

**Supplementary Table S1.** Panel of *Leptospira* antigens used in the microscopic agglutination test

| Genomic species          | Serogroup           | Serovar        | Strain         | Source/origin        |
|--------------------------|---------------------|----------------|----------------|----------------------|
| Unknown                  | Unclassified        | Unclassified   | IMR Lep 1      | Local, Melaka        |
| <i>L. kemamanensis</i>   | Unclassified        | Unclassified   | IMR Lep 115    | Local, Terengganu    |
| <i>L. sarikeiensis</i>   | Unclassified        | Unclassified   | IMR Lep 175    | Local, Sarawak       |
| <i>L. interrogans</i>    | Unclassified        | Lai            | IMR Lep 22     | Local, Johor         |
| Unclassified             | Unclassified        | Unclassified   | HOSHAS         | Local, unspecified   |
| <i>L. kirschneri</i>     | Grippotyphosa       | Grippotyphosa  | Duyster        | WHO, The Netherlands |
| <i>L. interrogans</i>    | Sejroe              | Hardjoprajitno | Hardjoprajitno | WHO, Indonesia       |
| <i>L. biflexa</i>        | Semarang            | Patoc          | Patoc 1        | WHO, Italy/US/France |
| <i>L. interrogans</i>    | Australis           | Fugis          | Fudge          | WHO, Malaysia        |
| <i>L. interrogans</i>    | Autumnalis          | Bangkinang     | Bangkinang 1   | WHO, Indonesia       |
| <i>L. interrogans</i>    | Canicola            | Malaya         | H6             | Local, unspecified   |
| <i>L. borgpetersenii</i> | Celledoni           | Whitcombi      | Whitcombi      | WHO, Malaysia        |
| <i>L. interrogans</i>    | Icterohaemorrhagiae | Birkin         | Birkin         | WHO, Malaysia        |
| <i>L. interrogans</i>    | Pyrogenes           | Biggis         | Biggs          | WHO, Malaysia        |
| <i>L. borgpetersenii</i> | Unclassified        | Hardjobovis    | IMR Lep 27     | Local, unspecified   |
| <i>L. interrogans</i>    | Icterohaemorrhagiae | Copenhageni    | IMR Lep 803/11 | Local, unspecified   |
| <i>L. kmetyi</i>         | Tarassovi           | Malaysia       | Bejo-Iso9      | WHO, Malaysia        |
| <i>L. interrogans</i>    | Icterohaemorrhagiae | Lai Langkawi   | Langkawi       | WHO, Malaysia        |
| <i>L. interrogans</i>    | Pomona              | Pomona         | Pomona         | WHO, Australia       |
| <i>L. interrogans</i>    | Djasiman            | Gurungi        | Gurung         | WHO, Malaysia        |
| <i>L. borgpetersenii</i> | Hebdomadis          | Worsfoldi      | Worsfold       | WHO, Malaysia        |
| <i>L. weilii</i>         | Javanica            | Coxi           | Cox            | WHO, Malaysia        |
| <i>L. interrogans</i>    | Tarassovi           | Tarassovi      | Perepelitsin   | WHO, Russia          |
| <i>L. interrogans</i>    | Canicola            | Jonsis         | Jones          | WHO, Malaysia        |

*Note.* The MAT panel included locally isolated strains and WHO reference strains maintained at the Institute for Medical Research, Malaysia.  
MAT: microscopic agglutination test; WHO: World Health Organization.

**Supplementary Table S2.** Model Fit Statistics for Logistic Regression Predicting Leptospirosis Seropositivity

| Step           | −2 log likelihood | $\chi^2$ | <i>df</i> | p-value | Cox & Snell R <sup>2</sup> | Nagelkerke R <sup>2</sup> |
|----------------|-------------------|----------|-----------|---------|----------------------------|---------------------------|
| 1              | 58.760            | 65.616   | 11        | <0.001  | 0.199                      | 0.580                     |
| 2              | 58.764            | −0.004   | 10        | 0.950   | 0.199                      | 0.580                     |
| 3              | 60.658            | −1.894   | 9         | 0.595   | 0.194                      | 0.565                     |
| 4              | 61.572            | −0.915   | 6         | 0.339   | 0.192                      | 0.557                     |
| 5              | 62.604            | −1.031   | 5         | 0.310   | 0.189                      | 0.549                     |
| 6, final model | 63.566            | 60.810   | 4         | <0.001  | 0.186                      | 0.541                     |

*Note.* Backward stepwise logistic regression using the likelihood ratio method was applied.  $\chi^2$ : chi-square statistic; *df*: degrees of freedom; p-value: probability value; Cox & Snell R<sup>2</sup> and Nagelkerke R<sup>2</sup>: pseudo-R<sup>2</sup> measures of model explanatory power. The final model significantly improved fit,  $\chi^2(4) = 60.810$ ,  $p < 0.001$ , and explained 54.1% of variance based on Nagelkerke R<sup>2</sup>.

**Supplementary Table S3.** MAT antibody titres among seropositive respondents

| No. | Sample ID | Gender | Age group | Product subgroup | Lep 1 | Lep 115 | Lep 175 | BOV  | HOS   | GRI   | PRAV  | PAT  | MAL  | BIR   | BIG  |
|-----|-----------|--------|-----------|------------------|-------|---------|---------|------|-------|-------|-------|------|------|-------|------|
| 1   | MT 004    | 1      | 5         | 3                | —     | —       | —       | —    | —     | —     | —     | —    | —    | —     | 1:50 |
| 2   | MT 035    | 2      | 4         | 3                | —     | —       | —       | —    | 1:400 | —     | —     | —    | —    | —     | 1:50 |
| 3   | MT 043    | 2      | 4         | 2                | —     | —       | 1:50    | —    | —     | —     | —     | —    | —    | —     | —    |
| 4   | MT 063    | 2      | 5         | 3                | —     | —       | 1:50    | —    | —     | —     | —     | —    | 1:50 | —     | —    |
| 5   | MT 064    | 2      | 5         | 2                | —     | —       | —       | —    | —     | —     | —     | —    | —    | 1:100 | —    |
| 6   | MT 065    | 2      | 1         | 3                | —     | —       | —       | —    | —     | —     | —     | —    | —    | —     | 1:50 |
| 7   | MT 069    | 2      | 5         | 2                | —     | —       | —       | 1:50 | —     | —     | —     | —    | —    | —     | —    |
| 8   | MT 111    | 1      | 5         | 1                | —     | —       | —       | —    | —     | —     | —     | —    | —    | 1:50  | —    |
| 9   | MT 115    | 2      | 4         | 1                | —     | —       | 1:100   | —    | —     | —     | —     | —    | —    | —     | —    |
| 10  | MT 130    | 1      | 3         | 2                | —     | 1:50    | —       | —    | —     | —     | —     | —    | —    | —     | —    |
| 11  | MT 135    | 1      | 5         | 1                | —     | —       | —       | —    | 1:800 | —     | —     | —    | —    | —     | —    |
| 12  | MT 149    | 2      | 4         | 1                | 1:50  | —       | —       | —    | —     | —     | —     | —    | —    | 1:100 | —    |
| 13  | MT 162    | 2      | 3         | 1                | —     | —       | —       | —    | 1:800 | —     | —     | —    | —    | —     | —    |
| 14  | MT 182    | 2      | 2         | 2                | —     | —       | —       | —    | —     | 1:100 | —     | —    | —    | —     | —    |
| 15  | MT 244    | 2      | 4         | 2                | —     | —       | —       | —    | —     | —     | 1:400 | —    | —    | —     | —    |
| 16  | MT 272    | 2      | 4         | 4                | —     | —       | 1:200   | —    | —     | —     | —     | 1:50 | —    | —     | —    |

*Note.* MAT titres are shown only for seropositive respondents. BOV: Hardjobovis; HOS: HOSHAS; GRI: Grippotyphosa; PRAV: Hardjoprajitno; PAT: Patoc; MAL: Malaya; BIR: Birikini; BIG: Biggis. Gender: 1 = male, 2 = female. Age group: 1 = ≤20, 2 = 21–30, 3 = 31–40, 4 = 41–50, 5 = ≥51 years. Product subgroup: 1 = fresh animal-based, 2 = fresh plant-based, 3 = processed/prepared foods, 4 = non-food products.