**Supplementary Table S7.** Infection status of *Metagonimus* spp.metacercariae (MsMc) in fish from Seomjin-gang (upper reaches) in Jeollabuk-do, Korea

|  |  |  |  |
| --- | --- | --- | --- |
| Locality (Year) and fish sp. | No. fish examined | No. (%) fish infected | No. MsMc detected |
| Range | Average |
| ㉓ Osu-cheon in Imsil-gun (2011~ 2013) |
| *Zacco platypus* | 100 | 57 (57.0) | 1-32 | 3.9 |
| *Hemibarbus labeo* | 76 | 3 (3.9) | - | 1.0 |
| *Squalidus japonicus coreanus* | 40 | 2 (5.0) | 1-2 | 1.5 |
| *Opsariichthys uncirostris* | 36 | 17 (47.2) | 1-25 | 4.2 |
| *Squalidus chankaensis* | 35 | 8 (22.9) | 1-10 | 3.3 |
| *Acanthorhodeus gracilis* | 9 | 1 (11.1) | - | 3.0 |
| *Rhodeus ocellatus* | 3 | 2 (66.7) | 2-4 | 3.0 |
| Subtotal | 299 | 90 (30.1) | 1-32 | 3.7 |
| ㉔-1. Seomjin-gang in Sunchang-gun (2014, 2015) |
| *Pungtungia herz* | 56 | 13 (23.2) | 1-9 | 1.9 |
| *Zacco platypus* | 51 | 45 (88.2) | 1-200 | 25.8 |
| *Pseudogobio esocinus* | 32 | 13 (40.6) | 1-60 | 6.9 |
| *Zacco temminckii* | 15 | 11 (73.3) | 1-36 | 7.9 |
| *Opsariichthys uncirostris* | 14 | 14 (100) | 1-45 | 9.9 |
| *Carassius auratus* | 14 | 1 (7.1) | - | 5.0 |
| *Sarcocheilichthys variegatus* | 12 | 4 (33.3) | 1-6 | 2.8 |
| *Squalidus japonicus coreanus* | 11 | 3 (27.3) | - | 1.0 |
| *Acheilognathus rhombeus* | 10 | 3 (30.0) | 1-4 | 2.3 |
| *Siniperca scherzeri* | 10 | 1 (10.0) | - | 2.0 |
| *Squalidus gracilis majimae* | 6 | 1 (16.7) | - | 1.0 |
| *Acanthorhodeus gracilis* | 6 | 5 (83.3) | 7-40 | 16.2 |
| *Gnathopogon strigatus* | 5 | 4 (80.0) | 5-14 | 7.5 |
| *Hemibarbus longirostris* | 5 | 4 (80.0) | 2-14 | 8.0 |
| *Hemibarbus labeo* | 4 | 1 (25.0) | - | 2.0 |
| *Plecoglossus altivelis* | 3 | 3 (100) | 282-6,750 | 3,146 |
| *Cyprinus carpio* | 2 | 1 (50.0) | - | 1.0 |
| *Hemiculter leucisculus* | 1 | 1 (100) | - | 1.0 |
| Subtotal | 257 | 128 (49.8) | 1-6,750 | 86.8 |
| ㉔-2. Seomjin-gang in Sunchang-gun (2018~2020) |
| *Pungtungia herzi* | 104 | 49 (47.1) | 1-32 | 3.8 |
| *Zacco platypus* | 91 | 58 (63.7) | 1-68 | 8.8 |
| *Pseudogobio esocinus* | 75 | 34 (45.3) | 1-58 | 6.8 |
| *Squalidus chankaensis* | 48 | 21 (43.8) | 1-6 | 2.2 |
| *Squalidus japonicus coreanus* | 44 | 2 (4.5) | 1-2 | 1.5 |
| *Zacco koreanus* | 36 | 33 (91.7) | 1-93 | 18.8 |
| *Sarcocheilichthys variegatus* | 34 | 16 (47.1) | 1-7 | 2.4 |
| *Zacco temminckii* | 20 | 17 (85.0) | 1-11 | 4.5 |
| *Hemibarbus longirostris* | 20 | 9 (45.0) | 1-5 | 2.2 |
| *Siniperca scherzeri* | 20 | 1 (5.0) | - | 1.0 |
| *Hemibarbus labeo* | 19 | 3 (15.8) | 1-2 | 3.3 |
| *Acheilognathus rhombeus* | 17 | 10 (58.8) | 1-7 | 2.3 |
| *Acheilognathus majusculus* | 15 | 4 (26.7) | 1-10 | 3.8 |
| *Carassius auratus* | 15 | 5 (33.3) | 1-9 | 3.0 |
| *Ladislabia taczanowskii* | 13 | 7 (53.8) | 1-4 | 2.0 |
| *Odontobutis platycephala* | 12 | 5 (41.7) | 1-10 | 5.0 |
| *Acheilognathus lanceolatus* | 11 | 1 (9.1) | - | 8.0 |
| *Coreoleuciscus splendidus* | 10 | 2 (20.0) | 1-2 | 1.5 |
| *Microphysogobio koreensis* | 1-15 9.0 | 4 (44.4) | 1-15 | 5.0 |
| *Acanthorhodeus gracilis* | 7 | 2 (28.6) | - | 1.0 |
| *Acheilognathus yamatsutae* | 5 | 2 (40.0) | - | 1.0 |
| *Opsariichthys uncirostris* | 4 | 4 (100) | 4-130 | 46.8 |
| *Microphysogobio longidorsalis* | 2 | 1 (50.0) | - | 27.0 |
| *Squalidus multimaculatus* | 2 | 2 (100) | 2-5 | 3.5 |
| *Gnathopogon strigatus* | 2 | 1 (50.0) | - | 1.0 |
| *Pseudobagrus fulvidraco* | 1 | 1 (100) | - | 2.0 |
| Subtotal | 636 | 294 (46.2) | 1-130 | 7.1 |
| ㉕ Songdae-cheon in Namwon-si (2012, 2013, 2020) |
| *Pungtungia herzi* | 83 | 32 (38.6) | 1-20 | 2.9 |
| *Zacco temminckii* | 57 | 56 (98.3) | 2-334 | 60.5 |
| *Zacco platypus* | 56 | 51 (91.1) | 1-175 | 25.3 |
| *Sarcocheilichthys variegatus* | 53 | 37 (69.8) | 1-15 | 4.5 |
| *Pseudogobio esocinus* | 37 | 21 (56.8) | 1-218 | 15.8 |
| *Rhynchocypris oxycephalus* | 21 | 1 (4.8) | - | 1.0 |
| *Acheilognathus yamatsutae* | 20 | 10 (50.0) | 1-18 | 3.9 |
| *Sarcocheilichthys nigripinnis* | 20 | 11 (55.0) | 1-3 | 1.9 |
| *Acheilognathus majusculus* | 12 | 10 (83.3) | 1-28 | 5.3 |
| *Lepomis macrochirus* | 12 | 6 (50.0) | 1-11 | 4.5 |
| *Coreoperca herzi* | 9 | 1 (11.1) | - | 1.0 |
| *Squalidus gracilis majimae* | 6 | 6 (100) | 1-2 | 1.2 |
| *Zacco koreanus* | 6 | 3 (50.0) | 1-7 | 3.0 |
| *Microphysogobio koeensis* | 5 | 1 (20.0) | - | 4.0 |
| *Carassius auratus* | 4 | 2 (50.0) | 1-24 | 12.5 |
| *Gnathopogon strigatus* | 3 | 3 (100) | 1-8 | 3.7 |
| *Hemibarbus longirostris* | 2 | 2 (100) | 17-20 | 18.5 |
| Subtotal | 406 | 253 (62.3) | 1-334 | 21.8 |
| Total | 1,597 | 765 (47.9) | 1-6,750 | 24.9 |

Uninfected fish species (No. of fish examined): ㉓ *P. esocinus* (25), *M. jeoni* (6), *C. auratus* (3), *P. herzi* (2), *C. tetralineata* (2), *O. platycephala* (2), *M. koeensis* (1), *H. longirostris* (1); ㉔-1. *C. herzi* (19), *A. koreensis* (12), *O. platycephala* (9), *C. splendidus* (4), *A. yamatsutae* (3), *A. springeri* (3), *C. tetralineata* (2), *A. lanceolatus* (1), *A. macropterus* (1), *C. lutheri* (1) and *M. anguillicaudatus* (1); ㉔-2. *C. herzi* (19), *L. andersoni* (12), *A. revulais* (3), *M. salmoides* (3), *C. carpio* (2) and *A. koreensis* (1); ㉕ *P. parva* (2), *A. springeri* (2), *M. koreensis* (2), *S. scherzeri* (2), *A. lanceolatus* (2), *C. splendidus* (2), *H. labeo* (1) and *I. longicorpa* (1).