

PHYLUM ANNELIDA

Class Oligochaeta

Microdrile oligochaetes

Megadrile oligochaetes

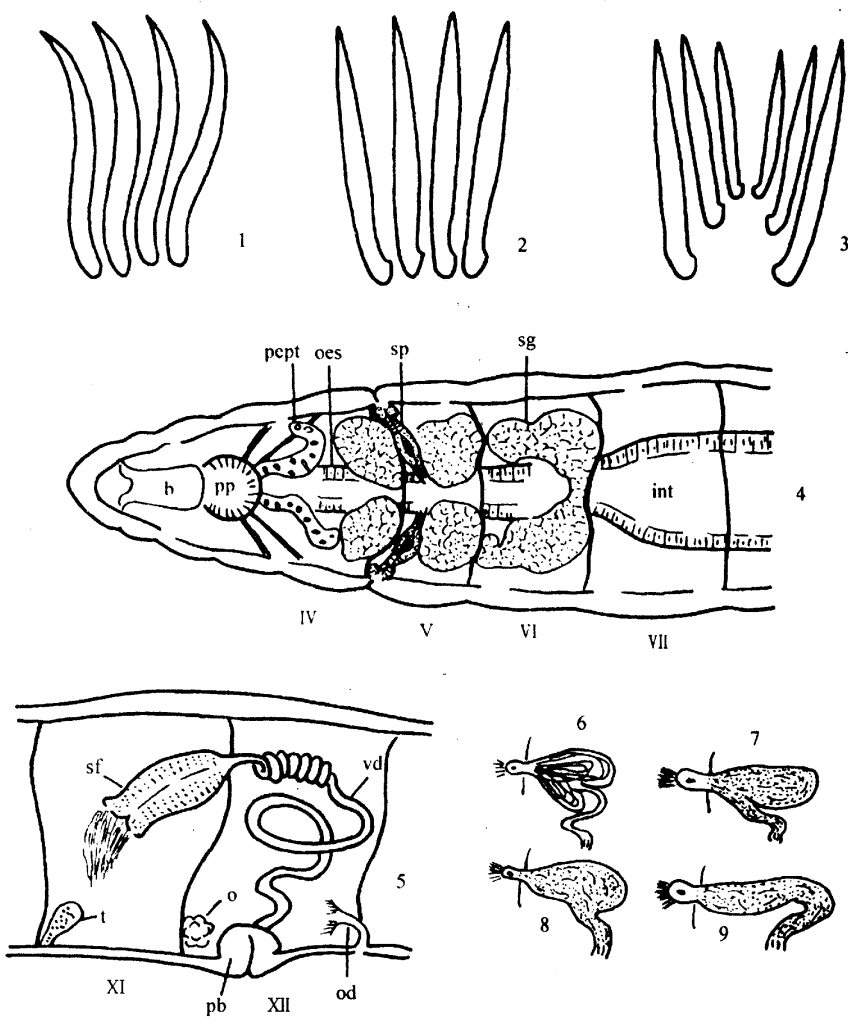


Fig. 15 Illustration of different parts of Enchytraidae

1. sigmoid setae (*Lumbrillus* type); 2. straight setae (*Enchytraeus* type); 3. pairwise setae (*Fridericia* type); 4. dorsal view of anterior segments; 5. lateral view of genital organs; 6. nephridia without interstitial tissue; 7-9. nephridia with well-developed interstitial tissue, and efferent ducts originating from antero-ventral, mid-ventral and terminal of postseptal parts. b. brain; int. intestine; o. ovary; od. oviduct; oes. oesophagus; pb. penial bulb; pept. peptonephridia; pp. pharyngeal plate; sf. sperm funnel; sg. septal glands; sp. spermatheca; t. testes; vd. vas deferens.

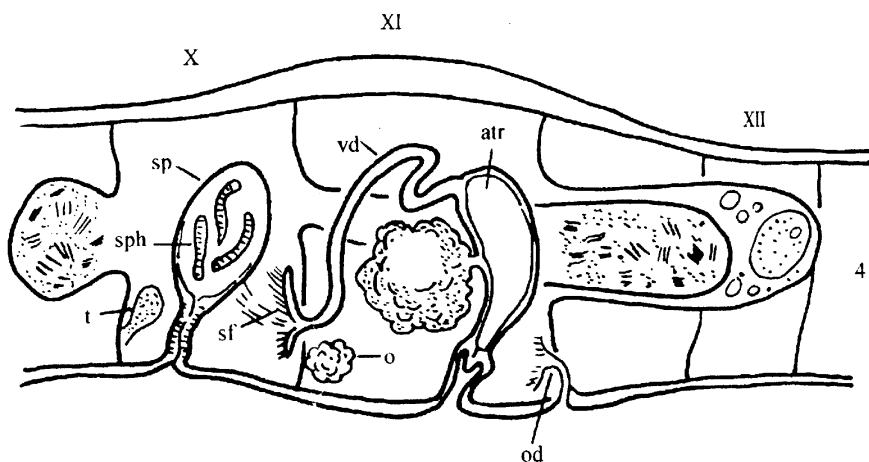
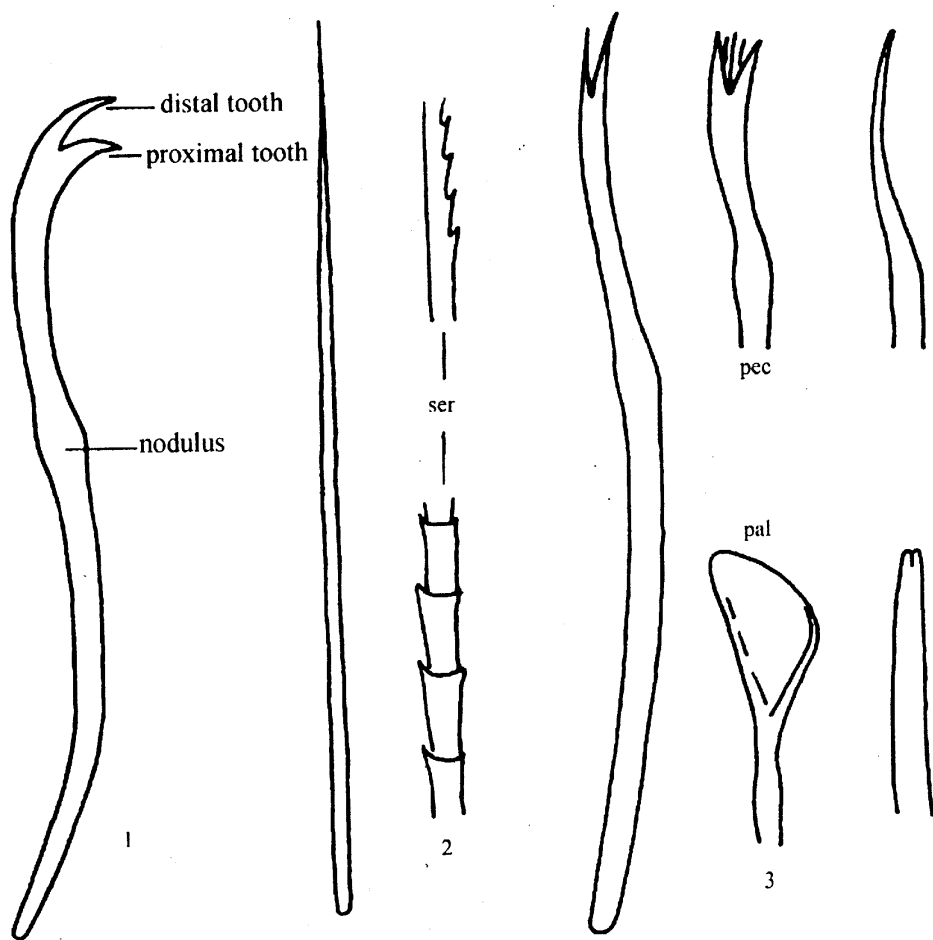


Fig. 16 Illustration of different parts of Naididae and Tubificidae

1-3. *Nais*: 1. crotchet, 2. hair, 3. needle; 4. lateral view of genital organs of Tubificidae. atr. atrium; o. ovary; pal. palmate; pec. pectinate; pr. prostate; ser. serration; sf. sperm funnel; sp. spermatheca; sph. spermatophore; t. testes; vd. vas deferens.

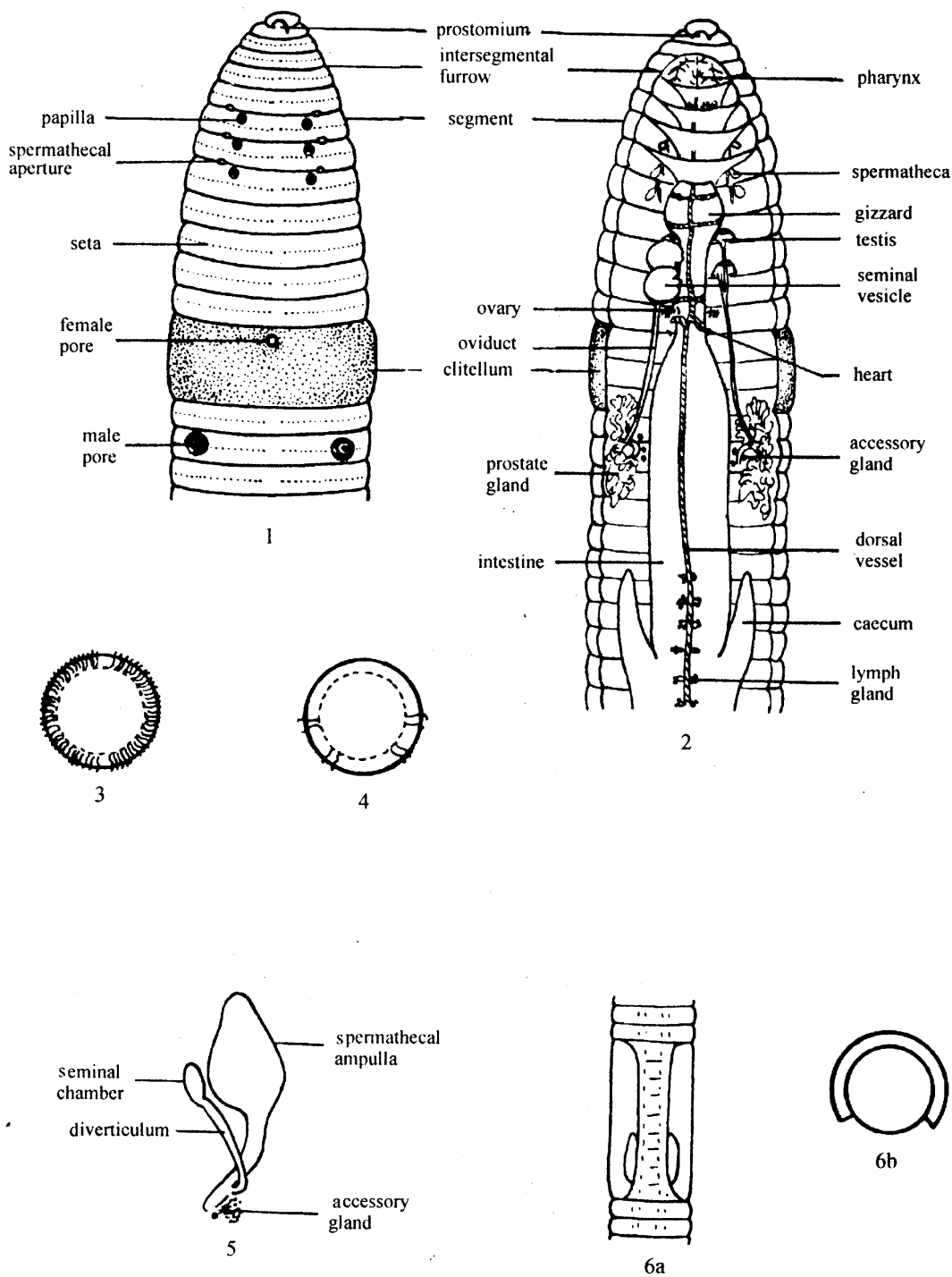


Fig. 17 Illustration of different parts of Lumbricida

1. external ventral view of anterior end of *Amonthas*; 2. dissection of internal organs of *Amonthas* with dorsal body-wall removed; 3. arrangement of setae of *Amonthas*; 4. arrangement of setae of *Allolobophora*; 5. spermatheca of *Amonthas*; 6. saddle-shaped clitellum of *Eisenia*; 6a. ventral view; 6b. cross-section view.

Key to families and genera of Class Oligochaeta

L<40mm; segments and clitellum usually inconspicuous; male pore half a segment from septum bearing male funnel

L>40mm; segments and clitellum usually conspicuous; male pores one segment or more behind septum bearing male funnel



Microdrile oligochaetes



Megadrile oligochaetes
Lumbricida

gonads more than 2 pairs



gonads 2 pairs



very long and slender; setae 1-2 per bundle, usually simple-pointed; male ducts without atria and prostate



Haplotaxidae
Haplotaxis

setae 2 per bundle, simple-pointed or distal tooth reduced; blind posterior lateral blood vessels usually present; last pair of male pores before septum bearing sperm funnel



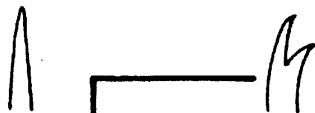
Lumbriculidae
Lumbriculus

usually greyish white; setae simple-pointed. male pores on XII; spermathecae in V



Enchytraeidae

bifid crotchets usually present; male pores before XII; spermathecae one segment before male pores



usually transparent and small; budding zone often present. male pores on V, VI or VIII; spermathecae on IV, V or VII

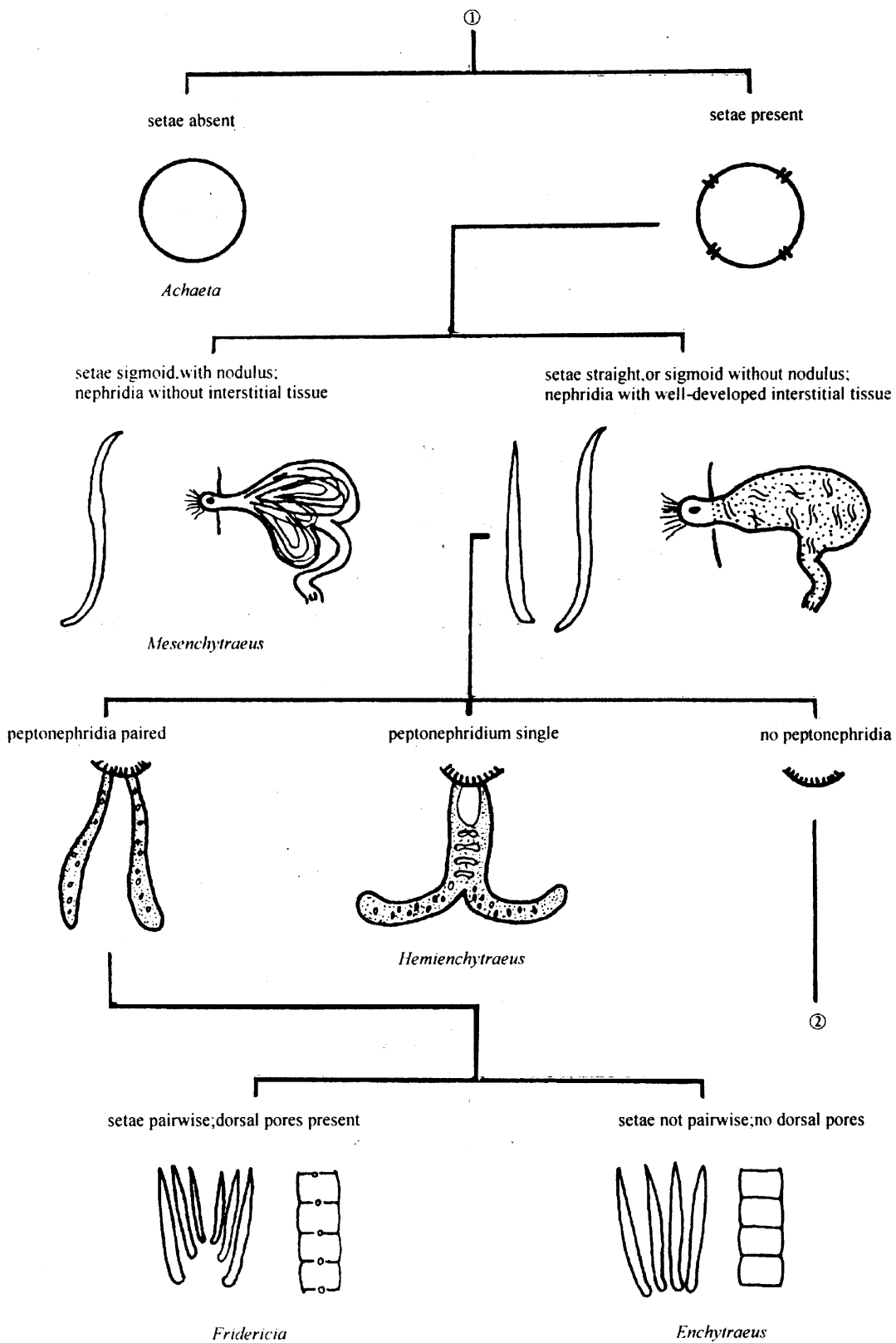


Naididae

usually reddish, long and thick; male pores on XI; spermathecae in X



Tubificidae



②

oesophageal appendages in VI, or IV+VI;
transition between oesophagus and intestine sudden

no oesophageal appendages; transition
between oesophagus and intestine gradual



Henlea

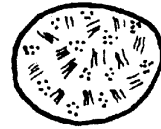


seminal vesicles lobed

seminal vesicles not lobed



Lumbricillus



coelomocytes of two types

coelomocytes of one type



Hemifridericia

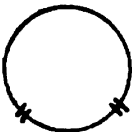


Marionina

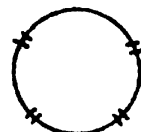
③

dorsal setae absent

dorsal setae present



Chaetogaster



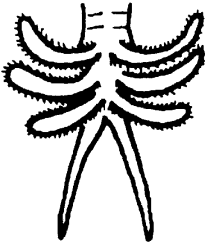
④

④

branchial fossa with palps

branchial fossa without palps

branchial fossa and palps absent



Aulophorus

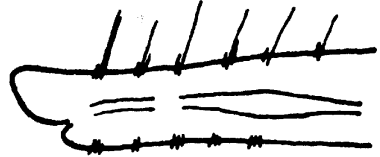
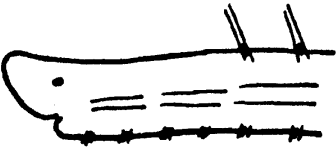


Dero



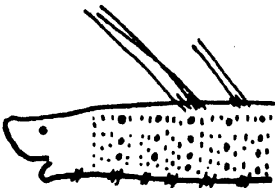
eyes present; dorsal setae from VI onwards

no eyes; dorsal setae from II onwards

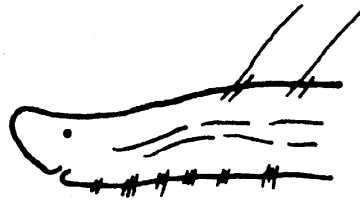


body wall usually surrounded by adhering foreign matter, with rows of sensory papillae

body clean, without sensory papillae



Slavina



Nais

proboscis present

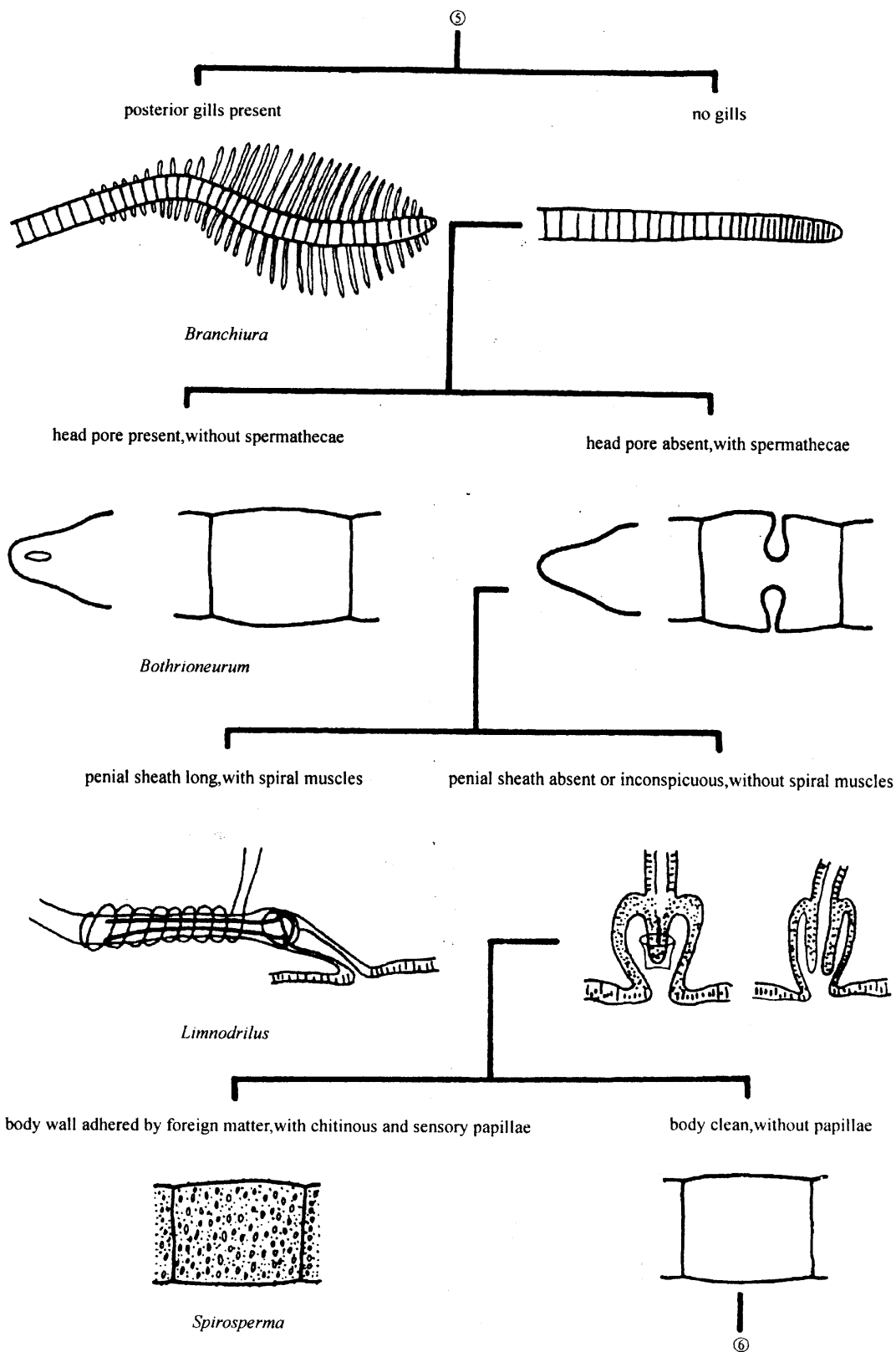
no proboscis



Pristina



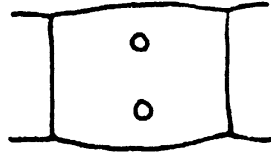
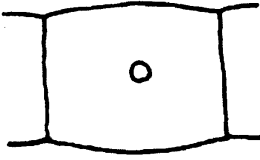
Pristinella



⑥

no hairs;male pore single

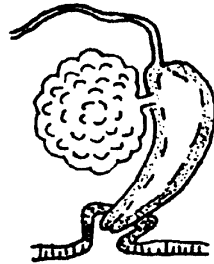
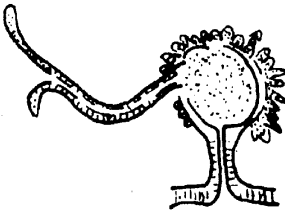
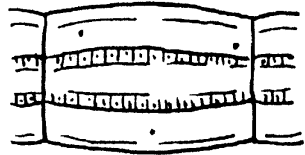
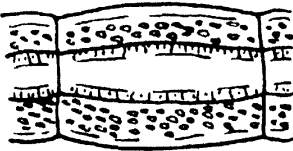
hairs present;male pores paired



Monopylephorus

coelomocytes abundant;prostate diffuse

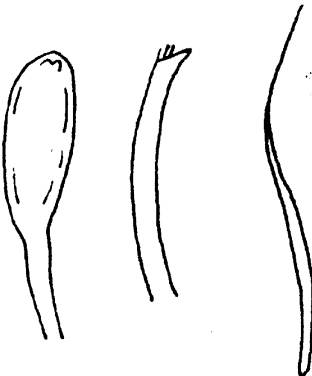
coelomocytes few;prostate solid



Rhyacodrilus

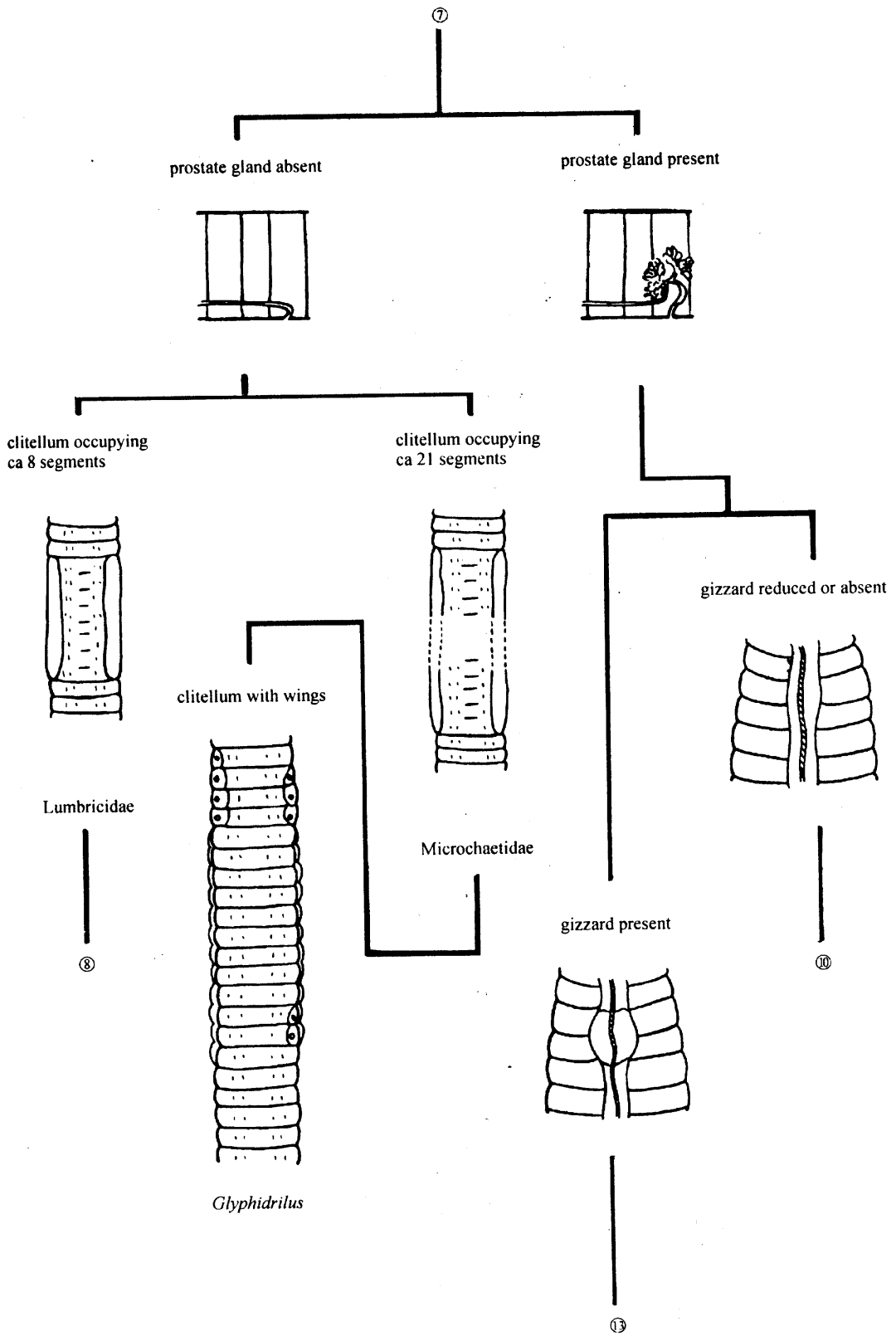
needle usually modified;hair bayonet-shaped

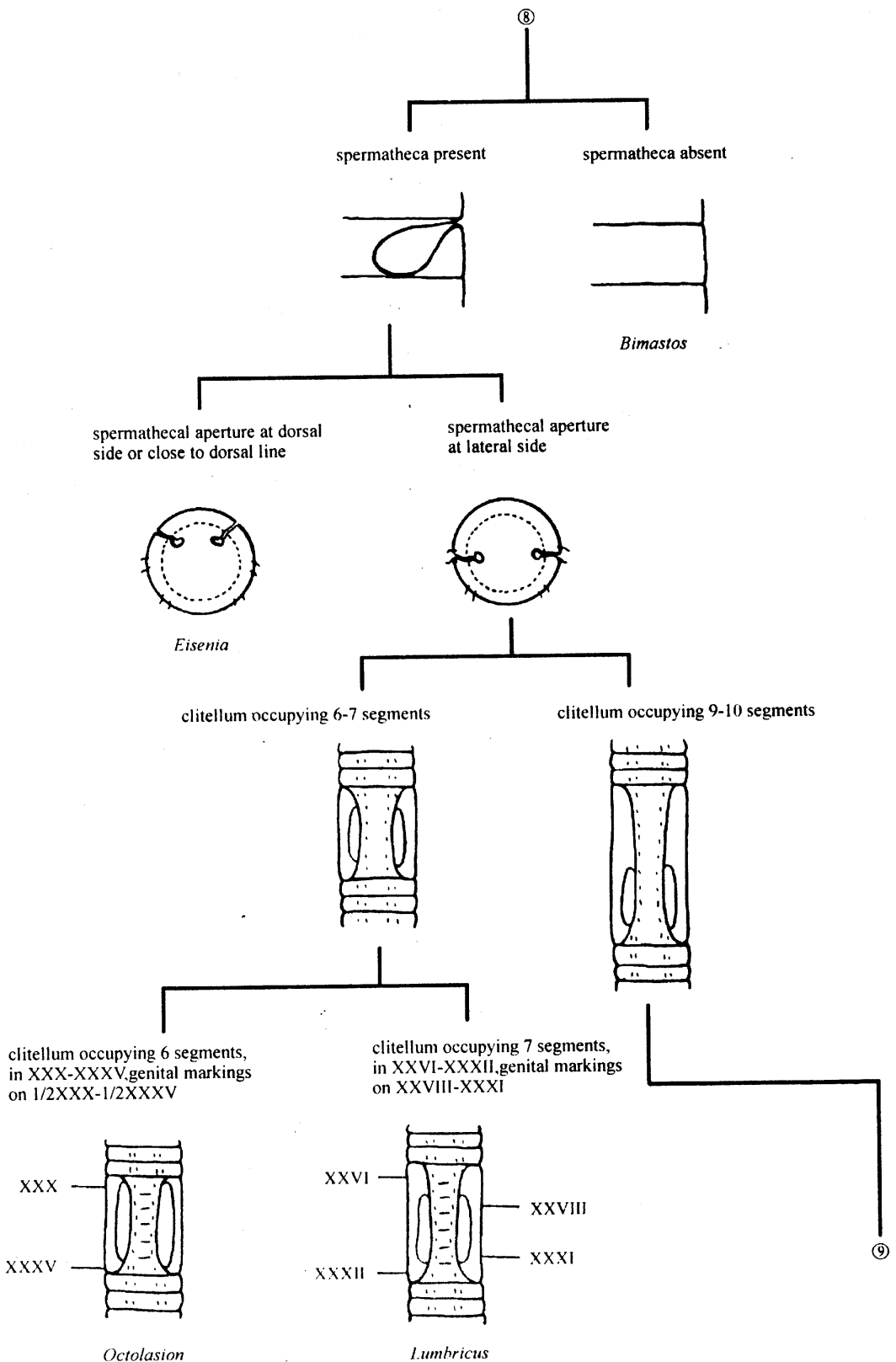
needle normal.usually pectinate;hairs usually pectinate



Tubifex

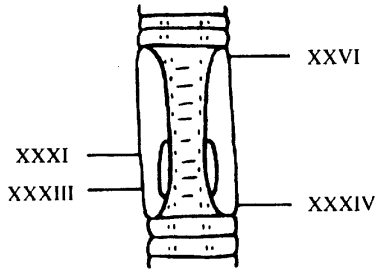
Aulodrilus





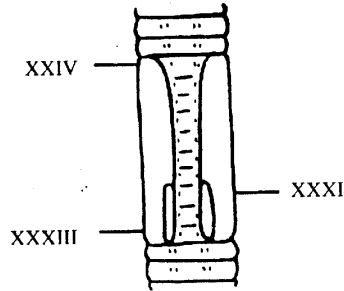
⑨

clitellum occupying 9 segments,
in XXVI-XXXIV, genital markings
on XXXI-XXXIII



Allolobophora

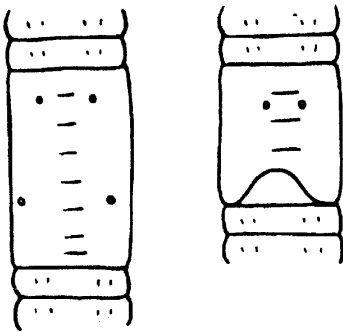
clitellum occupying 10 segments,
in XXIV-XXXIII, genital markings
on XXXI-XXXIII



Dendrobaena

⑩

clitellum occupying 7 or 8 segments
normally, if only occupying 5 segments,
clitellum with a ventral notch posteriorly



Ocnodrilidae

⑪

clitellum occupying 5 segments



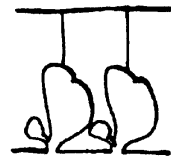
Acanthodrilidae

Spermathecae 1 pair

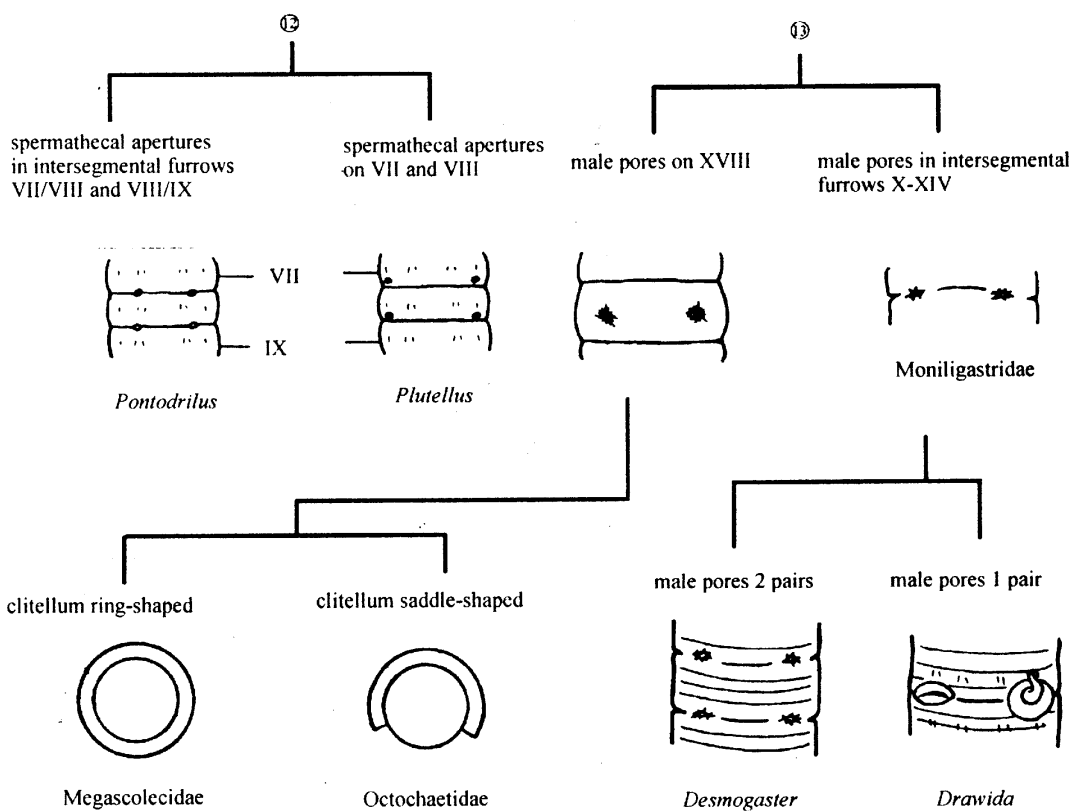
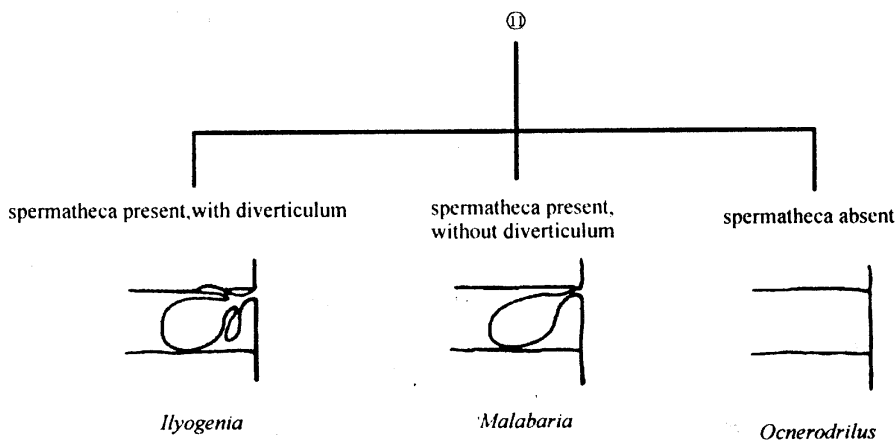


Microscolex

Spermathecae 2 pairs

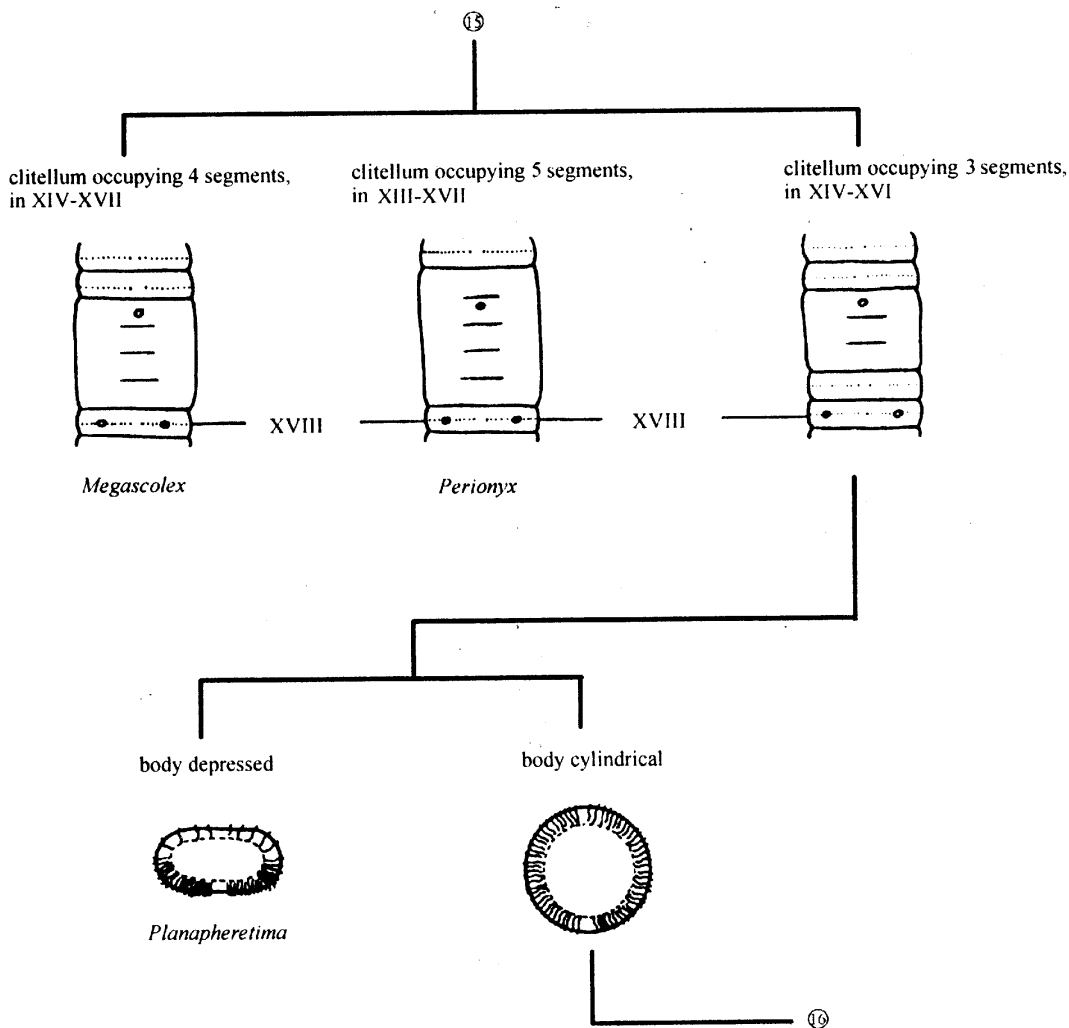
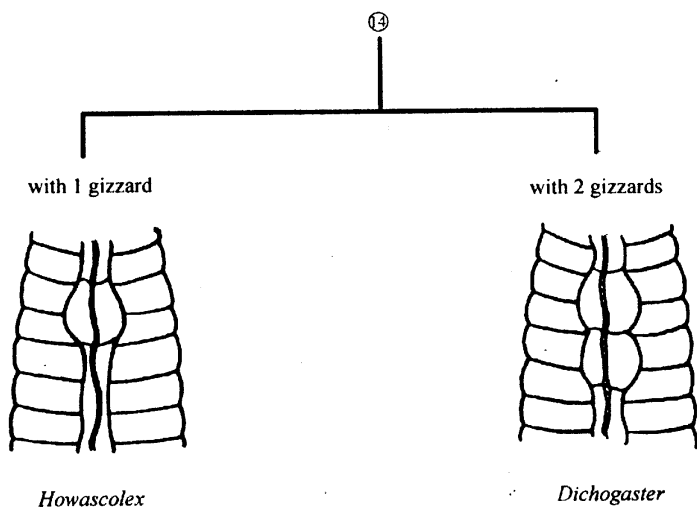


⑫



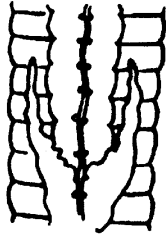
⑬

⑭

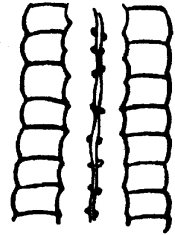


16

cacum present

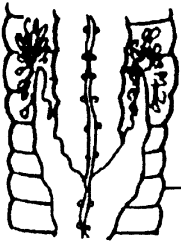


cacum absent



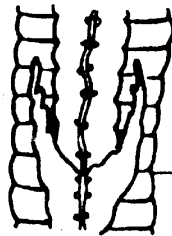
Metapheretima

caeca origin at XXII



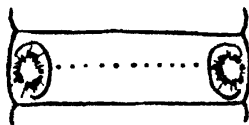
Pithemera

caeca origin at XXVII



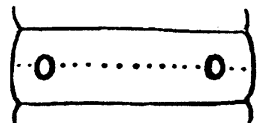
XXVII

copulatory pouches present



Metaphire

copulatory pouches absent



Amyntas

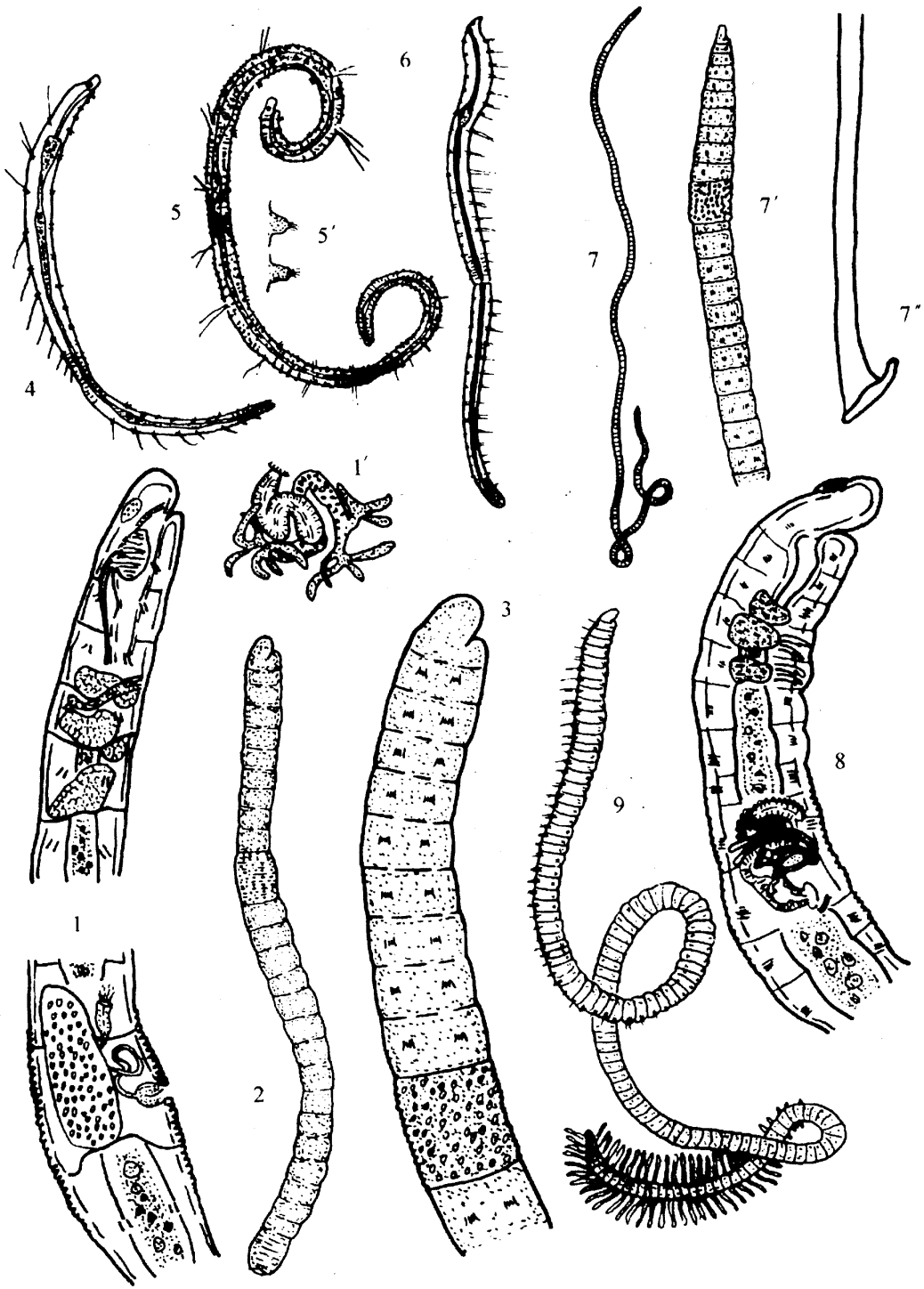
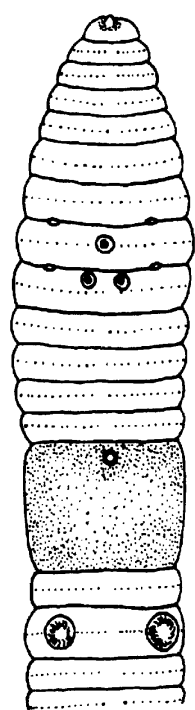
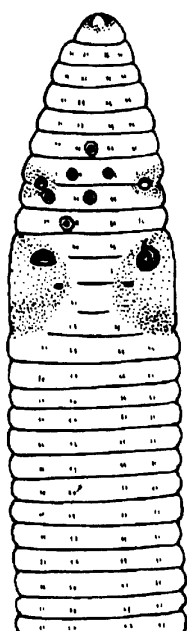


Fig. 18 Common microdriles in China

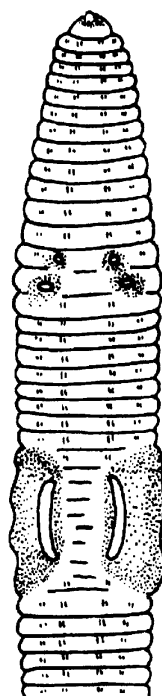
1 & 1'. *Hemienchytraeus* and peptonophridia; 2. *Achaeta*; 3. *Fridericia*; 4. *Nais*; 5 & 5'. *Slavina* and sensory papillae (after Chen); 6. *Pristinella*; 7, 7' & 7''. *Limnodrilus* and anterior segments enlarged, penial sheath; 8. *Bothrioneurum*; 9. *Branchiura* (after Chen).



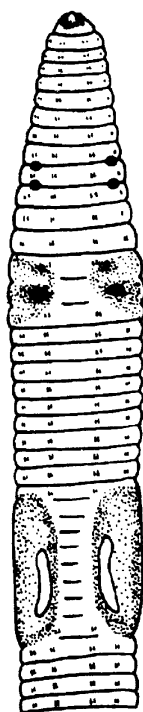
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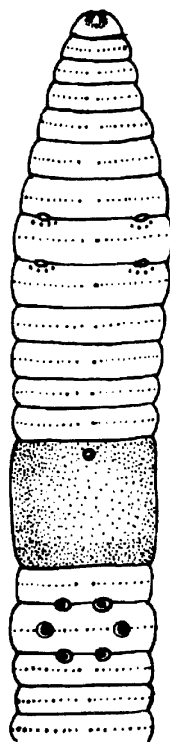
2



3



4



5

Fig. 19 Common megadriles in China

1. *Metaphire*; 2. *Drawida*; 3. *Eisenia*; 4. *Allolobophora*; 5. *Amyntas*

PHYLUM ANNELIDA

Class Oligochaeta

Body segmented, without parapodia. Head weakly developed. Setae few and simple. Hermaphrodite, with gonads confined to several anterior segments. Eggs developing in cocoons. Clitellum present when mature. For convenience, the class usually be divided into Microdrile and Megadrile oligochaetes. Microdriles usually shorter than 40 mm. Eggs large and yolky. Clitellum only one cell thick in region of gonopores. Eversible thickened pharynx. Lateral lines present. No typhlosole, gizzard, or anterior digestive glands except septal glands. No subneural blood vessel. Anterior nephridia reduced in number. Megadriles usually longer than 40mm, with corresponding characters opposite to the former. 179 species belonging to five families and 65 genera of microdriles and 198 species of seven families and 24 genera of megadriles recorded from China.

Order Haplotaxida

Plesioporous microdriles. Octogonadal (two pairs of testes and two pairs of ovaries in successive segments), or lacking GIII (3rd pairs of gonads), or GIV, or GI and GIV. Atria and prostates absent. Setae lumbricine (two in each of four bundles) or reduced. One family known in the country.

Family Haplotaxidae

Setae single or closely paired per bundle, S-shaped or distally hooked. Dorsal setae sometimes smaller than ventral, sometimes absent posteriorly, or even completely absent. Testes in IX and X, or X and XI, ovaries in XI and XII, or XII, or XII and XIII. Male efferent ducts short, without atria and prostate glands. Male pores two pairs on X and XI or XI and XII, or both on XII. Spermathecae 1 – 4 pairs. In freshwaters and wetland. One genus known in the country.

Haplotaxis Hoffmeister, 1843

Setae one per bundle, with large sickle-shaped ones ventrally and small straight ones dorsally; often absent in many or all segments. Predatory, with massive muscular pharynx. Usually in subterranean waters. One species known in the country from Hunan and Guangdong provinces and Xinjiang Autonomous Region.

Order Lumbriculida

Prosoporous microdriles. Octogonadal or with GIV lost, sometimes GI or GII also. Atria present, with external prostates. Setae lumbricine, sometimes bifid. One family known in the country.

Family Lumbriculidae

Setae from II onwards, simple-pointed or bifid, occasionally absent; Blind posterior lateral blood vessels usually present. Testes 1 - 4 pairs, in (VI) VII-X (XI). Ovaries 1 - 2 pairs, situated one or rarely two segments behind last testes-bearing segment. Vasa deferentia each discharging into an atrium, or vasa deferentia of the same side into a common atrium. Male pores on VII-XV, opening at segment bearing corresponding pair of testes, or at segment bearing last pair of testes. Spermathecae variable in number and position, opening at VII-XV. Freshwater inhabitants. Two species of two genera known in the country, mainly distributed in the north.

Lumbriculus Grube, 1844

Setae bifid with reduced distal tooth. Testes 1 - 4 pairs in VII-XIII. 1 - 2 pairs testes associated with each pair atria. Atria cylindrical to saciform with prostate cells in discrete masses. Male pores 1 - 4 pairs on VII-XIII. Ovaries 1 - 2 pairs in segment behind last pair of testes. Spermathecal variable in number, mostly 2 - 5 pairs situated two segments behind last atrial segment. One species known in the country from Heilongjiang, Jiangsu and Hunan provinces, Guangxi and Xizang (Tibet) Autonomous Regions.

Order Tubificida

Plesioporous microdriles. Gonads in GII and GIII. Atria usually present, with or without prostates. Setae from lumbricine to complex.

Family Enchytraeidae

Usually greyish white. No proboscis. No eyes. Head pore usually present. Dorsal pores present or absent. Setae from II onwards; dorsal and ventral setae similar in form, simple-pointed, sigmoid or straight; mostly four bundles per segments, with setal number in a bundle variable, sometimes absent. Septal glands three pairs in 4/5, 5/6, 6/7. Testes in XI, ovaries in XII. Sperm funnels usually cylindrical in XI. Atria mostly absent. Spermathecae one pair, opening behind 4/5, sometimes with diverticula and accessory glands, with or without connection with oesophagus. Sexual reproduction only. Terrestrial, freshwater and marine inhabitants. Widespread in the country, 36 species belonging to 12 genera known.

Mesenchytraeus Eisen, 1878

Setae sigmoid, with nodulus; ventral setae more than dorsal. Nephridia almost without interstitial tissue. Vasa deferentia short and thick, usually expanding ectally into thick-walled atria with prostate glands. Usually in moist soil. Only one unidentified species known in the country from Hunan Province.

Hemienchytraeus Cernovitov, 1935

Setae straight, two per bundle. Peptonenephridia unpaired. Spermathecae simple, without connection with oesophagus. Usually in terrestrial habitats. Widespread in the country, six species known.

Achaeta Vejdovsky, 1877

Setae absent, with transparent bodies often in the position of setal bundle. Oesophageal

appendages usually present. Transition between oesophagus, and intestine more or less sudden. Penial bulb with numerous gland-cells arranged in fan-shape. Spermathecae without connection with oesophagus. Usually in terrestrial habitats. Three species known in the country from Zhejiang, Hubei, Hunan provinces and Beijing.

***Henlea* Michaelsen, 1889**

Setae unequal or equal in size in a bundle. Transition between oesophagus and intestine sudden. Oesophageal appendages in VI or IV + VI. Spermathecae simple, with connection with oesophagus. Freshwater and terrestrial inhabitants. Species numerous in the country, but only 2 species from Hunan Province and Xizang Autonomous Region identified.

***Hemifridericia* Nielsen et Christensen, 1959**

Peptonephridia absent. Coelomocytes of two types. Spermathecae simple, with connection with oesophagus. Terrestrial inhabitants. One species known in the country from Hunan Province.

***Fridericia* Michaelsen, 1889**

Dorsal pores from VII onwards. Setae disposed in pairs, with outermost pair longest and innermost shortest. Peptonephridia paired, usually with branches. Coelomocytes of two types. Spermathecae simple or with diverticula, with connection with oesophagus. Mostly terrestrial. Widespread in the country, six species known.

***Enchytraeus* Henle, 1837**

Dorsal pores absent. Peptonephridia paired, without branches. Spermathecae connected with oesophagus. Freshwater, marine or terrestrial inhabitants. Widespread in the country, three species known.

***Lumbricillus* Ørsted, 1844**

Setae usually sigmoid, without nodulus. Glands enveloping nerve cord usually present in several postclitellar segments. Testes lobed, enclosed in seminal vesicles. Spermathecae connected with oesophagus. Mainly marine, seldom freshwater and terrestrial. One species known in the country from Jiaozhou Bay.

***Marionina* Michaelsen, 1889**

Setae sigmoid or straight, usually few in number, sometimes absent in several or all segments. Oesophageal appendages present or absent. Spermathecae simple or with diverticula, mostly with connection with oesophagus, and with accessory glands at ectal duct and orifice. Freshwater, marine or terrestrial inhabitants. Species numerous and widespread in the country, five species identified.

Family Naididae

Prostomium usually well developed, with or without proboscis. Eyes usually present. Dorsal setae usually from II-VI onwards, with hairs and needles; ventral setae from II onwards; bifid crotchets, or sometimes simple-pointed. Testes and ovaries one pair each, in IV-V, V-VI, or VII-VIII. Prostate glands diffuse, on vasa deferentia or atria. Spermathecal setae present or absent. Penial setae usually present. Asexual reproduction by budding or fragmentation prevalent, maturing only in a certain season. Mostly freshwater inhabitants.

Widespread in the country, 58 species belonging to 21 genera known.

***Chaetogaster* von Baer, 1827**

Prostomium weakly developed. No dorsal setae; ventral setae bifid or simple crotchets, absent in III-V. Freshwater inhabitants. Widespread in the country, five species known.

***Nais* Müller, 1773**

Eyes normally present. Anterior segments usually pigmented. Dorsal setae from VI onwards, with hairs and needles; ventral setae of II-V mostly differentiated from those following. Freshwater inhabitants. Widespread in the country, nine species known.

***Slavina* Vejdovsky, 1883**

Body wall usually surrounded by adhering foreign matter, and provided with rows of sensory papillae. Eyes present or absent. Dorsal setae from IV or VI onwards, with no-serrated hairs and simple needles. Freshwater inhabitants. One species widespread in the country (eyes present; dorsal setae from VI onwards).

***Dero* Oken, 1815**

Anus opening into a ciliated branchial fossa, without palps. Dorsal setae from IV, or VI onwards; ventral setae of II-V as a rule sharply differentiated from those following. Usually in tubes of secreted mucus and foreign matter. Freshwater inhabitants. Five species known in the country, mainly distributed in the south.

***Aulophorus* Schmarda, 1861**

Branchial fossa present with palps. Dorsal setae from IV, V or VI onwards; ventral setae of II-V different or not different from those following. Usually living in portable tubes. Freshwater inhabitants. Five species known in the country, mainly distributed in the south.

***Pristinella* Brinkhurst, 1985**

No proboscis. Dorsal setae from II onwards, with hairs. Stomachal dilatation in VII or VIII, with intra-cellular canals. Freshwater or terrestrial inhabitants. Six species known in the country, mainly distributed in the south.

***Pristina* Ehrenberg, 1828**

Proboscis present. Dorsal setae from II onwards, with hairs. Stomachal dilatation in VII or VIII, with intra-cellular canals. Freshwater inhabitants. Six species known in the country, mainly distributed in the south.

Family Tubificidae

Prostomium without a proboscis. No eyes. Setae from II onwards, four bundles per segments. Hairs present or absent. Needles bifid crotchets, sometimes with intermediate teeth forming obscurely to completely pectinate setae or (rarely) palmate setae; occasionally simple-pointed, mostly in the posterior. Ventral setae bifid or (seldom) simple-pointed. Testes and ovaries one pair each, in X and XI. Male funnels in testes-bearing segment, atrium and male pores in succeeding segment together with female funnels. Female pores in furrow behind segment bearing male pores. Spermathecae paired in X, or single. or absent,

with spermatophores or free sperm masses. Sexual reproduction prevalent. Freshwater, marine or terrestrial inhabitants. Widespread in the country, 82 species belonging to 29 genera known.

***Tubifex* Lamarck, 1816**

Hairs present, needles pectinate anteriorly; ventral setae crotchets. Vasa deferentia coiled, entering atria apically or subapically. Atria moderately large, gradually tapering distally. Prostate glands large, connected to atria subapically on anterior side through short and stout necks. No ejaculatory duct. Penes present, without conspicuous penial sheath. Spermatophores present. One species known in the country, mainly distributed in the north.

***Limnodrilus* Claparè de, 1862**

No hairs. Vasa deferentia and ejaculatory ducts long. Atria small bean-shaped, with large prostate glands. Penes long, with long and thick penial sheath. Spermatophores present. Freshwater inhabitants. Widespread in the country, six species known.

***Spirosperma* Eisen, 1879**

Brownish to dark black. Body wall chitinously papillate, with rings of sensory papillae. Dorsal setae hairs and pectinate needles, and ventral setae crotchets. Vasa deferentia long. Atria broad tubes, mostly horse-shoe shaped over connection with large prostate glands situated 1/3 to 1/2 way down from union with vasa deferentia. Penes true. Spermatophores present. Freshwater inhabitants. Three species known in the country, mainly distributed in the north.

***Aulodrilus* Bretscher, 1899**

Vasa deferentia short. Atria globular or bean-shaped to elongate cylindrical. Prostate glands solid, connected with atria through necks. Penes true. Penial setae spoon-shaped or absent. Spermathecae present or absent, without spermatophores. Reproductive organs commonly located more anteriorly than usual due to asexual reproduction. In tubes, using unsegmented posterior end as respiratory organs. Freshwater inhabitants. Widespread in the country, six species known.

***Bothrioneurum* Stolc, 1888**

Head pore present. Coelomocytes abundant. Vasa deferentia short. Atria of two parts, with the proximal covered with prostate cells and the distal naked. Copulatory chambers large with paratria, eversible to form pseudopenes. Penial setae usually present. Reproductive organs commonly located more anteriorly than usual due to reproduction by fragmentation. Freshwater and terrestrial inhabitants. Three species known in the country, mainly distributed in the north.

***Rhyacodrilus* Bretscher, 1901**

Coelomocytes abundant. Vasa deferentia moderately long, joining atria subapically. Atria usually covered with prostate cells. Penial setae usually present. No spermatophores. Freshwater and terrestrial inhabitants. Widespread in the country, three species known.

***Monopylephorus* Levinsen, 1884**

Coelomocytes abundant. Vasa deferentia entering atria apically. Atria tubular, with

prostate cells. Penes present or absent. No spermatophores. Male pores and spermathecal pores frequently included in median inversions of the body wall. Freshwater, brackish and marine inhabitants. Widespread in the country, three species known.

***Branchiura* Beddard, 1892**

Dorsal and ventral gill filaments present on each segment posteriorly. Vasa deferentia short. Atria with prostate cells and paratria. Copulatory chamber eversible to form a pseudopenes. No spermatophores. Freshwater inhabitants. Monospecific genus, widespread in the country.

Order Lumbricida

Opisthoporous megadriles. 3rd pair of gonads usually absent, 1st and 2nd pairs usually present. Setae lumbricine or perichaetine. Seven families known in the country.

Family Moniligastridae

Setae four pairs per segment. Clitellum in X-XIII (or X-XIV). Male pores one pair in intersegmental furrow X/XI (or two pairs in intersegmental furrows XI/XII and XII/XIII). Female pores one pair in intersegmental furrow XI/XII (or on segment XIV). Dorsal pore absent. Gizzard number more than one. Sixteen species belonging to two genera known in the country.

1. *Drawida* Michaelsen, 1900

Body median or small sized. Clitellum in X-XIII. Male pores one pair, in intersegmental furrow X/XI. Female pores one pair, in intersegmental furrow XI/XII. Spermathecal apertures one pair in intersegmental furrow VII/VIII. Gizzards more than three. Testis sacs suspended on septum IX/X. Fifteen species known from Hebei, Shandong, Shanxi, Gansu, Xinjiang, Sichuan, Anhui, Jiangsu, Zhejiang, Jiangxi, Fujian, Hainan and Neimenggu.

2. *Desmogaster* Rosa, 1895

Body large sized. Each segment with 3–7 circular furrows. Clitellum in X-XIV. Male pores two pairs, in intersegmental furrows XI/XII and XII/XIII. Female pores one pair on XIV. Spermathecal apertures two pairs in intersegmental furrows VII/VIII and VIII/IX. Gizzards three. Testis sacs suspended on posterior faces of septa X/XI and XI/XII. One species known from Jiangsu.

Family Ocnerodrilidae

Setae four pairs per segment. Clitellum occupying 5–8 segments. Male pores one pair on XVII. Female pores one pair on XIV. Spermatheca absent, or one pair at IX. Nephridia meganephridial. Oesophageal pouches in IX. Gizzard reduced or absent. Three species belonging to three genera known in the country.

1. *Ilyogenia* Beddard, 1892

Body median sized. Clitellum in XIII-XVII, ring-shaped, posteriorly with a ventral notch. Spermathecal diverticulum long sac-shaped. Spermathecal apertures in intersegmental furrow VIII/IX. Oesophageal pouches in IX. Gizzard absent. Species known from Nanjing, Jiangsu.

2. *Malabaria* Stephenson, 1924

Body slender. Clitellum in XIV-XX, saddle-shaped. Spermatheca without diverticulum. Spermathecal apertures in intersegmental furrow VIII/IX. Oesophageal pouches in IX-X. Gizzard reduced. One species known from Hainan.

3. *Ocnerodrilus* Eisen, 1878

Body small sized. Clitellum in XIII-XX, saddle-shaped. Spermatheca absent. Oesophageal pouches in IX-XI. Gizzard absent. One species known from Jiangsu, Zhejiang, Sichuan and Hainan.

Family Acanthodrilidae

Setae four pairs per segment. Clitellum in XIII-XVII. Female pores on XIV. Nephridia meganephridial. Gizzard reduced or absent. Four species belonging to three genera known in the country.

1. *Microscolex* Rosa, 1887

Body small sized. Clitellum ring-shaped. Male pores one pair on XVII. Spermathecal apertures one pair in intersegmental furrow VIII/IX. One species known from Wuxi, Jiangsu.

2. *Pontodrilus* Perrier, 1874

Body median sized. Clitellum saddle-shaped. Male pores two pairs in intersegmental furrows XVII/XVIII and XVIII/XIX, or one pair on XVIII. Spermathecal apertures two pairs in intersegmental furrows VII/VIII and VIII/IX. Two species known from Hainan and Yunnan.

3. *Plutellus* Perrier, 1873

Clitellum saddle-shaped, in $1/2$ XIII – $1/2$ XVIII. Male pores one pair on ventral side of XVIII, located on rounded papillae. Spermathecal apertures two pairs, on VII and VIII, in line with c. One species known from Sichuan.

Family Octochaetidae

Clitellum saddle-shaped. Male pores one pair on XVIII. Female pores on XIV. Spermathecal apertures two pairs in intersegmental furrows VII/VIII and VIII/IX. Three species belonging to two genera known from Hainan and Fujian.

1. *Howascolex* Michaelsen, 1901

Body small sized. Setae lumbricine, four pairs per segment. Clitellum in $2/3$ XIII – XVII. Meganephridial and micronephridial nephridia present. Gizzard single. One species known from Xiamen, Fujian.

2. *Dichogaster* Beddard, 1888

Body small sized. Setae perichaetine, numerous per segment. Clitellum in XIII-XX. Nephridia micronephridial. Gizzards two. Two species known from Hainan.

Family Microchaetidae

Setae four pairs per segment. Clitellum saddle-shaped, in XIII-XXXIV, with wings in XVIII-XXIII (or clitellum in XVIII-XXXVIII, with wings in XXII-XXXIII). Male pore on clitellum, indistinct. Spermathecal apertures anterior to male pores. Nephridia meganephridial. Prostate gland absent. Gizzard reduced or absent. Only one genus, *viz.* *Glyphidrilus* Horst, 1889 reported from China. Two species of the genus known from Hainan and Yunnan.

Family Lumbricidae

Seae four pairs per segment. Clitellum saddle-shaped, occupying 7 - 9 segments. Male pores one pair on XV. Female pores one pair on XIV. Spermatheca, when present, without diverticulum. Nephridia meganephridial. Prostate gland absent. Dorsal pores present. Gizzard well-developed. Sixteen species belonging to six genera known in the country.

1. *Allolobophora* Eisen, 1874

Clitellum in XXVI-XXXIV. Spermathecal apertures two pairs in intersegmental furrows IX/X and X/XI. Testes without testis sac. Six species known from Shandong, Gansu, Xinjiang, Sichuan, Yunnan, Anhui, Jiangsu, Zhejiang, Jiangxi and Hunan.

2. *Eisenia* Malm, 1877

Clitellum in XXIV (or XXV or XXVI or XXVII) -XXXII (or XXXIII). Spermathecal apertures two pairs in intersegmental furrows IX/X and X/XI, in line with d, near dorsal line in some species. Testes without testis sac. Five species known from Heilongjiang, Jilin, Beijing, Gansu, Shanxi, Xinjiang and Sichuan.

3. *Bimastos* Moore, 1893

Body small sized. Clitellum in XXV-XXXII, puberty wall indistinct or absent. Spermatheca absent. Testes without testis sac. Two species known from Heilongjiang, Gansu, Xinjiang, Xizang, Sichuan, Jiangsu, Zhejiang and Jiangxi.

4. *Lumbricus* Linnaeus, 1758

Clitellum in XXVI-XXXII, puberty wall in XXVIII-XXXI. Spermathecal apertures two pairs, in intersegmental furrows IX/X and X/XI. Testes with testis sacs. One species known from the east-north and west-north parts of China.

5. *Octolasion* Oerley, 1885

Clitellum in XXX-XXXV, puberty wall in 1/2XXX-1/2XXXV. Spermathecal apertures two pairs, in intersegmental furrows IX/X and X/XI. Testes with testis sacs. One species known from Haerbin, Heilongjiang.

6. *Dendrobaena* Eisen, 1874

Clitellum in XXIV-XXXIII, puberty wall in 1/2XXXI-XXXIII. Spermathecal apertures two pairs, in intersegmental furrows IX/X and X/XI. Testes without testis sac. One species known from Tacheng, Xinjiang.