Parasitic Hymenoptera in LPD trap liners: a guide for identifying common specimens

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Chalcidoidea:

Pteromalidae

Key attributes (discernible in a trap):

*Antennae*: funicle with 5-7 segments

*Legs*: 5 tarsal segments

*Wings*: curved submarginal vein

*Body length*: typically ~ 2 - 4 mm
Chalcidoidea:

Eulophidae

Key attributes (discernible in a trap):

Antennae: funicle with 0-4 segments
Legs: 4 tarsal segments
Wings: straight submarginal vein
Body length: typically ~ 1 - 3 mm
Chalcidoidea:

Encyrtidae

Key attributes (discernible in a trap):

*Antennae*: usually 11 segments (total)
*Legs*: 5 tarsal segments; fore- and mid-coxae close together; large apical spur on mid-tibiae
*Wings*: very short marginal vein
*Thorax*: triangular axillae nearly meeting medially
*Body length*: typically ~ 1 - 3 mm
Chalcidoidea:

Aphelinidae

Key attributes (discernible in a trap):

Antennae: usually ≤ 8 segments (total)
Legs: usually 5 tarsal segments
Wings: long marginal vein
Abdomen: broadly joined to thorax
Thorax: axillae do not meet
Body length: typically ≤ 1 mm
Chalcidoidea:

Mymaridae

Key attributes (discernible in a trap):

*Antennae*: long, filiform antennae; females with distinct club
*Legs*: 4-5 tarsal segments
*Wings*: highly reduced venation; fringed with long hairs; hindwings as narrow stalks
*Body length*: exceedingly small (0.5 - 1 mm)
Chalcidoidea:

Trichogrammatidae

Key attributes (discernible in a trap):

* **Antennae**: ≤ 2 funicle segments; distinct club
* **Legs**: 3 tarsal segments
* **Wings**: short but thick marginal vein; fringed with long hairs
* **Body length**: exceedingly small (0.5 - 1 mm)

![Trichogrammatid @ 90X](image1)

- Short, thick marginal vein
- Wings fringed with long hairs
Chalcidoidea:

Torymidae

Key attributes (discernible in a trap):

Antennae: usually 7 funicle segments; indistinct club
Abdomen: very long ovipositor sheath
Legs: often with large hindcoxae
Wings: very short, almost nonexistent stigmal vein
Body length: large chalcidoids (3 - 6 mm)
Platygastridea:

Scelionidae

Antennae: usually 11-12 segments
Legs: usually 5 tarsal segments
Wings: long stigmal vein, long post-marginal vein
Abdomen: flattened dorso-ventrally
Body length: typically ≤ 1 mm

Platygastridae

Antennae: usually 10 segments
Legs: usually 5 tarsal segments
Wings: no venation
Abdomen: strongly dorso-ventrally flattened
Body length: very small, typically ≤ 1 mm
Ichneumonoidea:

*Antennae*: long, many-segmented; filiform

*Wings*: radial and medial cells form “muzzled dog” in braconids; fused cells form “horse head” in ichneumonids

*Abdomen*: distinct propodeum

- Can be quite large
- “Horse head”
- “Muzzled dog head”

Braconid @ 20X (~ 4 mm)

Ichneumonid @ 12.5X

Ichneumonid @ 7X

Braconid @ 16X
Bethylidae

Eucoilidae

Ceraphronidae

Miscellaneous:

Bethylid @ 20X (moderate size: typically 4-5 mm long)

Eucoilid @ 40X (typically 3-4 mm long)

Ceraphronid @ 50X (small, typically 2-3 mm long)