

NEMATOTOLOGY 100

Key to the Nine Common *Pratylenchus* Species in California

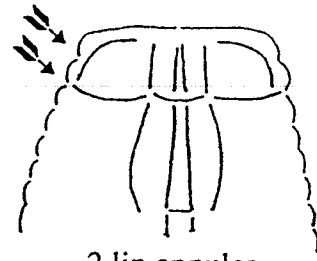
1.	Monosexual species, no sperm in spermatheca, males rare or unknown.	2
	Bisexual species, sperm in most spermatheca, males common.	7
2.	Very large, round stylet knobs, stylet averages 19 μ m in length; V% 82-89; 2 lip annules	<i>P. brachyurus</i>
	Stylet knobs oval or flattened, stylet generally less than 19 μ m long	3
3.	Tail tip annulated, 3 lip annules	<i>P. crenatus</i>
	Tail tip smooth	4
4.	Lip annules 2	5
	Lip annules 3	6
5.	Average V%=84, lip annules about same width; stylet knobs often flattened; vulval lips somewhat smooth	<i>P. neglectus</i>
	Average V%=78%, anterior lip annules markedly narrower than posterior; vulval lips protrude somewhat	<i>P. scribneri</i>
6.	Tail normally truncate, stylet averages 18 μ m in length; V% averages 76; normally assumes a "J" or "C" shape when heat killed	<i>P. zeae</i>
	Tail narrowly rounded, stylet averages 16 μ m in length; V% averages 71; normally almost straight when heat killed	<i>P. thornei</i>
7.	Lip annules 2, occasionally 3 on one side	<i>P. coffeae</i>
	Lip annules 3, occasionally 4 on one side	8
8.	Spermatheca normally round, posterior uterine branch 1 to 1.5 body widths long; large stylet knobs	<i>P. penetrans</i>
	Spermatheca normally oval, posterior uterine branch generally greater than 2 body widths long; moderate sized stylet knobs	<i>P. vulnus</i>

PRATYLENCHUS SPP. WITH 2 LIP ANNULES

P. brachyurus

P. neglectus (minyus)

P. scribneri



2 lip annules

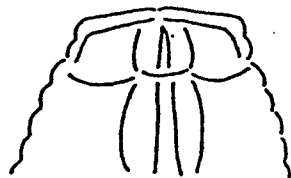
SHAPE OF HEAD AND STYLET KNOBS?

P. brachyurus

Large round stylet knobs



Angular (*) low, broad lip region

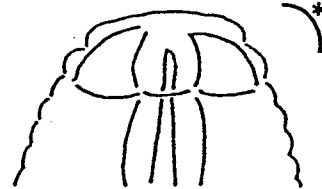


Other spp.

Smaller anteriorly flattened stylet knob



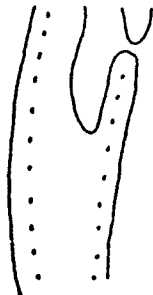
Rounded (*) lip region



LENGTH OF POSTVULVAR SAC?

P. neglectus (minyus)

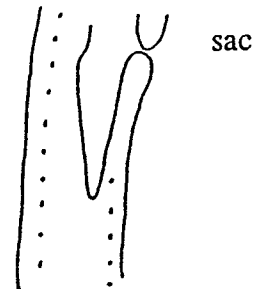
Postvulvar sac about 1 X body width at vulva



(also V = 80-87%)

P. scribneri

Postvulvar sac more than 1 X body width at vulva (about 1.5X)



(also V = 75-82%)

Less common possibility:
P. coffeae--unlike above has many males
and well-formed spermatheca

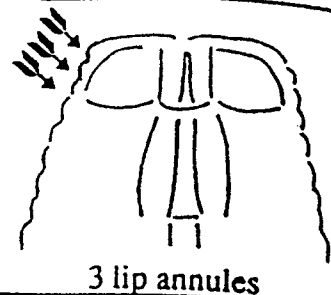
PRATYLENCHUS SPP. WITH 3 OR 4) LIP ANNULES

P. penetrans

**P. pratensis*

P. thornei

P. vulnus
(3 or 4 lip annules)



ANNULES ON TAIL TIP?

P. pratensis

Crenate tip



Other spp.

Smooth tip



SPERMATOTHECA VISIBLE? MALES?

P. thornei

Spermatheca inconspicuous;
males absent.

(also V = 73-80%)

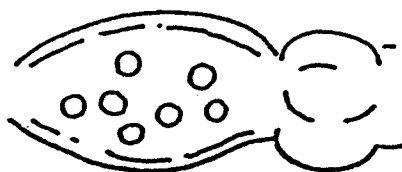
Other spp.

Spermatheca conspicuous;
males common. (Also V
likely to be more than 80%)

SPERMATOTHECA SHAPE?

P. vulnus

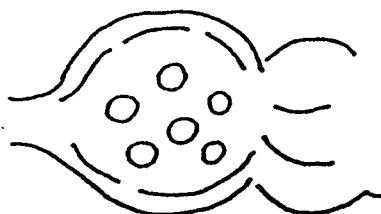
Spermatheca oval



(also may have 4 lip annules)

P. penetrans

Spermatheca round



**P. pratensis* is included for
comparison but is not likely to
be found in California

Less common possibilities: *P. zeae*--
distinct from *P. thornei* by pointed tail
(vs. blunt) and usually V = less than 73%

OBSERVATIONS ON ASSOCIATIONS
OF *PRATYLENCHUS* SPP.
IN CALIFORNIA

Contributed by M. V. McKenry, H. McKinney, and A. Bell

<i>P. brachyurus</i>	Bakersfield (Almonds); also more desert areas: Indio, Blythe (Cotton); Sandy Soil
<i>P. neglectus (minyus)</i>	Wide distribution and wide host range, weeds, grasses
<i>P. penetrans</i>	Cooler areas, apples, cherries, (i.e. stone fruits)
<i>P. scribneri</i>	Warmer areas, wide host range; cotton in El Centro, also sweet corn, snap beans
<i>P. thornei</i>	Clay soil, grass, weeds, wheat (especially certain varieties) other grains (some barley)
<i>P. vulnus</i>	Perineal crops, fruits, walnuts, vines, some citrus (often in low numbers)