

Mites found on adult bumblebees (genus *Bombus*)

Acariformes: Astigmata

mites on bee (lower magnification)

All mites without magnification signs (e.g., "2x") are approximately to scale.

Cerophagus
mites under tegulae

Bombus

Kuzinia **Kuzinia** **Tortonia**

Vidia **Aeroglyphus** **Tyrophagus** **Thyreophagus**

slide-mounted mites at higher magnification (can be distinguished by shape)

Kuzinia (phoretic deutonymph) dorsal granulate pattern shown **Cerophagus (phoretic deutonymph)** **Tortonia (phoretic deutonymph)**

Vidia (phoretic deutonymph) **Aeroglyphus (♀)** **Tyrophagus (♀)** **Thyreophagus (♀)**

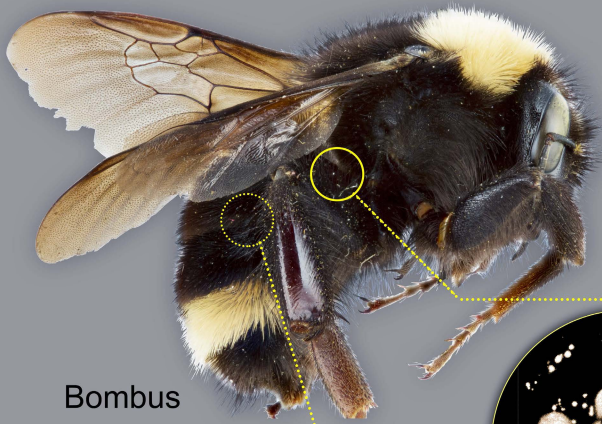
- associated exclusively with bees
- some life stages associated with bees, while others are not
- can complete entire life cycle without bees
- harmful to bee
- not harmful to bee
- unknown

Mites found on adult bumblebees (genus *Bombus*)

Acariformes: Prostigmata

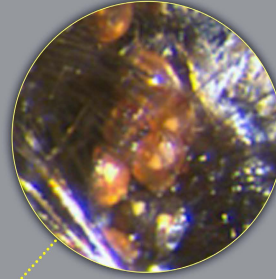
All mites without magnification signs (e.g., "2x") are approximately to scale.

mites on bee at lower magnification



Bombus

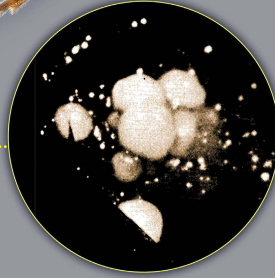
internally, in air sacs



Scutacarus



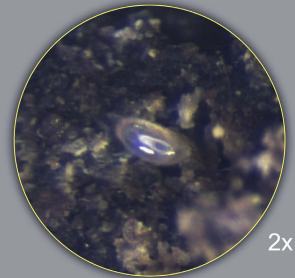
Imparipes



Locustacarus (adult females)



Parascutacarus



Tarsonemus

2x

slide-mounted mites at higher magnification (some can be distinguished by shape)



Locustacarus (♀, larviform)



Locustacarus (♂, larviform)



Locustacarus (♀, adult)

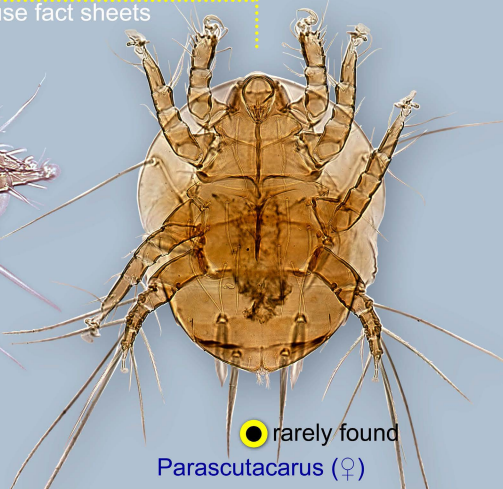
difficult to distinguish by shape; use fact sheets



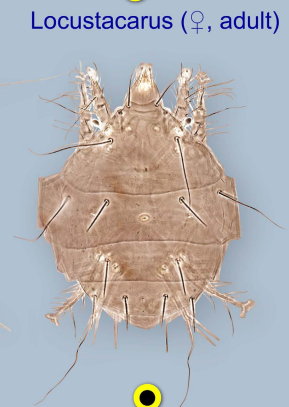
Scutacarus (♀)



Imparipes (♀)



Parascutacarus (♀) rarely found

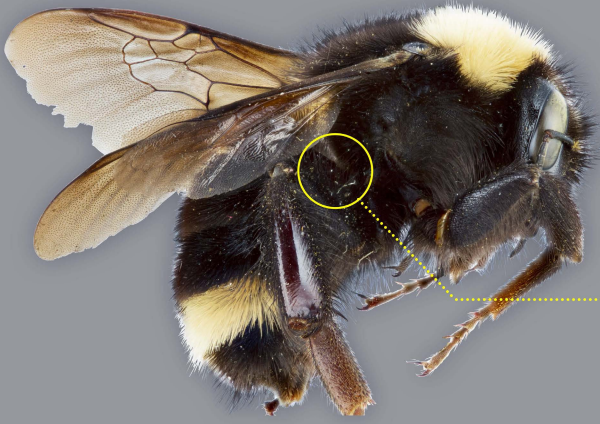


Tarsonemus (♀)

Mesostigmata

All mites without magnification signs (e.g., "2x") are approximately to scale.

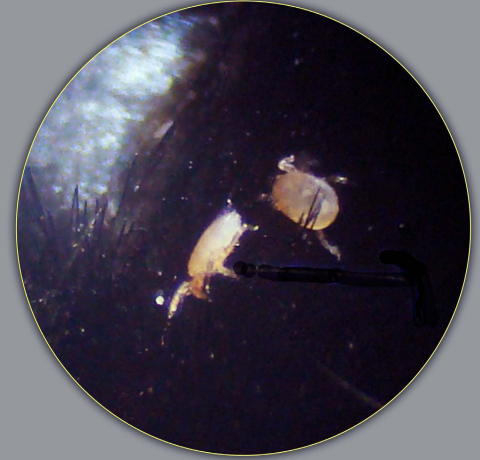
mites on bee at lower magnification



Bombus



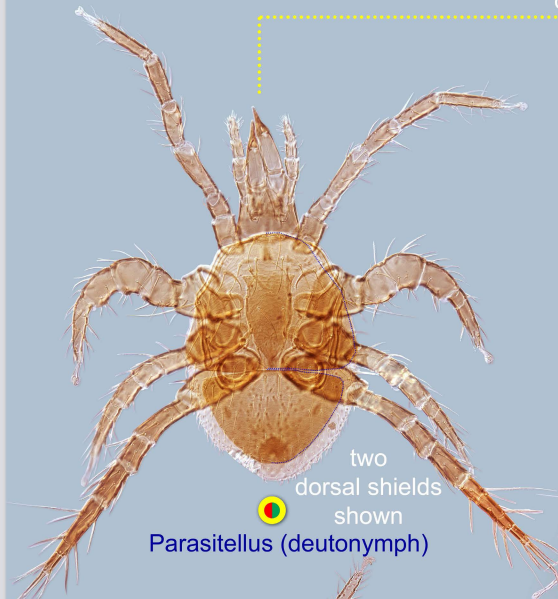
Parasitellus



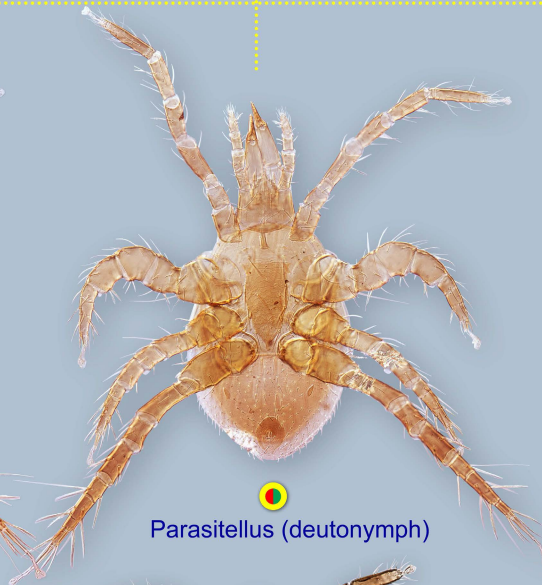
Pneumolaelaps

slide-mounted mites at higher magnification (some can be distinguished by shape)

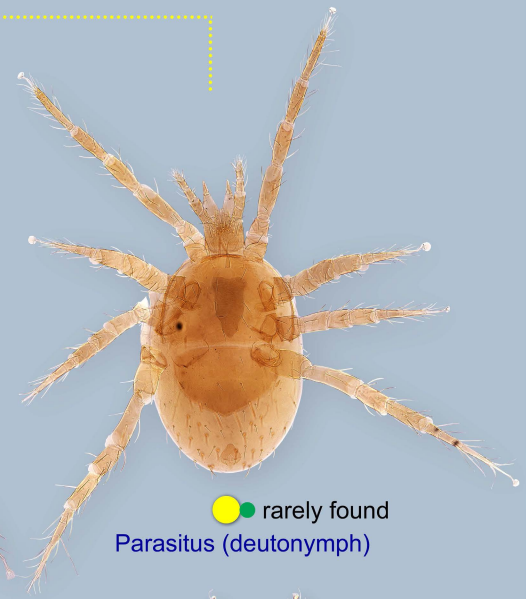
difficult to distinguish by shape; use fact sheets



two dorsal shields shown
Parasitellus (deutonymph)



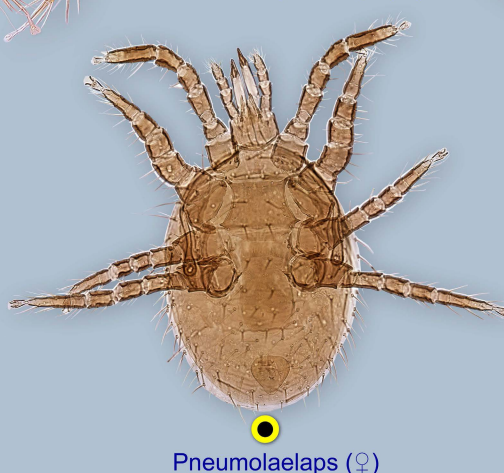
Parasitellus (deutonymph)



rarely found
Parasitus (deutonymph)



Proctolaelaps (♀)



Pneumolaelaps (♀)



Uropodina (deutonymph)