*The following supplement accompanies the article*

# Methodological issues affecting the study of fish parasites. III. Effect of fish preservation method

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Table S1. Significance (P) and F-statistics (Chi for precision tests) for paired comparisons between four fish preservation methods. Note that the Benjamini-Hochberg procedure was later applied in order to control for false discovery rate in multiple comparisons (resulting significance is shown in Figures 2-4).

| parameter | P | | | | | | F (Chi in precision) | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| comparison | Live vs Frozen | Live vs Formalin | Live vs Ethanol | Frozen vs Formalin | Frozen vs Ethanol | Formalin vs Ethanol | Live vs Frozen | Live vs Formalin | Live vs Ethanol | Frozen vs Formalin | Frozen vs Ethanol | Formalin vs Ethanol |
| *R. amarus* | | | | | | | | | | | | |
| *Bucephalus* sp. | 0.773 | 0.003 | 0.000 | 0.000 | 0.000 | 0.000 | 0.084 | 9.769 | 50.072 | 15.752 | 101.549 | 16.276 |
| *Holostephanus* sp. | 0.045 | 0.000 | 0.000 | 0.007 | 0.001 | 0.302 | 4.193 | 16.002 | 18.916 | 7.934 | 11.850 | 1.084 |
| *Metorchis xanthosomus* | 0.779 | 0.003 | 0.000 | 0.006 | 0.000 | 0.199 | 0.080 | 9.529 | 17.173 | 8.304 | 16.086 | 1.686 |
| Hyalin cysts | 0.154 | 0.000 | 0.000 | 0.000 | 0.000 | 0.090 | 2.083 | 16.506 | 22.705 | 15.046 | 26.001 | 2.969 |
| Soft cysts | 0.917 | 0.001 | 0.001 | 0.001 | 0.001 | 1.000 | 0.011 | 13.228 | 13.228 | 11.554 | 11.554 | 0.000 |
| *P. fluviatilis* | | | | | | | | | | | | |
| *Bunodera* sp. | 0.005 | 0.354 | 0.001 | 0.031 | 0.828 | 0.009 | 8.664 | 0.870 | 11.712 | 4.904 | 0.048 | 7.401 |
| *Dermocystidium* sp. | 0.030 | 0.008 | 0.448 | 0.353 | 0.054 | 0.008 | 4.952 | 7.640 | 0.583 | 0.877 | 3.856 | 7.538 |
| *Proteocephalus* sp. pl | 0.287 | 0.380 | 0.006 | 0.856 | 0.076 | 0.054 | 1.153 | 0.781 | 8.026 | 0.033 | 3.270 | 3.869 |
| *Proteocephalus cernua* | 0.060 | 0.001 | 0.001 | 0.004 | 0.004 | 1.000 | 3.678 | 12.247 | 12.247 | 8.934 | 8.934 | 0.000 |
| *Ergasilus sieboldi* | 0.395 | 0.603 | 0.456 | 0.221 | 0.174 | 0.742 | 0.734 | 0.273 | 0.563 | 1.532 | 1.891 | 0.109 |
| *Acanthocephalus* sp. | 0.964 | 0.739 | 0.421 | 0.660 | 0.216 | 0.109 | 0.002 | 0.112 | 0.657 | 0.196 | 1.564 | 2.650 |
| *Argulus foliaceus* | 0.287 | 0.717 | 0.047 | 0.456 | 0.302 | 0.082 | 1.152 | 0.132 | 4.097 | 0.564 | 1.084 | 3.127 |
| *Ancyrocephalus percae* | 0.014 | 0.088 | 0.000 | 0.302 | 0.101 | 0.004 | 6.391 | 2.999 | 16.004 | 1.084 | 2.773 | 8.934 |
| species richness | | | | | | | | | | | | |
| *R. amarus* | 0.257 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.312 | 24.765 | 57.266 | 25.176 | 56.546 | 25.171 |
| *P. fluviatilis* | 0.016 | 0.008 | 0.000 | 0.848 | 0.229 | 0.097 | 6.097 | 7.400 | 19.666 | 0.037 | 1.476 | 2.844 |
| species composition | | | | | | | | | | | | |
| *R. amarus* - Jaccard | 0.140 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 1.826 | 10.840 | 33.772 | 8.283 | 41.956 | 45.847 |
| *R. amarus* - Bray-Curtis | 0.474 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.865 | 16.561 | 35.559 | 18.910 | 44.262 | 31.065 |
| *P. fluviatilis* - Jaccard | 0.001 | 0.039 | 0.002 | 0.093 | 0.422 | 0.048 | 4.128 | 2.141 | 4.390 | 1.768 | 0.994 | 2.512 |
| *P. fluviatilis* - Bray-Curtis | 0.002 | 0.084 | 0.003 | 0.140 | 0.287 | 0.036 | 3.401 | 1.786 | 3.238 | 1.689 | 1.175 | 2.526 |
| precision | | | | | | | | | | | | |
| *Acanthocephalus* sp. | 0.000 | 0.000 | 0.000 | 0.201 | 0.600 | 0.107 | 22.180 | 31.841 | 12.991 | 1.634 | 0.275 | 2.602 |
| *Bunodera* sp. | 0.000 | 0.000 | 0.000 | 0.000 | 0.010 | 0.003 | 30.617 | 196.183 | 68.672 | 37.982 | 6.617 | 9.038 |
| *Holostephanus* sp. | 0.224 | 0.631 | 0.260 | 0.952 | 0.391 | 0.410 | 1.479 | 0.231 | 1.268 | 0.004 | 0.736 | 0.680 |