

PLP 3002

Nematodes
Agrios 15: 565-597

Rhabditida (buccal cavities)

Dorylaimida (odontostylets)

Tylenchida (stomatostylets)

Meloidogyne spp.
(Root knot nematode/
endoparasites)

- Galls due to growth regulators / "giant" cells
- Wide host range
 - Prefers high temperatures
 - Mature females pear-shaped
 - Lays eggs externally
 - Abet fungal, bacterial infections

Heterodera spp.
(Cyst nematode)

- Endoparasites
- Create large cells (“syncytia”) akin to giant cells
- Relatively narrow host ranges
 - Soybean cyst nematode
 - Golden nematode
 - Sugarbeet nematode

Heterodera spp.
(Cyst nematode)

- Mature females lemon-shaped
- Lays eggs within bodies
- Readily recognized on roots (pearl-like females)

Pratylenchus
(Lesion nematode)

- Endoparasites
 - Causes root lesions
- Wide host ranges
- All forms vermiform
- Abet fungal / bacterial infections

Aphenlenchoides
(Foliar nematode)

- Endoparasites
- Causes angular lesions on leaves

Many other tylenchids are entirely
ectoparasites

Trichodorus
(Stubby root nematode)

- Ectoparasites
- Wide host ranges
- Transmits certain viruses, including
corky ringspot
- All forms vermiform
- Impedes root tip development
