX

Culex biscaynensis

- extremely long, thin, needle-like siphon
- spikes on end of anal segment
- many stellate hairs on abdomen

'bromeliad-specialist; only found near Coral Gables
CULEX

Culex biscaynensis

LONG dark palps; dark proboscis

thorax light colored, usually without scales

abdomen dark scaled with light-colored lateral patches

wing scales dark, narrow

legs dark
**CULEX**

**Culex declarator**

- Upper and lower head hairs have 3 branches.
- Gills short, nearly equal in length.
- Siphon has only THREE pairs of hair tufts, one is offset.
- Row of pecten teeth has slight spiral twist.
Culex declarator

- Wing scales narrow, dark
- Legs dark
- Abdomen dark scaled
- Palps and proboscis dark
- Dark brown spots create 'striped' pattern
- Small patches of white scales
- Lateral white patches on abdomen
Culex erraticus

- Sub-dorsal setae present
- Hair strongly curved
- Long, thin siphon
- Multiple hair tufts on siphon
- Antennae have large white area, dark on end
- Lower head hair single, upper head hair short and branched
- 4th abdominal segment clear
**Culex erraticus**

- Small, dark mosquito
- Dark thorax has patches of broad pale scales on the mesepimeron and the mesokatepisternum
- Has a narrow line of broad, flat, ovate pale scales bordering eye margin
- Palps and proboscis dark
- Wing scales dark, narrow
CULEX

Culex nigripalpus

- Thorax with fine spicules
- Single hair extending from saddle
- Lower head tufts with 3-4 branches
- Long non-bulbous siphon, 6x width
- 4th segment of 1st instar clear
- Single (sometimes double) hairs, no tufts
**Culex nigripalpus**

- **Abdomen**: has triangular pale-scaled patches when viewed from the side—most prominent on segments V-VII.
- **Legs**: dark, no bands.
- **Wing scales**: dark and narrow.
- **Thorax**: usually no scales on side of thorax, if present in groups <6.
- **Abdomen**: no bands on abdomen, dark-scaled.
**Culex pilosus**

- Antennae longer than head, large tuft
- Head broad
- Ovoid gills on ventral side of head
- Siphon strongly upcurved
- Preapical spine curved
- 8 pairs of long tufts on siphon, first two pairs inserted within pecten
- Comb scales in single curved row; long, thorn-like
- Gills two different lengths
CULEX

Culex pilosus

- proboscis and palps dark, palps short
- abdomen dark scaled, with bronze or blue-green reflection
- thorax dark brown with only a few pale scales
- Lighter area covering upper 2/3 of the mesepimeron
- legs dark, sometimes with blue-green reflection
- wing scales narrow, dark

very small mosquito
**Culex quinquefasciatus**

- **lower head tufts** with 5 or more branches
- **short, bulbous siphon**, 4x width
- **two sets of hair tufts on siphon** (5 or more branches)
- **single hair extending from saddle**
- **caudal setae not widely separated in 1st instar**
Culex quinquefasciatus

broad M-shaped bands on abdomen, most prominent on segments IV & V
CULEX

Culex restuans

- lower head tufts, 5 or more branches
- single hair extending from saddle
- hair tuft in middle of antennae
- clear crescent anterior to egg breaker
- single hair extending from saddle
- single hairs on siphon, 2nd hair offset
- Siphon short, bulbous, 4-5x width
- DOUBLE hair extending from inside of anal segment

EGG
**Culex restuans**

- **Culex**

- **Culex restuans**

- **Wings dark**

- **Scutum copper colored with 2 pale spots (sometimes absent)**

- **Thorax has patches of white scales**

- **White basal bands on the abdomen**

- **Hind legs dark**

- **Palps and proboscis dark**

- **Thorax has patches of white scales**

- **Wings dark**

- **Scutum copper colored with 2 pale spots (sometimes absent)**

- **Thorax has patches of white scales**

- **White basal bands on the abdomen**

- **Hind legs dark**

- **Palps and proboscis dark**
**CULEX**

- **Culex salinarius**
  - Siphon long, non-bulbous, 7x width
  - Lower head tufts, 4 or more branches
  - Double hair extending from saddle
  - Multiple hairs on siphon, 3rd hair (double) offset
Culex salinarius

- Reddish mosquito
- Patches of scales on sides of thorax, patches have >6 scales
- Proboscis dark
- Abdomen has golden basal bands, segment VII golden scaled
- Wing scales dark
CULEX

Culex territans

- Head hair C is single
- No sub-dorsal setae
- Long, thin siphon
Culex territans

- Narrow APICAL bands on abdomen
- Palps and proboscis dark
- Wing scales dark
- Legs dark
Deinocerites

**cancer**

- lateral pouches on sides of head
- only has 2 bud-like gills
- many comb scales
- has dorsal and ventral sclerotized plates
- found in saltwater crab holes
DEINOCERITES

Antennae longer than proboscis

Legs dark

Wing scales narrow, brown

Deinocerites cancer
Mansonía dyari

- Subsiphon hair has 3 or 4 long, weakly-barbed branches.
- Hairs on anal segment have more than 2 branches.
- Comb scales are broad with many spines.
- Pupal trumpets long, pointed.
- Pupal paddles long and narrow.
**Mansonía dyari**

- Palps not more than 1/3 as long as proboscis, 'club-like'.
- Wings speckled with large light and dark scales.
- Wing scales broad, cut off at tip.
- Hind legs have narrow pale basal bands.
**MANSONIA**

**Mansonia titillans**

- Comb scales are very long, thorn-like
- Gills short, rounded
- Subsiphon hair has 2 or 3 long, strongly-barbed branches
**Mansonina titillans**

- Palps almost 1/2 as long as proboscis, 'stem-like'.

- Hind legs have narrow pale basal bands.

- The end of abdominal segment VII has a row of short dark spines (you must remove overlying scales to find these).

- Wings speckled with large light and dark scales; scales broad, cut off at tip.
**OCHLEROTATUS**

*Ochlerotatus bahamensis*

- Saddle has spines on caudal margin
- Gills two different lengths
- Stellate hair tufts on thorax and abdomen
- Found in Broward/Dade counties
Ochlerotatus bahamensis

- Scutum has multiple golden and silvery-white scaled lines
- Palps white tipped; proboscis dark
- Wing scales dark, narrow
- Legs dark with white basal bands
**OCHLEROTATUS**

**Ochlerotatus fulvus pallens**

- **medium-sized yellow mosquito**
- **scutum** yellow with 2 large black spots
- **palps and proboscis** yellow with black tips
- **yellow scales on the wing**
- **abdomen** yellow scaled with dark apical patches
- **legs** predominantly yellow scaled, with some black patches; lower tarsal segments usually dark
OCHLEROTATUS

Ochlerotatus infirmatus

Upper and lower head hairs single.

Anal segment completely ringed by saddle.

15-22 thorn-like comb scales in a patch.

Gills taper to a point; all the same length; longer than the anal segment.

Pecten evenly spaced; hair tuft beyond pecten.

Pre-apical spine not more than 1/2 as long as the apical pecten tooth.
Ochlerotatus infirmatus

- Scutum has broad white patch that reaches from the anterior margin to just beyond the middle.
- Abdomen dark scaled with basal triangular patches of white scales.
- Wing scales dark.
- Palps and proboscis dark.
- Legs dark.
OCHLEROTATUS  

**Ochlerotatus sollicitans**

- Torn-like comb scales in patch
- Gills variable in length, usually shorter than anal segment
- Multiple hairs on center of antenna
- Breeds in saltmarshes and coastal areas
- Siphon short 2-2.5x width, pecten reaches middle
OCHLEROTATUS sollicitans

- Palps white tipped
- White ring at middle of proboscis
- Thorax covered with many narrow white scales
- Wings have narrow white and dark scales
- Abdomen has white basal bands with a medial longitudinal stripe (or patch) of white scales
- Legs have white basal bands, white band in middle of 1st tarsal segment
Ochlerotatus taeniorhynchus breeds in saltmarshes and coastal areas.

- Siphon short, less than 2x width
- Apically rounded comb scales in patch
- Gills short, bluntly rounded, usually shorter than anal segment
Ochlerotatus taeniorhynchus

- Palps are white-tipped.
- White ring at middle of proboscis.
- Abdomen has white basal bands.
- Wing scales are dark.
- Legs have white basal bands.
- No ring at middle of first tarsal segment.
OCHLEROTATUS

Ochlerotatus tormentor
OCHLEROTATUS

Ochlerotatus triseriatus

thorn-like comb scales in uneven row

gills are short, two different lengths

paddles more oblong than Ae. albopictus or Ae. aegypti

pupa paddles have ‘stubble’

trumpet very dark

common in treeholes, and artificial containers near wooded areas
**Ochlerotatus triseriatus**

- **Scutum** dark, no lines or patterns of white scales
- Patch of white scales along edge of scutum
- Proboscis and palps are dark
- Many patches of silvery white scales on thorax
- Wing scales are dark
- Legs are dark, no white bands
Orthopodomyia signifera

- Abdominal segment VII has a large sclerotized plate.
- Two rows of comb scales, one row has much longer comb scales than the other.
- Gills two different lengths.
- Hair tuft on siphon multi-branched (5-7 branches).
**ORTHOPODOMYIA**

*Orthopodomyia signifera*

- **Scutum** has narrow longitudinal lines of white scales, very 'hairy'.
- **Occiput** has ovate white scales.
- **Thorax** has several patches of narrow white scales.
- **Proboscis** and **palps** predominately dark with some white scales.
- **Base of wing vein 4+5** usually with a patch of pale scales.
- **Wings** speckled with large white and dark scales.
- **Legs** have white apical and basal bands.
**Psorophora ciliata**

- **Head quadrate; top of head concave**
- **Antennae about 1/3 as long as the head**
- **Pecten teeth are long and hair-like**
- **12-16 thorn-like comb scales in 1 curved row**
- **Single hair beyond pecten**
- **Hair on anal segment with 3-4 branches**
**Psorophora ciliata**

- Very large mosquito
- Palps about 1/3 as long as proboscis
- Proboscis yellowish, dark at tip
- Scutum has longitudinal stripe of gold scales
- Wing scales dark
- Legs are ‘shaggy’ with white basal bands
**Psorophora**

*Psorophora columbiae*

- Head more broad than long
- Lower head hairs have more than 4 branches and are shorter than the antennae
- Gills longer than anal segment and pointed
- Siphon slightly bulbous with 3–6 pecten teeth

- **6 thorn-shaped comb scales**

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**Psorophora columbiae**

- Palps are dark with a white tip.
- Apical half of abdominal segments have pale scales.
- Proboscis has a wide pale-scaled band in the middle.
- Wings have light and dark scales with no distinctive pattern.
- Tarsal segments have basal bands; 1st tarsal segment also has a pale band at the middle.
**PSOROPHORA**

*Psorophora ferox*

- Antennae longer than median length of the head
- Long gills taper to a point; all the same length
- 6–8 thorn-like comb scales with strong subapical spines
- Siphon bulbous
- 3–5 widely spaced pecten teeth
Psorophora ferox

- Scutum dark with some golden scales; no distinct pattern
- Thorax with dark and whitish scales
- Wing scales dark and narrow
- Palps and proboscis dark
- abdomen dark with a purplish reflection
- legs shaggy, mostly dark and purplish
- tarsal segments 4 & 5 white (white ‘booties’)
- Legs shaggy, mostly dark and purplish
Psorophora johnstonii

- Antennae about as long as the head
- 5-7 thorn-like comb scales with strong spines
- Siphon bulbous; with 3-8 widely spaced pecten teeth
- Four pointed gills, all the same length
- 4-6 ‘fan-like’ precratal setae on anal segment
**TOXORHYNCHITITES**

*Toxorhynchites rutilus*

- Quadrate head
- Short, 'bud'-like gills
- Spines on edge of saddle
- No comb scales, lateral plate with 2 spines

- Large predatory species, common in tree-holes, also found in artificial containers and bromeliads
**TOXORHYNCHITES**

*Toxorhynchites rutilus*

- Sides of thorax with silvery-white, iridescent blue and purple scales
- Palps long and dark with iridescent purple scales
- Proboscis very long and sharply curved downward
- Legs have iridescent purple scales, tips white

Iridescent blue scales on occiput & antepronotum
upper thorax hair tuft (#3) has 4-8 branches and is more than half the length of long hair #1
Uranotaenia lowii

- Thorax has a few patches of iridescent blue scales and a dark spot.
- Short stripe of blue scales on wing.
- Apical patches of iridescent scales on abdomen.
- End of hindlegs white ('booties').
- Scutum dark.
*Uranotaenia sapphirina*

- **Upper thorax hair tuft (#3)** has 8 to 10 branches and is less than half the length of long hair #1.
- **Side hairs on segments I & II** are triple.
- **Head** with 4 strong spines.
URANOTAENIA

Uranotaenia sapphirina

proboscis dark, fat at tip

longitudinal stripe of iridescent sapphire blue scales on scutum

sapphire blue scales on side of thorax

leg almost completely dark except for small white patch on apex of femur and tibia (like knee bands)

long stripe of blue scales on wing
**Wyeomyia mitchellii**

- Short tuft of branched hair on saddle
- Long hairs on saddle
- Pairs of two
- Siphon short with many single hairs
- Shorter, wider gills than *Wyeomyia vanduzeei*
- No patches on 2nd or 3rd abdominal segments
**Wyeomyia mitchellii**

- Scales on antepronotum dark purple or black
- Palps and proboscis dark
- Wing scales dark, narrow
- Middle legs dark with white on last few tarsal segments
- Hind legs dark
**Wyeomyia vanduzeei**

- Pupae have circular pigmented areas on 2nd and 3rd abdominal segments.
- Long, narrow gills.
- Long hairs on saddle, no tuft.
- Siphon long, thin and with few hairs.
- Long simple hairs on saddle, no tuft.
- Pairs of four long simple hairs on saddle.
WYEOMYIA  

Wyeomyia vanduzeei

scales on antepronotum silvery white
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REFERENCES

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