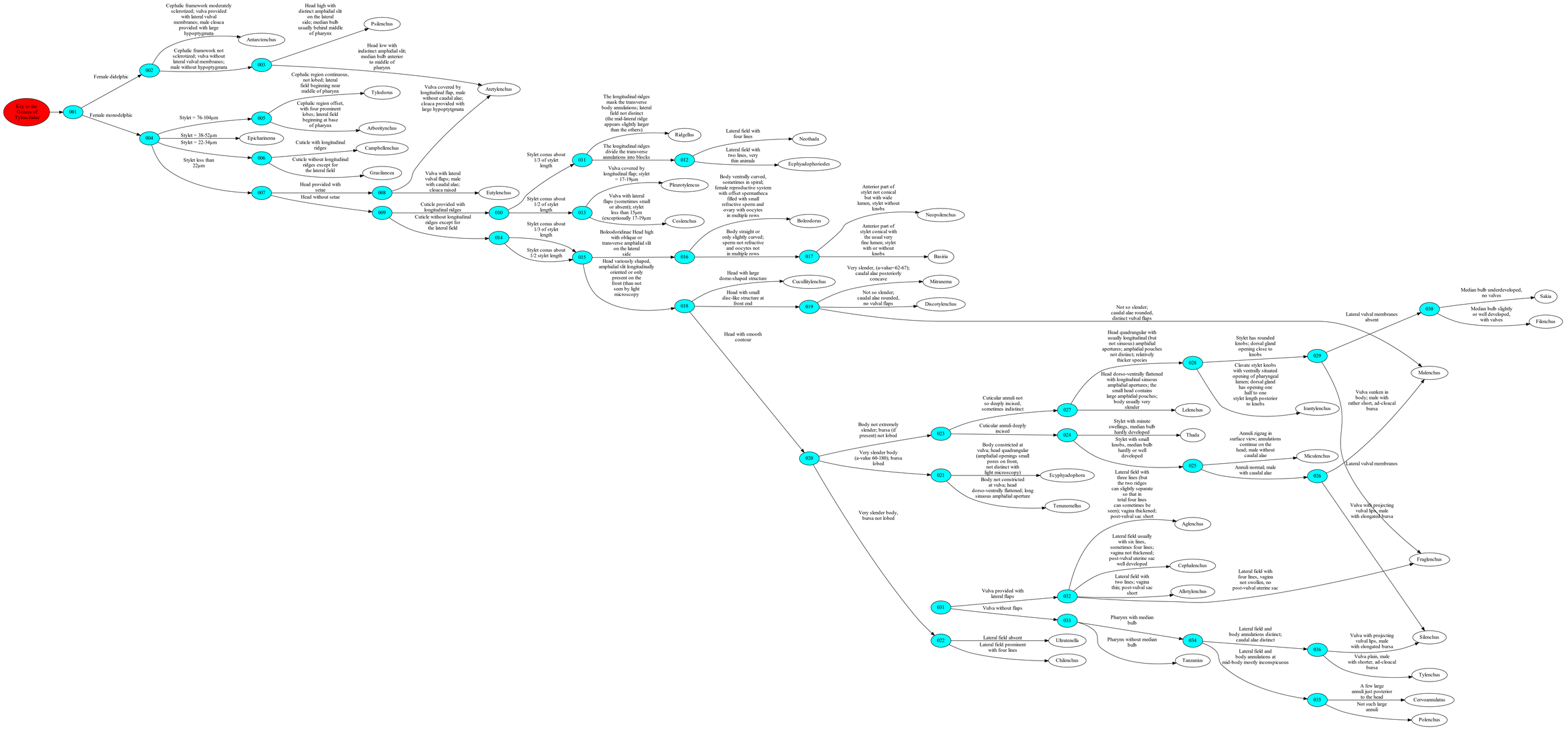
Key to the Genera of Tylenchidae
001
Female dilelphic
Female monodelphic
002
Cephalic framework moderately sclerotized; vulva provided with lateral vulval membranes; male cloaca provided with large hypoptygmata
Antarctenchus
Cephalic framework not sclerotized; vulva without lateral vulval membranes; male without hypoptygmata
003
Head high with distinct amphidial slit on the lateral side; median bulb usually behind middle of pharynx
Psilenchus
Head low with indistinct amphidial slit; median bulb anterior to middle of pharynx
Atetylenchus
004
Stylet = 76-104µm
005
Cephalic region continuous, not lobed; lateral field beginning near middle of pharynx
Tylodorus
Cephalic region offset, with four prominent lobes; lateral field beginning at base of pharynx
Arboritynchus
Stylet = 38-52µm
Epicharinema
Stylet = 22-34µm
006
Cuticle with longitudinal ridges
Campbellenchus
Cuticle without longitudinal ridges except for the lateral field
Gracilancea
Stylet less than 22µm
007
Head provided with setae
008
Vulva covered by longitudinal flap, male without caudal alae; cloaca provided with large hypoptygmata
Vulva with lateral vulval flaps; male with caudal alae; cloaca raised
Eutylenchus
Head without setae
009
Cuticle provided with longitudinal ridges
Cuticle without longitudinal ridges except for the lateral field
010
Stylet conus about 1/3 of stylet length
011
The longitudinal ridges mask the transverse body annulations; lateral field not distinct (the mid-lateral ridge appears slightly larger than the others)
Ridgellus
The longitudinal ridges divide the transverse annulations into blocks
012
Lateral field with four lines
Neothada
Lateral field with two lines, very thin animals
Ecphyadophoriodes
Stylet conus about 1/2 of stylet length
013
Vulva covered by longitudinal flap; stylet = 17-19µm
Pleurotylencus
Vulva with lateral flaps (sometimes small or absent); stylet less than 15µm (exceptionally 17-19µm
Coslenchus
014
Stylet conus about 1/3 of stylet length
Stylet conus about 1/2 stylet length
015
Bokeodoridinae Head high with oblique or transverse amphidial slit on the lateral side
Head variously shaped, amphidial slit longitudinally oriented or only present on the front (than not seen by light microscopy
016
Body ventrally curved, sometimes in spiral; female reproductive system with offset spermatheca filled with small refractive sperm and ovary with oocytes in multiple rows
Bokeodorus
Body straight or only slightly curved; sperm not refractive and oocytes not in multiple rows
017
Anterior part of stylet not conical but with wide lumen, stylet without knobs
Neopsilenchus
Anterior part of stylet conical with the usual very fine lumen; stylet with or without knobs
Basiria
018
Head with large dome-shaped structure
Cucullitylenchus
Head with small disc-like structure at front end
019
Very slender, (a-value=62-67); caudal alae posteriorly concave
Mitranema
Not so slender; caudal alae rounded, no vulval flaps
Discotylenchus
Head with smooth contour
020
Body not extremely slender; bursa (if present) not lobed
023
Cuticular annuli not so deeply incised, sometimes indistinct
027
Head quadrangular with usually longitudinal (but not sinuous) amphidial apertures; amphidial pouches not distinct; relatively thicker species
028
Stylet has rounded knobs; dorsal gland opening close to knobs
029
Lateral vulval membranes absent
030
Median bulb underdeveloped, no valves
Sakin
Median bulb slightly or well developed, with valves
Filenchus
Clavate stylet knobs with ventrally situated opening of pharyngeal lumen; dorsal gland has opening one half to one stylet length posterior to knobs
Irantylenchus
Head dorso-ventrally flattened with longitudinal sinuous amphidial apertures; the small head contains large amphidial pouches; body usually very slender
Lelenchus
Cuticular annuli deeply incised
024
Stylet with minute swellings, median bulb hardly developed
Thada
Stylet with small knobs, median bulb hardly or well developed
025
Annuli zigzag in surface view; annulations continue on the head; male without caudal alae
Miculenchus
Annuli normal; male with caudal alae
026
Lateral vulval membranes
Vulva sunken in body; male with rather short, ad-cloacal bursa
Malenchus
Vulva with projecting vulval lips, male with elongated bursa
Very slender body (a-value 60-180); bursa lobed
021
Body constricted at vulva; head quadrangular (amphidial openings small pores on front, not distinct with light microscopy)
Ecyphyadophora
Body not constricted at vulva; head dorso-ventrally flattened; long sinuous amphidial aperture
Tenunemellus
Very slender body, bursa not lobed
Not so slender; caudal alae rounded, distinct vulval flaps
Lateral field with three lines (but the two ridges can sometimes be seen); vagina thickened; post-vulval sac short
Aglenchus
Lateral field usually with six lines, sometimes four lines; vagina not thickened; post-vulval uterine sac well developed
Cephalenchus
Lateral field with two lines; vagina thin; post-vulval sac short
Allotylenchus
Lateral field with four lines, vagina not swollen, no post-vulval uterine sac
Fraglenchus
031
Vulva provided with lateral flaps
032
Vulva without flaps
033
Pharynx with median bulb
Pharynx without median bulb
Tanzanius
034
Lateral field and body annulations distinct; caudal alae distinct
036
Vulva with projecting vulval lips, male with elongated bursa
Silenchus
Lateral field and body annulations at mid-body mostly inconspicuous
Vulva plain, male with shorter, ad-cloacal bursa
Tylenchus
035
A few large annuli just posterior to the head
Cervoannulatus
Not such large annuli
Polenchus
022
Lateral field absent
Ultratenella
Lateral field prominent with four lines
Chilenchus