

# Contents

1. INTRODUCTION . . . . .	1-12
2. PARASITES IN GENERAL . . . . .	13-30
General Considerations, 13-20; Resistance and Immunity, 20-26; Host Specificity, 26-28; Names of Parasites, 28-29.	
PART I. PROTOZOA	
3. INTRODUCTION TO PROTOZOA . . . . .	31-46
4. SPIROCHETES . . . . .	47-78
Relapsing Fever, 51-57; Treponematoses, 57-58; Syphilis, 59-68; Yaws, 68-70; Pinta (Mal-de-Pinto), 70; Spirochetes in Local Infections, 70-72; Leptospirosis, 72-76.	
5. AMEBAS . . . . .	79-110
<i>Entamoeba histolytica</i> , 88-101; Other Intestinal Amebas, 101-105; Mouth Amebas, 105-108.	
6. INTESTINAL FLAGELLATES AND CILIATES . . . . .	111-132
Flagellates in General, 111-112; Intestinal Flagellates, 112-128; <i>Trichomonas</i> , 114-121; <i>Chilomastix mesnili</i> , 121-122; <i>Giardia</i> , 122-125; Other Intestinal Flagellates, 125-127; Intestinal Flagellates of Domestic Animals, 127-128; Intestinal Ciliates, 128-130.	
7. HEMOFLAGELLATES—I. LEISHMANIA AND LEISHMANIASIS . . . . .	133-151
The Trypanosomatidae, 133-135; Leishman Bodies and Leishmaniasis, 135-141; <i>Leishmania donovani</i> and Kala-Azar, 141-145; Oriental Sore, 145-147; American Cutaneous and Mucocutaneous Leishmaniasis, 147-150.	
8. HEMOFLAGELLATES—II. TRYPARANOSOMES . . . . .	152-179
African Trypanosomiasis and Sleeping Sickness, 158-166; American Trypanosomiasis, 167-175; <i>Trypanosoma cruzi</i> and Chagas' Disease, 167-174; <i>Trypanosoma rangeli</i> , 174-175; Trypanosomiasis of Animals, 175-177.	
9. THE SPOROZOA—I. MALARIA . . . . .	180-212
Classification of Sporozoa, 180-181; Classification of Malaria-like Parasites, 181-183; Malaria and Malaria-like Diseases	

in Animals Other than Man, 183–185; Human Malaria, 185–209; Blackwater Fever, 209–210.	
<b>10. OTHER SPOROZOA, AND ARTHROPOD-BORNE MICROORGANISMS OTHER THAN PROTOZOA . . . . .</b>	<b>213–238</b>
Sporozoa Other than Malaria 213–226; Haemosporidia, 213–219; Babesiidae, 213–216 <i>Toxoplasma</i> , 216–219; Coccidia, 219–226; Arthropod-Borne Organisms Other than Protozoa, 226–235; <i>Bartonella-Anaplasma</i> Group (Bartonellaceae), 230–231; Filterable Viruses, 231–234.	
<b>PART II. HELMINTHOLOGY</b>	
<b>11. INTRODUCTION TO THE "WORMS" . . . . .</b>	<b>239–259</b>
<b>12. THE TREMATODES OR FLUKES—I. GENERAL ACCOUNT . . . . .</b>	<b>260–276</b>
Monogenea, 275–276	
<b>13. THE TREMATODES OR FLUKES—II. SCHISTOSOMES . . . . .</b>	<b>277–296</b>
Human Schistosomiasis, 277–293; Schistosome Dermatitis (Swimmer's Itch), 293–294; Animal Schistosomes, 294–295.	
<b>14. THE TREMATODES OR FLUKES—III. OTHER TREMATODES . . . . .</b>	<b>297–328</b>
Lung Flukes ( <i>Paragonimus</i> ), 297–301; Liver Flukes, 302–312; Fasciolidae, 302–305; Dicrocoeliidae, 305–307; Opisthorchiidae, 307–312; Intestinal Flukes, 312–325; Amphistomes, 312–314; <i>Fasciolopsis buski</i> , 314–317; Heterophyidae, 317–320; <i>Troglotrema salmincola</i> , 320–321; Echinostomes, 321–323; Strigeids, 323–324; Plagiorchiidae, 324–325.	
<b>15. THE CESTOIDEA OR TAPEWORMS . . . . .</b>	<b>329–374</b>
Order Pseudophyllidea, 341–349; Order Cyclophyllidea, 349–371; Taeniidae, 350–361; Hymenolepididae, 361–365; Dipyliidae, 365–366; Anoplocephalidae, 366–368; Linstowiidae, 369; Davaineidae, 369–371; Mesocestoididae, 371.	
<b>16. ACANTHOCEPHALA (SPINY-HEADED WORMS) . . . . .</b>	<b>375–382</b>
<b>17. THE NEMATODES IN GENERAL . . . . .</b>	<b>383–391</b>
<b>18. TRICHURIS, TRICHINELLA, AND THEIR ALLIES . . . . .</b>	<b>392–407</b>
Suborder Trichurata, 392–404; <i>Trichuris</i> , 392–395; Other Trichuridae, 395–396; <i>Trichinella spiralis</i> and Trichiniasis, 396–404; Suborder Dioctophymata, the Giant Kidney Worm, 404–405.	
<b>19. THE HOOKWORMS AND THEIR ALLIES—SUBORDER STRONGYLATA . . . . .</b>	<b>408–439</b>
Hookworms of Man, 409–429; Other Strongylata, 429–437.	
<b>20. OTHER INTESTINAL NEMATODES . . . . .</b>	<b>440–461</b>
Ascaridoidea, 440–448; <i>Ascaris lumbricoides</i> , 440–447; Other Ascaridoidea, 447–448; Oxyuroidea, 448–453; Enter-	

<i>taenia vermicularis</i> , 449–453; Other Oxyuroidea, 453; Rhabditida, 453–459; <i>Strongyloides stercoralis</i> , 454–458; <i>Diplostaphy whole coronata</i> , 458–459; <i>Rhabditis</i> , 459.	
<b>21. FILARIAE, SPIRUROIDS, AND GUINEA WORM</b>	<b>462–499</b>
Filariae (Superfamily Filarioidea), 462–484; <i>Wuchereria</i> ( <i>Filaria</i> ) <i>bancrofti</i> , 464–472; <i>Wuchereria malayi</i> , 472–473; The African Eye Worm, <i>Loa loa</i> , 473–475; <i>Dipetalonema perstans</i> , and <i>D. streptocerca</i> , 475–476; <i>Mansonella ozzardi</i> , 476; <i>Onchocerca</i> , 477–481; Other Filariae in Man, 481–482; Filariae in Domestic Animals, 482–484; Spiruroids (Superfamily Spiruroidea), 484–490; Suborder Camallanata; Guinea Worms (Superfamily Dracunculoidea), 490–495; <i>Dracunculus medinensis</i> , 490–495.	
<b>PART III. ARTHROPODS</b>	
<b>22. INTRODUCTION TO ARTHROPODS</b>	<b>500–521</b>
Classification, 500–502; Insect Morphology and Anatomy, 502–508; Life History, 508–509; Classification of Insects, 509–510; Arthropods as Parasites and Bloodsuckers, 510–512; Arthropods as Disease Transmitters, 512–514; Insecticides and Repellents, 514–519.	
<b>23. THE ACARINA (MITES) AND PENTASTOMIDA</b>	<b>522–550</b>
Acarina (Except Ticks), 522–544; Itch and Mange Mites (Sarcoptidae and Psoroptidae), 525–530; Hair Follicle Mites ( <i>Demodex</i> ), 530–531; Redbugs or "Chiggers" (Trombiculidae), 531–536; Bloodsucking Mites (Dermanyssidae), 536–539; Mites in the Lungs, Intestine, Urinary Passages, etc., 539–540; Grocer's Itch and Allied Forms of Mite Dermatitis, 540–543; Oribatids, 543–544; The Pentastomida, Tongue Worms and Their Allies, 544–548.	
<b>24. TICKS</b>	<b>551–580</b>
Classification, and Important Species, 557–564; Injury from Ticks, 564–565; Ticks as Vectors of Disease, 565–566; Ticks and Relapsing Fever, 566–569; Ticks and Spotted Fever and Other Rickettsial Diseases, 569–574; Tularemia and Other Bacterial Diseases, 574–576; Piroplasmosis, Anaplasmosis, and Virus Diseases, 576–578; Control of Ticks, 578.	
<b>25. BEDBUGS AND OTHER HEMIPTERA</b>	<b>581–596</b>
Bedbugs ( <i>Cimex</i> ), 582–589; Bedbugs and Disease, 587–589; Remedies and Prevention, 589. Other Parasitic Bugs, 589–595; Triatomidae, 589–593; Other Hemiptera, 593–594; Triatomidae and Disease, 594–595; Control, 595.	
<b>26. LICE (ANOPLURA AND MALLOPHAGA)</b>	<b>597–618</b>
Anoplura, 598–613; Human Lice, 600–612; Head and Body Lice ( <i>Pediculus humanus</i> ), 601–605; Crab Louse, 605–607;	

## Contents

Lice and Disease, 607-610; Prevention and Remedies, 610-612; Anoplura on Domestic Animals, 612-613; Mallophaga, 613-617.	
<b>27. FLEAS (SIPHONAPTERA)</b>	<b>619-642</b>
Fleas and Disease, 629-635; Fleas and Plague, 629-633; Fleas and Typhus, 633-635; Fleas and Other Diseases, 635; Notes on Important Species of Fleas, 635-640; Flea Control, 640-641.	
<b>28. DIPTERA—I. BLOODSUCKING AND DISEASE-CARRYING FLIES OTHER THAN MOSQUITOES</b>	<b>643-692</b>
Suborder Orthorrhapha, 547-670; Phlebotomus or Sandflies (Psychodidae), 647-654; Biting Midges or No-see-ums (Heleidae), 654-659; Blackflies or Buffalo Gnats (Simuliidae), 659-666; Horseflies (Tabanidae), 666-670; Suborder Cyclorrhapha, 671-688; Hornflies and Stableflies (Stomoxyidae), 672-675; Housefly ( <i>Musca domestica</i> ), 675-676; Blowflies, 677; Tsetse Flies ( <i>Glossina</i> ), 677-681; Tsetse flies and Trypanosomiasis, 581-683; Control, 683-685; Eye flies (Chloropidae), 685-687; Pupipara, 687-688.	
<b>29. DIPTERA—II. MOSQUITOES</b>	<b>693-741</b>
Life History and Habits, 697-706; Classification, 706-711; Mosquitoes and Malaria, 711-720; Mosquitoes and Yellow Fever, 720-727; Mosquitoes and Dengue, 727-729; Mosquitoes and Filariasis, 729-731; Mosquitoes and Encephalitis, 731-734; Mosquitoes and <i>Lermatobia</i> , 734-735; Control and Extermination, 735-740.	
<b>30. DIPTERA—III. FLY MAGGOTS AND MYIASIS</b>	<b>742-770</b>
Muscoid Maggots, 747-760; Bloodsucking Maggots, 747-748; Myiasis of Wounds and Natural Cavities (Screwworms), 749-754; Wool Maggots Causing "Strike," 754; Muscoid Skin Maggots, 754-757; Myiasis of the Intestine and Urinary Tract, 757-760; Bot Flies, 760-768; Skin Bots (Cuterebridae), 760-763; Bots Causing Warbles in Cattle ( <i>Hypoderma</i> spp.), 763-765; Head Bots (Oestridae), 765-766; Horse Bots ( <i>Gastrophilus</i> spp.), 766-768	
<b>SOURCES OF INFORMATION</b>	<b>771-773</b>
<b>INDEX</b>	<b>775-799</b>