1. P. flakkensis
   1. The Lip region is composed of two annules (one stria)
   2. Spermatheca filled with sperm (males generally common)
   3. Terminus crenate
   4. V = 73-77
   5. stylet = 17 um
   6. apical lip annule flattened, distinctly narrower than the second annule
   7. Spermatheca round to quadrangular
   8. PUS undifferentiated
2. P. loosi
   1. The Lip region is composed of two annules (one stria)
   2. Spermatheca filled with sperm (males generally common)
   3. Terminus smooth, unstriated
   4. Terminus narrowly rounded to subacute
   5. V = 79-85
   6. body slender, a= 28-36
   7. apical lip annule slightly rounded
   8. spermatheca oval
3. P. alleni
   1. The Lip region is composed of two annules (one stria)
   2. Spermatheca filled with sperm (males generally common)
   3. Terminus smooth, unstriated
   4. Terminus broadly rounded, truncated or indented
   5. Spermatheca spherical
   6. stylet length under 15 um
   7. V = 78-83
   8. stylet= 13.5-15 um;
   9. PUS short just over body width, undifferentiated
   10. tail bluntly rounded, terminus often with one or two indentations)
   11. Spermatheca oval
   12. spear length over 15 um
4. P. coffeae
   1. The Lip region is composed of two annules (one stria)
   2. Spermatheca filled with sperm (males generally common)
   3. Terminus smooth, unstriated
   4. Terminus broadly rounded, truncated or indented
   5. Spermatheca oval;
   6. spear length over 15 um
   7. V = 76-84;
   8. stylet= 15-18 um;
   9. PUS very variable in size,
   10. usually with rudimentary ovary;
   11. terminus broadly rounded, truncate, or indented
5. P. gibbicaudatus
   1. The Lip region is composed of two annules (one stria)
   2. Spermatheca empty (males rare or absent)
   3. Terminus crenate
   4. Vulva 70-77
   5. Stylet = 14-16 um;
   6. lip region flattened, second annule distinctly wider than first;
   7. pharyngeal overlap about 40 um;
   8. tail with 24-39 annules, terminus often irregular;
   9. PUS with rudimentary ovary, 2 BODY WIDTHS long;
   10. lateral field with four lines
6. P. estoniensis
   1. The Lip region is composed of two annules (one stria)
   2. Spermatheca empty (males rare or absent)
   3. Terminus crenate
   4. Vulva 79-86
   5. Stylet 15.5-17 um;
   6. lip region low dome-shaped;
   7. tail with 22-30 annules, terminus regularly rounded;
   8. lateral field with six lines
7. P. hexincisus
   1. The Lip region is composed of two annules (one stria)
   2. Spermatheca empty (males rare or absent)
   3. Terminus smooth or with single terminal indentation
   4. Lateral field with six lines
   5. V = 75--82;
   6. stylet 14.5-15.4 um;
   7. lip region flattened;
   8. pharyngeal overlap short (24 um illustration);
   9. PUS short, undifferentiated;
   10. terminus round to trunncated
8. P. brachyurus
   1. The Lip region is composed of two annules (one stria)
   2. Spermatheca empty (males rare or absent)
   3. Terminus smooth or with single terminal indentation
   4. Lateral field with four (occasionally five) lines, sometimes with oblique striation in the central band
   5. Stylet length over 19 um;
   6. V = 82-89
   7. Lip region low, angular;
   8. tail distally often subcylindrical (Pharyngeal overlap about 50 um (31-68);
   9. PUS short, undifferentiated;
   10. terminus smooth, broadly rounded to truncate
9. P. macrostylus
   1. The Lip region is composed of two annules (one stria)
   2. Spermatheca empty (males rare or absent)
   3. Terminus smooth or with single terminal indentation
   4. Lateral field with four (occasionally five) lines, sometimes with oblique striation in the central band
   5. Stylet length over 19 um; V = 82-89
   6. Lip region higher rounded;
   7. tail conoid
   8. Pharyngeal overlap 21-48 11 um;
   9. PUS 1.0-1.7 BODY WIDTHS long, slightly differentiated;
   10. tail tapering to narrowly round or irregular terminus
10. P. neglectus
    1. The Lip region is composed of two annules (one stria)
    2. Spermatheca empty (males rare or absent)
    3. Terminus smooth or with single terminal indentation
    4. Lateral field with four (occasionally five) lines, sometimes with oblique striation in the central band
    5. Stylet length 18 um or less
    6. Vulva 80-87
    7. Pharyngeal overlap 27 um (19-35);
    8. apical head annule low dome-shaped;
    9. stylet usually 15-17 um;
    10. PUS short, undifferentiated;
    11. lateral field in pre vulvar region with oblique striation in the central band;
    12. tail tapering to rounded, often oblique terminus
11. P. jordanensis
    1. The Lip region is composed of two annules (one stria)
    2. Spermatheca empty (males rare or absent)
    3. Terminus smooth or with single terminal indentation
    4. Lateral field with four (occasionally five) lines, sometimes with oblique striation in the central band
    5. Stylet length 18 um or less
    6. Vulva 73-80
    7. Orifice of dorsal pharyngeal gland 3 um or more from stylet base;
    8. c' = 2.1-3.0;
    9. cuticle of tail indented terminally
    10. stylet 14.5-15.0 um;
    11. pharyngeal overlap 39 um (29-53);
    12. PUS short, undifferentiated
12. P. scribneri
    1. The Lip region is composed of two annules (one stria)
    2. Spermatheca empty (males rare or absent)
    3. Terminus smooth or with single terminal indentation
    4. Lateral field with four (occasionally five) lines, sometimes with oblique striation in the central band
    5. Stylet length 18 um or less
    6. Vulva 73-80
    7. Orifice of dorsal pharyngeal gland less than 2.5 um from stylet base;
    8. c' = 2.0-2.3;
    9. terminal cuticle not indented
    10. Stylet 12-16 um;
    11. pharyngeal overlap 35 um (20-45);
    12. apical head annule flattened;
    13. PUS 1.1-1.4 BODY WIDTHS long, undifferentiated; terminus usually broadly rounded.
    14. Very similar are P. agilis Thorne and Malek, 1968 (cuticular striation more distinct) and
    15. P.acuticaudatus Braasch and Decker, 1989 (cuticular striation more distinct, tail narrowly rounded)
13. P. ventroprojectus
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca filled with sperm (males generally common)
    3. Terminus smooth
    4. Terminus oblique-truncate with ventral projection
    5. V = 78-80;
    6. stylet = 14-16 um;
    7. spermatheca oval, rectangular or elongate;
    8. PUS 0.9-1.8 BODY WIDTHS long, usually with one terminal cell;
    9. terminus smooth or with 1-2 indentations.
14. P. vulnus
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca filled with sperm (males generally common)
    3. Terminus smooth
    4. Terminus regularly rounded
    5. Terminus bluntly pointed to narrowly rounded.
    6. Body long (0.46-0.91 mm) and
    7. slender (a= 25-40);
    8. PUS long, differentiated
    9. Head with three or four annules;
    10. stylet = 13-19 um;
    11. central zone of lateral field usually narrower than marginal ones;
    12. median bulb narrower, more oblong than in most other species;
    13. pharyngeal overlap 38 um (26-53). Very similar is P. ekrami Bajaj and Bhatti, 1984, distinguished only by shorter stylet (11-13 um and
    14. constantly three head annules)
15. P. sudanensis
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca filled with sperm (males generally common)
    3. Terminus smooth
    4. Terminus regularly rounded
    5. Terminus broadly rounded
    6. Vulva 70-76;
    7. spermatheca oval
    8. (Stylet = 14-16 um;
    9. PUS 1-1.5 BODY WIDTHS , undifferentiated;
    10. tail subcylindrical, with broadly rounded, smooth terminus)
16. P. mediterraneus
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca filled with sperm (males generally common)
    3. Terminus smooth
    4. Terminus regularly rounded
    5. Terminus broadly rounded
    6. Vulva 76-84; if <76, then spermatheca round
    7. Lip region high;
    8. tail almost truncate;
    9. spermatheca round to broadly oval
    10. (V = 77-80;
    11. stylet= 13-15 um;
    12. central zone of the lateral field in midbody with oblique striae which sometimes give the impression of six lateral lines;
    13. PUS about one body width long)
17. P. pseudopratensis
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca filled with sperm (males generally common)
    3. Terminus smooth
    4. Terminus regularly rounded
    5. Terminus broadly rounded
    6. Vulva 76-84; if <76, then spermatheca round
    7. Lip region normal
    8. Spermatheca oval;
    9. V = 76-80
    10. Stylet = 15 um;
    11. body often narrowed ventrally behind vulva;
    12. lip region flattened anteriorly;
    13. terminus round to truncate;
    14. PUS short, undifferentiated
18. P. penetrans
    1. Spermatheca round;
    2. V = 77-84 (
    3. V= usually 78-84;
    4. stylet = 15-17 um;
    5. pharyngeal overlap 50 um (32- 65);
    6. PUS 1.0-1.5 BODY WIDTHS long;
    7. spermatheca round to squarish;
    8. terminus evenly rounded, terminal cuticle slightly thickened.
    9. Very similar are P. kralli Ryss, 1982, which differs only by the more angular terminus, and
    10. P. subpenetrans Taylor and Jenkins,1957, differing by longer, differentiated PUS.
    11. Ryss (1988) considered both species identical with penetrans)
19. P. morettoi
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca filled with sperm (males generally common)
    3. Terminus annulated
    4. Terminus pointed;
    5. tail annules > 30
    6. Spermatheca round;
    7. posterior uterine sac more than 2.5 body widths long
    8. Body long, 0.56-0.93 mm, and
    9. slender, a= 26-40,
    10. stylet= 14-19 um,
    11. V= 73-80,
    12. tail 46-62 um long, usually with mucro
20. P. kasari
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca filled with sperm (males generally common)
    3. Terminus annulated
    4. Terminus pointed;
    5. tail annules > 30
    6. Spermatheca oblong;
    7. posterior uterine sac less than 1.8 body widths long
    8. (Body rather long, 0.56-0.77 mm;
    9. V = 75-81;
    10. stylet = 16-18 um;
    11. tail length under 40 um,
    12. terminus without mucro.
    13. Ryss (1988) considered kasari and morettoi identical)
21. P. pratensisobrinus
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca filled with sperm (males generally common)
    3. Terminus annulated
    4. Terminus round;
    5. tail annules < 30
    6. Spermatheca oblong
    7. c = 12-15;
    8. stylet 15-17 um
    9. V = 75-80;
    10. spermatheca round to elongate.
    11. Considered possibly an extreme variant of P. pratensis by Bernard (1984);
    12. Ryss (1988) synonymized it with P. kasari
22. P. pratensis
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca filled with sperm (males generally common)
    3. Terminus annulated
    4. Terminus round;
    5. tail annules < 30
    6. Spermatheca oblong
    7. c = 15-24;
    8. stylet 13-16 um
    9. V = 75-79;
    10. spermatheca large, elongate, farther anterior to vulva than usual in this genus;
    11. terminus rounded to oblique, sometimes irregularly knobbed
23. P. convallariae
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca filled with sperm (males generally common)
    3. Terminus annulated
    4. Terminus round;
    5. tail annules < 30
    6. The spermatheca is no longer than wide
    7. Terminus truncate,
    8. tail annules < 20
    9. V = 76-81;
    10. stylet 16-18 um;
    11. PUS 1.4-2 body widths , undifferentiated;
    12. terminus truncate to indented
24. P. ventroprojectus
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca filled with sperm (males generally common)
    3. Terminus annulated
    4. Terminus round;
    5. tail annules < 30
    6. The spermatheca is no longer than wide
    7. Terminus is not truncate or oblique-truncate
    8. Terminus oblique-truncate with ventral projection (see under no. 15)
25. P. pratensisobrinus
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca filled with sperm (males generally common)
    3. Terminus annulated
    4. Terminus round;
    5. tail annules < 30
    6. The spermatheca is no longer than wide
    7. Terminus is not truncate or oblique-truncate
    8. Terminus round
    9. The Lip region is composed of three annules (two striae)
    10. Spermatheca filled with sperm (males generally common)
    11. Terminus annulated
    12. Terminus round
    13. Posterior uterine sac 1.6-2.7 body widths long (see under no. 23)
26. P. fallax
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca filled with sperm (males generally common)
    3. Terminus annulated
    4. Terminus round
    5. Posterior uterine sac no longer than 1.4 body widths
    6. V = 77-81;
    7. stylet= 16-17 um;
    8. pharyngeal overlap 31 um (20-44);
    9. PUS often with some terminal differentiation;
    10. terminus rounded or slightly irregular.
    11. Very similar to P. pseudofallax Cafe-Filho and Huang, 1989, differing from P. fallax by shorter stylet(14-16 um), deeper body striation and undifferentiated PUS)
27. P. microstylus
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca empty (males rare or absent)
    3. Terminus smooth
    4. Stylet length 11-12 um
    5. V = 75-77;
    6. pharyngeal overlap 28-46 um;
    7. PUS short, undifferentiated;
    8. Terminus broadly rounded)
28. P. thornei
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca empty (males rare or absent)
    3. Terminus smooth
    4. Stylet length 14-20 um
    5. Head high, not offset;
    6. tail truncate;
    7. body narrowed ventrally behind vulva;
    8. V = 73-80
    9. Stylet = 15-19 um;
    10. pharyngeal overlap 40 um (30-55);
    11. PUS about 1.5 body widths ,undifferentiated
29. P. zeae
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca empty (males rare or absent)
    3. Terminus smooth
    4. Stylet length 14-20 um
    5. Head standard, usually slightly offset;
    6. body not narrowed behind the vulva
    7. Vulva 65-76
    8. Stylet = 15-18 um;
    9. pharyngeal overlap = 31 um (18-40);
    10. head annules often indistinct;
    11. PUS 1-2 body widths long, often with some ovarial tissue;
    12. intestine overlaps rectum
30. P. pinguicaudatus
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca empty (males rare or absent)
    3. Terminus smooth
    4. Stylet length 14-20 um
    5. Head standard, usually slightly offset;
    6. body not narrowed behind the vulva
    7. Vulva 73-83
    8. Tail subcylindrical, broadly rounded
    9. Posterior uterine sac shorter than body width
    10. V = 78-84;
    11. stylet= 15-20 um;
    12. lateral field areolated;
    13. tail very plump, with broadly rounded terminus.
    14. Very similar is P. cruciferus Bajaj and Bhatti, 1984, distinguished by greater length (0.65-0.79 vs. 0.42-0.63 mm) and
    15. shorter pharyngeal overlap(31-51 um vs. 52- 70).
    16. However, Brzeski and Szczygiet (1977) illustrated an overlap of 37 um in P. pinguicaudatus, so the two species cannot be satisfactorily distinguished at present)
31. P. andinus
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca empty (males rare or absent)
    3. Terminus smooth
    4. Stylet length 14-20 um
    5. Head standard, usually slightly offset;
    6. body not narrowed behind the vulva
    7. Vulva 73-83
    8. Tail subcylindrical, broadly rounded
    9. Posterior uterine sac longer than body width
    10. Posterior uterine sac undifferentiated
    11. V = 78-81 (Corbett, 1984; in original description 81-85),
    12. stylet= 15-18 um; PUS 1.5 body widths (19-34 um);
    13. pharyngeal overlap 28-53 um;
    14. tail plump,
    15. terminusbroadly rounded;
    16. lateral field partly areolated
32. P. mulchandi
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca empty (males rare or absent)
    3. Terminus smooth
    4. Stylet length 14-20 um
    5. Head standard, usually slightly offset;
    6. body not narrowed behind the vulva
    7. Vulva 73-83
    8. Tail subcylindrical, broadly rounded
    9. Posterior uterine sac longer than body width
    10. Posterior uterine sac differentiated
    11. Vulva 75-78,
    12. stylet length 16-20 um
    13. (PUS more than 1.5 body widths;
    14. terminus truncate, oblique, broadly or occasionally narrowly rounded
33. P. sensillatus
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca empty (males rare or absent)
    3. Terminus smooth
    4. Stylet length 14-20 um
    5. Head standard, usually slightly offset;
    6. body not narrowed behind the vulva
    7. Vulva 73-83
    8. Tail subcylindrical, broadly rounded
    9. Posterior uterine sac longer than body width
    10. Posterior uterine sac differentiated
    11. Vulva 77-81 ,
    12. stylet length 14-18 um
    13. Body slender (a = 28-42);
    14. pharynx short (b > 1)
    15. L = 0.57--0.69 mm;
    16. stylet= 15-17 um;
    17. pharyngeal overlap 46 um (39- 66);
    18. PUS 23. um (14-32);
    19. tail very plump
34. P. sefaensis
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca empty (males rare or absent)
    3. Terminus smooth
    4. Stylet length 14-20 um
    5. Head standard, usually slightly offset;
    6. body not narrowed behind the vulva
    7. Vulva 73-83
    8. Tail subcylindrical, broadly rounded
    9. Posterior uterine sac longer than body width
    10. Posterior uterine sac differentiated
    11. Vulva 77-81 ,
    12. stylet length 14-18 um
    13. Body stouter (a= 17-31);
    14. pharynx longer (b = <7)
    15. L = 0.40-0.53 mm;
    16. stylet= 14-16 um;
    17. tail very plump;
    18. PUS 15-30 um;
    19. pharyngeal overlap 21--41 um; lateral field very variable
35. P. delattrei
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca empty (males rare or absent)
    3. Terminus smooth
    4. Stylet length 14-20 um
    5. Head standard, usually slightly offset;
    6. body not narrowed behind the vulva
    7. Vulva 73-83
    8. Tail tapering, more narrowly rounded
    9. Vulva 73-81
    10. Stylet = 14- 18 um;
    11. PUS 1.2-1.4 body widths long, undifferentiated;
    12. a small (0.39-0.55) and
    13. stout (a = 20-28) species
36. P. bolivianus
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca empty (males rare or absent)
    3. Terminus smooth
    4. Stylet length 14-20 um
    5. Head standard, usually slightly offset;
    6. body not narrowed behind the vulva
    7. Vulva 73-83
    8. Tail tapering, more narrowly rounded
    9. Vulva 77-83
    10. V = 80-82;
    11. stylet = 17-20 um;
    12. pharyngeal overlap= 18-49 um;
    13. PUS 22- 31 um or 1.25 body widths long, undifferentiated.
    14. Frederick and Tarjan (1989) and I consider P. australis Valenzuela and Raski, 1985 identical to P. bolivianus
37. P. crenatus
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca empty (males rare or absent)
    3. Terminus annulated
    4. Vulva 80-86;
    5. posterior uterine sac longer than body width
    6. Stylet = 14-18 um;
    7. pharyngeal overlap short, 25 um (17-38);
    8. terminus coarsely striated, often clavate in younger females;
    9. cuticular sculpture rather deep and conspicuous
38. P. teres
    1. The Lip region is composed of three annules (two striae)
    2. Spermatheca empty (males rare or absent)
    3. Terminus annulated
    4. Vulva 70-77;
    5. posterior uterine sac no longer than body width
    6. stylet= 17-18 um;
    7. pharyngeal overlap= 54 um (illustration);
    8. tail tapering, terminus round or oblique
39. P. goodeyi
    1. The Lip region is composed of four annules (three striae)
    2. Tail dorsally sinuate just before terminus;
    3. V = 73-75
    4. Stylet = 15-17 um;
    5. pharyngeal overlap = 48 um (40-63);
    6. spermatheca large,rectangular
40. P. morettoi
    1. The Lip region is composed of four annules (three striae)
    2. Tail regular, not sinuate
    3. Tail annules 34-53;
    4. tail pointed;
    5. spermatheca round (see under no. 21)
41. P. typicus
    1. The Lip region is composed of four annules (three striae)
    2. Tail regular, not sinuate
    3. Tail annules < 30;
    4. tail rounded; spermatheca oval or empty
    5. Spermatheca empty
    6. Stylet length 15-17 um
    7. V = 79-84;
    8. PUS long, differentiated;
    9. tail conoid, terminus generally narrowly rounded.
    10. Males unknown, and it is uncertain if the filled spermatheca is not rather a developing oocyte with granular contents
42. P. wescolagricus
    1. The Lip region is composed of four annules (three striae)
    2. Tail regular, not sinuate
    3. Tail annules < 30;
    4. tail rounded; spermatheca oval or empty
    5. Spermatheca empty
    6. Stylet length 17-20 um
    7. V = 78-82;
    8. pharyngeal overlap= 21-49 um;
    9. PUS 1 body widths long, undifferentiated;
    10. Tail subcylindrical, terminus smooth, broadly rounded
43. P. vulnus
    1. The Lip region is composed of four annules (three striae)
    2. Tail regular, not sinuate
    3. Tail annules < 30;
    4. tail rounded;
    5. spermatheca oval or empty
    6. Spermatheca oval, filled with sperm
    7. Tail narrowly rounded to subacute;
    8. posterior uterine sac two body widths long, differentiated;
    9. body slender (a = 25-39) (see under no. 16)