**Supplementary Table 5:** P values for *S. japonicum* intensity of infection (GMEPG) in Jiangxi and Hunan provinces based on real-time PCR (qPCR) data

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Sex** |  | **Male** |  | **p <0.05** |  |  |  |  |  |  |
|  | **Female** | 0.21 |  |  |  |  |  |  |  |  |
|  | **Province** |  | **Hunan** |  |  |  |  |  |  |  |  |
|  | **Jiangxi** | 0.9541 |  |  |  |  |  |  |  |  |
|  | **Jiangxi** | **Villages** | Xinhua | Dingshan | Caohui | Dongfang | Huangjia | Fuqian | Biaoen | Huanggin |  |
|  | Xinhua | na | na | na | na | na | na | na | na |  |
|  | Dingshan | - | na | na | na | na | na | na | na |  |
|  | Caohui | - | 0.93 | na | na | na | na | na | na |  |
|  | Dongfang | - | 0.1509 | 0.2717 | na | na | na | na | na |  |
|  | Huangjia | - | 0.0327 | 0.0835 | 0.4529 | na | na | na | na |  |
|  | Fuqian | - | 0.6224 | 0.7143 | 0.5595 | 0.2373 | na | na | na |  |
|  | Biaoen | - | 0.076 | 0.2164 | 0.9649 | 0.2626 | 0.536 | na | na |  |
|  | Huanggin | - | 0.6217 | 0.7685 | 0.3098 | 0.0796 | 0.9701 | 0.2154 | na |  |
|  | **Hunan** | **Villages** | Longwang | Xiangjiang | Zhangshu | Changjiang | Ganzhou | Xincheng | Dongtinghong | Xinggang |  |
|  | Longwang | na | na | na | na | na | na | na | na |  |
|  | Xiangjiang | 0.6278 | na | na | na | na | na | na | na |  |
|  | Zhangshu | 0.0122 | 0.0455 | na | na | na | na | na | na |  |
|  | Changjiang | 0.7326 | 0.9636 | 0.2044 | na | na | na | na | na |  |
|  | Ganzhou | 0.497 | 0.2712 | 0.0033 | 0.4523 | na | na | na | na |  |
|  | Xincheng | 0.0147 | 0.0557 | 0.8802 | 0.2362 | 0.004 | na | na | na |  |
|  | Dongtinghong | 0.2579 | 0.42 | 0.5457 | 0.5585 | 0.1254 | 0.6138 | na | na |  |
|  | Xinggang | 0.3009 | 0.4544 | 0.6078 | 0.5697 | 0.1614 | 0.6732 | 0.9801 | na |  |
|  |  |  | <10 | 10 - 20 | 20 - 40 | 40 - 60 | >60 |  |  |  |  |
|  | **Age group** | <10 | na | na | na | na | na |  |  |  |  |
|  | 10 - 20 | 0.3202 | na | na | na | na |  |  |  |  |
|  | 20 - 40 | 0.9160 | 0.3329 | na | na | na |  |  |  |  |
|  | 40 - 60 | 0.8356 | 0.3327 | 0.5352 | na | na |  |  |  |  |
|  | >60 | 0.4256 | 0.7143 | 0.1172 | 0.3940 | na |  |  |  |  |
|  |  |  | Illiterate | Primary school | Middle-high school | College |  |  |  |  |  |
|  | **Education** | Illiterate | na | na | na | na |  |  |  |  |  |
|  | Primary school | 0.0492 | na | na | na |  |  |  |  |  |
|  | Middle-high school | 0.1095 | 0.7445 | na | na |  |  |  |  |  |
|  | College | <0.0001 | 0.7445 | <0.0001 | na |  |  |  |  |  |
|  |  |  | Farmer | Fisherman | Farmer + Fisherman | Businessman | Teacher/administrator | Student | Unemployed | Preschool/child | Other |
|  | **Occupation** | Farmer | na | na | na | na | na | na | na | na | na |
|  | Fisherman | 0.7464 | na | na | na | na | na | na | na | na |
|  | Farmer + Fisherman | 0.6061 | 0.9402 | na | na | na | na | na | na | na |
|  | Businessman | <0.0001 | 0.0004 | <0.0001 | na | na | na | na | na | na |
|  | Teacher/administrator | <0.0001 | 0.0002 | <0.0001 | 0.4227 | na | na | na | na | na |
|  | Student | 0.5631 | 0.5241 | 0.2964 | 0.4227 | <0.0001 | na | na | na | na |
|  | Unemployed | 0.1811 | 0.4121 | 0.2386 | <0.0001 | <0.0001 | 0.9926 | na | na | na |
|  | Preschool/child | - | - | - | - | - | - | - | na | na |
|  | Other | - | - | - | - | - | - | - | - | na |
|  |  |  | Farmer/fisher | Business/teacher | Student/child | Unemployed | Other |  |  |  |  |
|  | **Occupation2** | Farmer/fisher | na | na | na | na | na |  |  |  |  |
|  | Business/teacher | <0.0001 | na | na | na | na |  |  |  |  |
|  | Student/child | 0.5052 | <0.0001 | na | na | na |  |  |  |  |
|  | Unemployed | 0.0807 | <0.0001 | 0.9896 | na | na |  |  |  |  |
|  | Other | - | - | - | - | na |  |  |  |  |
|  |  |  | Home latrine | Public latrine | Field | Marsh or lake | Other | Unknown |  |  |  |
|  | **Defecate 2** | Home latrine | na | na | na | na | na | na |  |  |  |
|  | Public latrine | 0.2498 | na | na | na | na | na |  |  |  |
|  | Field | 0.8207 | 0.0262 | na | na | na | na |  |  |  |
|  | Marsh or lake | 0.7961 | 0.3426 | <0.0001 | na | na | na |  |  |  |
|  | Other | - | - | - | - | na | na |  |  |  |
|  | Unknown | - | - | - | - | - | na |  |  |  |
|  |  |  | No | 1-5 episodes/fortnight | >5 episodes/fortnight | Don't know |  |  |  |  |  |
|  | **Diarrhoea** | No | na | na | na | na |  |  |  |  |  |
|  | 1-5 episodes/fortnight | 0.2722 | na | na | na |  |  |  |  |  |
|  | >5 episodes/fortnight | <0.0001 | 0.0480 | na | na |  |  |  |  |  |
|  | Don't know | <0.0001 | <0.0001 | <0.0001 | na |  |  |  |  |  |
|  |  |  | No | 1-5 episodes/fortnight | >5 episodes/fortnight | Don't know |  |  |  |  |  |
|  | **Weakness** | No | na | na | na | na |  |  |  |  |  |
|  | 1-5 episodes/fortnight | 0.1932 | na | na | na |  |  |  |  |  |
|  | >5 episodes/fortnight | 0.2903 | 0.0793 | na | na |  |  |  |  |  |
|  | Don't know | <0.0001 | 0.0642 | <0.0001 | na |  |  |  |  |  |
|  |  |  | No | 1-5 episodes/fortnight | >5 episodes/fortnight | Don't know |  |  |  |  |  |
|  | **Fever** | No | na | na | na | na |  |  |  |  |  |
|  | 1-5 episodes/fortnight | <0.0001 | na | na | na |  |  |  |  |  |
|  | >5 episodes/fortnight | 0.3964 | 0.7743 | na | na |  |  |  |  |  |
|  | Don't know | - | - | - | na |  |  |  |  |  |
|  |  |  | Yes | No | Don't know |  |  |  |  |  |  |
|  | **HepB** | Yes | na | na | na |  |  |  |  |  |  |
|  | No | 0.4656 | na | na |  |  |  |  |  |  |
|  | Don't know | 0.1731 | 0.1955 | na |  |  |  |  |  |  |
|  |  |  | Yes | No | Don't know |  |  |  |  |  |  |
|  | **Ever had schistosomiasis** | Yes | na | na | na |  |  |  |  |  |  |
|  | No | 0.3016 | na | na |  |  |  |  |  |  |
|  | Don't know | - | - | na |  |  |  |  |  |  |
|  |  |  | Yes | No | Don't know |  |  |  |  |  |  |
|  | **Had advanced schistosomiasis** | Yes | na | na | na |  |  |  |  |  |  |
|  | No | 0.0914 | na | na |  |  |  |  |  |  |
|  | Don't know | - | - | na |  |  |  |  |  |  |
|  |  |  | Yes | No | Don't know |  |  |  |  |  |  |
|  | **Had acute schistosomiasis** | Yes | na | na | na |  |  |  |  |  |  |
|  | No | - | na | na |  |  |  |  |  |  |
|  | Don't know | - | - | na |  |  |  |  |  |  |
|  |  |  | Yes | No | Don't know |  |  |  |  |  |  |
|  | **Treated for schistosomiasis last 2 years** | Yes | na | na | na |  |  |  |  |  |  |
|  | No | 0.3925 | na | na |  |  |  |  |  |  |
|  | Don't know | - | - | na |  |  |  |  |  |  |
|  |  |  | <5 | 5-10 | >10 <20 | >20 | 0 | Unknown |  |  |  |
|  | **Total number of previous Schistosomiasis treatments** | <5 | na | na | na | na | na | na |  |  |  |
|  | 5-10 | 0.4621 | na | na | na | na | na |  |  |  |
|  | >10 <20 | 0.3500 | 0.2274 | na | na | na | na |  |  |  |
|  | >20 | <0.0001 | <0.0001 | <0.0001 | na | na | na |  |  |  |
|  | 0 | 0.1985 | 0.8069 | 0.1144 | <0.0001 | na | na |  |  |  |
|  | Unknown | 0.9285 | 0.6911 | 0.4996 | 0.0002 | 0.5992 | na |  |  |  |
|  |  |  | <5 | 5-10 | 10-20 | >20 |  |  |  |  |  |
|  | **Years worked in this village** | <5 | na | na | na | na |  |  |  |  |  |
|  | 5-10 | 0.0924 | na | na | na |  |  |  |  |  |
|  | 10-20 | 0.4504 | 0.1408 | na | na |  |  |  |  |  |
|  | >20 | - | - | - | na |  |  |  |  |  |
|  |  |  | Yes | No | Don't know | No answer |  |  |  |  |  |
|  | **Live and work for more than 6 mths/yr in this village** | Yes | na | na | na | na |  |  |  |  |  |
|  | No | <0.0001 | na | na | na |  |  |  |  |  |
|  | Don't know | - | - | na | na |  |  |  |  |  |
|  | No answer | - | - | - | na |  |  |  |  |  |
|  |  |  | Yes | No | Don't know | No answer |  |  |  |  |  |
|  | **Have you had water contact last 12 mths** | Yes | na | na | na | na |  |  |  |  |  |
|  | No | 0.3207 | na | na | na |  |  |  |  |  |
|  | Don't know | - | - | na | na |  |  |  |  |  |
|  | No answer | - | - | - | na |  |  |  |  |  |
| **Spring water contact activities** |  |  | >1 per wk | Between weekly and monthly | 1 per mth | No response |  |  |  |  |  |
| **Frequency of water contact** | >1 per wk | na | na | na | na |  |  |  |  |  |
| Between weekly and monthly | 0.6243 | na | na | na |  |  |  |  |  |
| 1 per mth | 0.662 | 0.8262 | na | na |  |  |  |  |  |
| No response | - | - | - | na |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Fishing** | Checked | 0.1775 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Herding bovines** | Checked | <0.0001 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Farming/Cutting grass** | Checked | 0.6946 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **washing clothes** | Checked | 0.2381 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Swimming or playing** | Checked | 0.5816 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Wading/Washing hands** | Checked | 0.7582 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Other** | Checked | <0.0001 |  |  |  |  |  |  |  |  |
| **Summer water contact activities** |  |  | >1 per wk | Between weekly and monthly | 1 per mth | No response |  |  |  |  |  |
| **Frequency of water contact** | >1 per wk | na | na | na | na |  |  |  |  |  |
| Between weekly and monthly | 0.779 | na | na | na |  |  |  |  |  |
| 1 per mth | 0.9951 | 0.7217 | na | na |  |  |  |  |  |
| No response | - | - | - | na |  |  |  |  |  |
|  |  | Unchecked | |  |  |  |  |  |  |  |
| **Fishing** | Checked | 0.1775 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Herding bovines** | Checked | <0.0001 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Farming/Cutting grass** | Checked | 0.6946 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **washing clothes** | Checked | 0.2381 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Swimming or playing** | Checked | 0.5816 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Wading/Washing hands** | Checked | 0.7582 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Other** | Checked | <0.0001 |  |  |  |  |  |  |  |  |
| **Autumn water contact activities** |  |  | >1 per wk | Between weekly and monthly | 1 per mth | No response |  |  |  |  |  |
| **Frequency of water contact** | >1 per wk | na | na | na | na |  |  |  |  |  |
| Between weekly and monthly | 0.9729 | na | na | na |  |  |  |  |  |
| 1 per mth | 0.3614 | 0.383 | na | na |  |  |  |  |  |
| No response | - | - | - | na |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Fishing** | Checked | 0.3763 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Herding bovines** | Checked | <0.0001 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Farming/Cutting grass** | Checked | 0.4505 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  | check these |  |  |  |  |  |  |
| **washing clothes** | Checked | <0.0001 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Swimming or playing** | Checked | 0.0002 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Wading/Washing hands** | Checked | 0.1329 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Other** | Checked | - |  |  |  |  |  |  |  |  |
| **Water contact - seasons combined** |  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Fishing** | Checked | 0.1788 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Herding bovines** | Checked | <0.0001 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Farming/Cutting grass** | Checked | 0.7415 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **washing clothes** | Checked | 0.6832 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Swimming or playing** | Checked | <0.0001 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Wading/Washing hands** | Checked | 0.9954 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Other** | Checked | <0.0001 |  |  |  |  |  |  |  |  |
|  |  | Unchecked |  |  |  |  |  |  |  |  |
| **Any WC** | Checked | 0.0178 |  |  |  |  |  |  |  |  |

GMEPG: geometric mean eggs per gram of faeces