Supplementary Table 2. Source of the morphological data of cercariae used for comparisons with experimental swimming data. Where possible the geographical origin of the morphological data was derived from the same country as that of the experimental data. When that was not possible morphological data was derived from the nearest available country. If the experimental swimming study specified a specific morphological source for identification of cercariae used then this was also used in the present study.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Species | Geographical Origin of swimming data | Geographical origin of morphological data | Morphotype | Body length (μm) | Tail stem length (μm) | Furcae length (μm) | Functional tail length (μm) | Total longitudinal size (μm) | Ref |
| *Schistosoma mansoni* | Puerto Rico [1] (York) | Puerto Rico | Furcocercariae | 207 | 243 | 110 | 463 | 670 | [1] |
|  | Puerto Rico [2] (York) | Puerto Rico | Furcocercariae | 189 | 250 | 75 | 400 | 589 | [2] |
|  | Puerto Rico [3] (York) | Puerto Rico | Furcocercariae | 189 | 250 | 75 | 400 | 589 | [2] |
|  | Puerto Rico [4] (York) | Puerto Rico | Furcocercariae | 189 | 250 | 75 | 400 | 589 | [2] |
|  | Puerto Rico [5]  (UCSF) | Puerto Rico | Furcocercariae | 207 | 243 | 110 | 463 | 670 | [1] |
|  | Puerto Rico [6] | Puerto Rico | Furcocercariae | 207 | 243 | 110 | 463 | 670 | [2] |
|  | Liberia | Sierra Leone | Furcocercariae | 165 | 212 | 79 | 370 | 582 | [3] |
|  | Brazil | Brazil | Furcocercariae | 128 | 257 | 114 | 485 | 613 | [4] |
| *Trichobilharzia ocellata* | Germany | Not known | Furcocercariae | 295 | 368 | 212 | 792 | 1087 | [5] |
| *Bilharzia polonica* | Finland | Wales | Furcocercariae | 235 | 291 | 117 | 525 | 760 | [6] |
| *Diplostomum spathaceum* | Germany | Poland | Furcocercariae | 235.1 | 273.2 | 272.9 | 819 | 1054.1 | [7] |
|  | England | Poland | Furcocercariae | 235.1 | 273.2 | 272.9 | 819 | 1054.1 | [7] |
| *Diplostomum pseudospathaceum* | Finland | Poland | Furcocercariae | 185.4 | 206 | 201.2 | 608.4 | 793.8 | [7] |
| *Posthodiplostomum cuticola* | Germany | Germany | Furcocercariae | 236 | 284 | 254 | 792 | 1028 | [8] |
| *Transversotrema patialense* | Malaysia | India | Furcocercariae | 450 | 494 | 342 | 1178 | 1628 | [9] |
| *Ichthyocotylurus variegatus* | Finland | Finland | Furcocercariae | 214 | 269 | 267 | 803 | 1017 | [10] |
| *Cercaria spinulosa* | Finland | Finland | Furcocercariae | 161 | 170 | 144 | 458 | 619 | [10] |
| *Aporocotylid* sp. 1 | New Zealand | New Zealand | Furcocercariae | 100 | 200 | 30 | 260 | 360 | [11] |
| *Apatemon* sp. | New Zealand | New Zealand | Furcocercariae | 130 | 130 | 130 | 390 | 520 | [12] |
| *Proterometra macrostoma* | USA | USA | Furcocercariae | 1200 | 5000 | 1200 | 7400 | 8600 | [13] |
| *Alaria arisaemoides* | Canada | Canada | Furcocercariae | 148 | 213 | 164 | 541 | 689 | [14] |
| *Australapatemon minor* | Germany | Wales | Furcocercariae | 115 | 130 | 110 | 350 | 465 | [6] |
|  | England | Wales | Furcocercariae | 115 | 130 | 110 | 350 | 465 | [6] |
| *Australapatemon burti* | Finland | USA | Furcocercariae | 129 | 159 | 150 | 459 | 588 | [15] |
| *Australapatemon* sp. | Finland | Finland | Furcocercariae | 139 | 154 | 180 | 514 | 653 | [10] |
| *Cotylurus flabelliformis* | USA | USA | Furcocercariae | 217 | 238 | 239 | 716 | 933 | [16] |
| *Cotylurus brevis* | Finland | Finland | Furcocercariae | 218 | 221 | 220 | 661 | 879 | [10] |
| *Echinostoma revolutum* | Germany | Europe | Echinostome | 194 | - | - | 396 | 590 | [17] |
| *Echinostoma caproni* | Egypt | Madagascar | Echinostome | 245 | - | - | 500 | 745 | [18] |
| *Echinostoma* sp. (*Cercaria spinifera)* | Germany | Denmark | Echinostome | 181 | - | - | 369 | 550 | [19] |
| *Echinostoma* sp. (of Fulica) | Switzerland | Switzerland | Echinostome | 1050 | - | - | 950 | 2000 | [20] |
| *Echinoparyphium recurvatum* | England [1]  (York) | England  (York) | Echinostome | 373 | - | - | 423 | 796 | [21] |
|  | England [2] (Egham) | England | Echinostome | 381 | - | - | 408 | 789 | [22] |
| *Echinoparyphium aconiatum* | Switzerland | Switzerland | Echinostome | 578 | - | - | 525 | 1103 | [21] |
| *Echinoparyphium* sp. | Germany | Germany | Echinostome | 300 | - | - | 800 | 1100 | [23] |
| *Himasthla elongate* | White sea [1] | White sea | Echinostome | 550 | - | - | 540 | 1090 | [24] |
|  | White sea [2] | White sea | Echinostome | 550 | - | - | 540 | 1090 | [24] |
| *Himasthla rhigedana* | USA | USA | Echinostome | 638 | - | - | 974 | 1612 | [25] |
| *Hypoderaeum conoideum* | Germany | Denmark | Echinostome | 257 | - | - | 284 | 541 | [19] |
|  | Switzerland | Switzerland | Echinostome | 530 | - | - | 480 | 1010 | [20] |
| *Hypodaeraeum* sp. | England | England | Echinostome | 455 | - | - | 433 | 888 | [26] |
| *Cercaria ogunis* | Nigeria | Nigeria | Echinostome | 325 | - | - | 518 | 843 | [27] |
| *Cryptocotyle lingua* | Northern Ireland [1] | Northern Ireland | Parapleurophocercous | 160 | - | - | 375 | 535 | [28] |
|  | Northern Ireland [2] | Northern Ireland | Parapleurophocercous | 160 | - | - | 375 | 535 | [28] |
|  | Northern Ireland [3] | Northern Ireland | Parapleurophocercous | 160 | - | - | 375 | 535 | [28] |
|  | Northern Ireland [4] | Northern Ireland | Parapleurophocercous | 160 | - | - | 375 | 535 | [28] |
|  | Northern Ireland [5] | Northern Ireland | Parapleurophocercous | 160 | - | - | 375 | 535 | [28] |
|  | White sea  [1] | White sea | Parapleurophocercous | 197 | - | - | 345 | 542 | [24] |
|  | White sea [2] | White sea | Parapleurophocercous | 197 | - | - | 345 | 54 | [24] |
| *Haplorchis pumilio* | Taiwan | China | Parapleurophocercous | 202 | - | - | 440 | 642 | [5] |
| *Cercaria caribbea LXXI* | Jamaica | Jamaica | Parapleurophocercous | 147 | - | - | 722 | 869 | [29] |
| *Plagiorchis muris* | Japan | Japan | Xiphidiocercariae | 261 | - | - | 139 | 400 | [30] |
| *Plagiorchis elegans* | England | England | Xiphidiocercariae | 275 | - | - | 216 | 491 | [21] |
| *Maritrema poulini* | New Zealand | New Zealand | Xiphidiocercariae | 100 | - | - | 50 | 150 | [31] |
| *Maritrema subdolum* | White sea | France | Xiphidiocercariae | 135 | - | - | 140 | 270 | [32] |
| *Plerogenoides medians* | Germany | Poland | Xiphidiocercariae | 230 | - | - | 130 | 360 | [33] |
| *Opisthioglyphe ranae* | Poland | Not known | Xiphidiocercariae | 334 | - | - | 241 | 575 | [5] |
| *Probolocoryphe lanceolata* | USA | USA | Xiphidiocercariae | 180 | - | - | 195 | 375 | [34] |
| *Cercaria parvicaudata* (*Renicola* sp.) | White sea | White sea | Xiphidocercariae | 245 | - | - | 175 | 420 | [24] |
| *Centrocestus formosanus* | Taiwan | Taiwan | Pleurolophocercous | 119 | - | - | 117 | 236 | [5] |
| *Euhaplorchis* sp. | USA | USA | Pleurolophocercous | 150 | - | - | 400 | 550 | [34] |
| *Cercaria opacocorpa* | USA | USA | Pleurolophocercous | 160 | - | - | 400 | 560 | [35] |
| *Fasciola hepatica* | USA | Denmark | Gymnocephalous | 280 | - | - | 550 | 830 | [19] |
| *Cercaria E* | USA | USA | Gymnocephalous | 624 | - | - | 880 | 1504 | [36] |
| *Echinostephilla patella* | Northern Ireland | Scotland | Megalurous | 588 | - | - | 206 | 794 | [37] |
| *Parorchis acanthus* | Wales | Wales | Megalurous | 1000 | - | - | 820 | 1820 | [38] |
| *Coitocaecum parvum* | New Zealand | New Zealand | Cotylocercous | 300 | - | - | 50 | 350 | [12] |
| *Cercaria setifera* | France | France | Trichocercous | 447 | - | - | 841 | 1288 | [39] |
| *Cercaria F* | USA | USA | ‘Hugh-tailed monostome’ | 2000 | - | - | 2400 | 4400 | [36] |

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