**Supplementary Table S1.** Infection status of *Metagonimus* spp.metacercariae (MsMc) in fish from the water systems of Hantan-gang and Imjin-gang in Korea

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| --- | --- | --- | --- |
| Locality (Year) and fish sp. | No. fish examined | No. (%) fish infected | No. MsMc detected |
| Range | Average |
| ① Hantan-gang in Cheorwon-gun, Gangwon-do (2012, 2013, 2019) |
| *Pungtungia herzi* | 76 | 8 (10.5) | 1-2 | 1.1 |
| *Microphysogobio longidorsalis* | 58 | 2 (3.4) | - | 1.0 |
| *Pseudogobio esocinus* | 57 | 55 (96.5) | 1-486 | 70.2 |
| *Zacco temminckii* | 52 | 46 (88.5) | 1-135 | 22.5 |
| *Zacco platypus* | 51 | 51 (100) | 1-230 | 41.7 |
| *Coreoleuciscus splendidus* | 46 | 1 (2.2) | - | 1.0 |
| *Zacco koreanus* | 27 | 26 (96.3) | 1-124 | 28.9 |
| *Coreoperc herzi* | 24 | 4 (16.7) | 1-2 | 1.8 |
| *Acheilognathus rhombeus* | 20 | 17 (85.0) | 1-95 | 27.9 |
| *Hemibarbus longirostris* | 17 | 16 (94.1) | 3-115 | 18.9 |
| *Hemibarbus mylodon* | 16 | 15 (93.8) | 4-242 | 55.0 |
| *Pseudobagrus koreanus* | 13 | 2 (15.4) | 2-10 | 6.0 |
| *Acheilognathus signifer* | 12 | 8 (66.7) | 1-7 | 3.8 |
| *Hemibarbus labeo* | 9 | 7 (77.8) | 1-153 | 29.4 |
| *Acanthorhodeus macropterus* | 7 | 5 (71.4) | 1-64 | 22.0 |
| *Carassius auratus* | 6 | 4 (66.7) | 1-25 | 10.8 |
| *Liobagrus andersoni* | 4 | 2 (50.0) | 1-2 | 1.5 |
| *Acheilognathus majusculus* | 4 | 2 (50.0) | - | 1.0 |
| *Gobiobotia brevibarba* | 4 | 4 (100) | 15-29 | 24.3 |
| *Acheilognathus lanceolatus* | 3 | 2 (66.7) | 3-4 | 3.5 |
| *Acanthorhodeus gracilis* | 2 | 2 (100) | 3-15 | 9.0 |
| *Rhodeus ocellatus* | 2 | 2 (100) | 7-10 | 8.5 |
| *Sarcocheilichthys variegatus* | 1 | 1 (100) | - | 1.0 |
| *Ladislabia taczanowskii* | 1 | 1 (100) | - | 1.0 |
| Subtotal | 512 | 283 (55.3) | 1-486 | 35.1 |
| ② Hantan-gang in Yeoncheon-gun, Gyeonggi-do (2013) |
| *Zacco platypus* | 60 | 26 (43.0) | 1-29 | 9.2 |
| *Pungtungia herzi* | 28 | 1 (3.6) | 1 - | 1.0 |
| *Hemibarbus labeo* | 21 | 5 (23.8) | 1-2 | 1.2 |
| *Rhodeus ocellatus* | 20 | 6 (30.0) | 1-35 | 10.5 |
| *Coreoleuciscus splendidus* | 15 | 4 (26.7) | 1-2 | 1.3 |
| *Hemibarbus longirostris* | 11 | 9 (81.8) | 1-45 | 7.7 |
| *Acheilognathus yamatsutae* | 10 | 4 (40.0) | 1-19 | 6.0 |
| *Pseudogobio esocinus* | 9 | 3 (33.3) | 5-85 | 34.0 |
| *Zacco temminckii* | 3 | 2 (66.7) | 2-3 | 2.5 |
| Subtotal | 177 | 60 (33.9) | 1-85 | 8.6 |
| ③ Togyo-jeosuji in Cheorwon-gun, Gangwon-do (2018~2020) |
| *Zacco platypus* | 139 | 137 (98.6) | 1-1,020 | 143.9 |
| *Carassius auratus* | 71 | 45 (63.4) | 1-100 | 19.2 |
| *Hemibarbus labeo* | 68 | 54 (79.4) | 1-57 | 9.9 |
| *Pseudorasbora parva* | 56 | 38 (67.9) | 1-78 | 10.0 |
| *Pseudogobio esocinus* | 38 | 31 (81.6) | 1-240 | 59.4 |
| *Micropterus salmoides* | 27 | 5 (18.5) | 1-14 | 3.8 |
| *Rhodeus ocellatus* | 27 | 20 (74.1) | 1-30 | 6.9 |
| *Acheilognathus rhombeus* | 25 | 25 (100) | 3-31 | 12.7 |
| *Zacco koreanus* | 19 | 18 (94.7) | 1-211 | 56.8 |
| *Abbotina revularis* | 18 | 6 (33.3) | 1-9 | 3.0 |
| *Pungtungia herzi* | 16 | 2 (12.5) | 1-4 | 2.5 |
| *Lepomis macrochirus* | 14 | 1 (7.1) | - | 2.0 |
| *Odontobutis obscurus* *interrupta* | 12 | 8 (66.7) | 1-5 | 3.6 |
| *Hemibarbus longirostris* | 9 | 8 (88.9) | 2-18 | 7.3 |
| *Acanthorhodeus gracilis* | 5 | 5 (100) | 1-24 | 8.4 |
| Subtotal | 544 | 403 (74.1) | 1-1,020 | 62.0 |
| ④ Imjin-gang in Gyeonggi-do (2013) |
| *Zacco platypus* | 68 | 49 (72.1) | 1-250 | 18.3 |
| *Pseudorasbora parva* | 30 | 10 (33.3) | 1-4 | 1.8 |
| *Pseudogobio esocinus* | 30 | 7 (23.3) | 1-5 | 2.6 |
| *Sarcocheilichthys variegatus* | 27 | 16 (59.3) | 1-11 | 2.0 |
| *Acheilognathus yamatsutae* | 20 | 20 (100) | 1-16 | 5.1 |
| *Hemibarbus labeo* | 10 | 8 (80.0) | 1-6 | 2.4 |
| *Hemibarbus longirostris* | 10 | 1 (10.0) | - | 2.0 |
| *Coreoleuciscus splendidus* | 2 | 2 (100) | - | 1.0 |
| Subtotal | 197 | 113 (57.4) | 1-250 | 9.6 |
| Total | 1,430 | 859 (60.1) | 1-1,020 | 42.5 |

Uninfected fish species (No. of fish examined): ① *L. mediadiposalis* (9), *L. obesus* (3), *I. koreensis* (4), *M. anguillicaudatus* (4), *S. scherzeri* (3), *P. fulvidraco* (2), *K. rotundicaudata* (2) and *O. obscurus* *interrupta* (1); ② *C. capio* (9), *M. longidorsalis* (7), *S. variegatus* (1) and *P. parva* (1); ③ *M. longidorsalis* (10), *A. lanceolatus* (10), *C. splendidus* (2) and *I. koreensis* (2); ④ *O. platycephala* (30), *A. springeri* (20), *C. auratus* (20), *A. revulais* (12), *P. herzi* (2), *S. gracilis majimae* (1) and *H. eigenmanni* (1).