Supplementary Table 6. Percentage of *S. furcifera* individuals assigned to each reference population in 2013 and the mean assignment log-likelihood for individuals from each geographic population to possible source population.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Country | Population | Method1 | Potential source (reference) population | | | | | | | | | | | | | | | | | | | |
| JC | TA | BA | JS | GR | JD | SA2 | WD | CW | KP | NYJ | CG | CN | GS | MY | B5 | B6 | CH | NE | TH |
| Korea | JC | Assignment2  Exclusion3  -LOG(L)4 | 7.5(3)  10(4)  13.13 | 60(24)  32.5(13)  21.26 | 65(26)  42.5(17)  18.52 | 92.5(37)  82.5(33)  19.71 | 97.5(39)  92.5(37)  22.11 | 65(26)  42.5(17) 17.66 | 77.5(31)  50(20)  19.59 | 95(38)  85(34)  20.78 | 15(6)  5(2) **16.40** | 75(30)  55(22)  19.79 | 100(40)  97.5(39)  23.29 | 72.5(29)  65(26)  18.70 | 92.5(37)  77.5(31) 242.56 | 95(38)  32(80)  20.73 | 90(36) 32(80)  21.49 | 82.5(33)  47.5(19) 19.16 | 82.5(33)  70(28)  20.56 | 87.5(35)  82.5(33) 17.90 | 47.5(19)  25(10) 17.85 | 77.5(31)  52.5(21) 19.31 |
|  | TA | Assignment  Exclusion  -LOG(L) | 100(39)  100(39)  25.57 | 5.1(2)  10.3(4)  18.74 | 100(39)  84.6(33) 24.25 | 100(39)  100(39)  26.38 | 100(39)  97.4(38) 26.47 | 100(39)  100(39) 25.04 | 84.6(33)  76.9(30) 22.36 | 100(39)  39(100) 27.09 | 92.3(36)  74.4(29) 24.31 | 94.9(37)  84.6(33) 23.36 | 100(39)  97.4(38) 26.41 | 97.4(38)  92.3(36)  23.47 | 94.9(37)  69.2(27) **22.19** | 97.4(38) 97.4(38) 26.43 | 100(39) 100(39) 24.99 | 100(39) 92.3(36) 26.26 | 92.3(36)  74.5(29) 22.45 | 100(39) 100(39) 28.01 | 94.9(37)  92.3(36) 24.65 | 100(39) 100(39)25.41 |
|  | BA | Assignment  Exclusion  -LOG(L) | 97.4(37) 100(38) 20.69 | 81.6(31)  71.1(27) 22.56 | 26.3(10) 26.3(10) 16.18 | 100(38)  81.6(31) 26.26 | 86.8(33)  84.2(32) 22.46 | 100(38) 100(38) 23.65 | 94.7(36) 100(38) 21.46 | 100(38)  71.1(27) 25.81 | 86.8(33)  28.9(11) 22.41 | 76.3(29)  92.1(35)  19.52 | 100(38)  60.5(23) 26.74 | 73.7(28)  5.3(2)  **18.81** | 92.1(35)  100(38) 22.75 | 100(38)  73.7(28) 22.31 | 97.4(37)  100(38) 22.34 | 97.4(37)  65.8(24)  22.96 | 78.9(30) 100(38) 20.89 | 100(38)  63.2(24) 23.66 | 100(38)  52.6(20) 22.78 | 100(38) 100(38) 23.02 |
|  | JS | Assignment  Exclusion  -LOG(L) | 90(36)  82.5(33) 20.00 | 80(32)  57.5(23) 23.18 | 100(40)  97.5(39) 25.38 | 7.5(3)  12.5(5)  13.77 | 95(38)  90(36) 22.67 | 52.5(21)  37.5(15) **16.87** | 77.5(31) 57.5(23) 21.03 | 80(32)  62.5(25) 17.42 | 72.5(29)  30(12) 20.54 | 97.5(39)  95(38) 24.10 | 92.5(37)  72.5(29) 20.25 | 100(40) 100(40) 27.23 | 92.5(37)  60(24) 21.17 | 100(40) 97.5(39)  22.45 | 77.5(31)  70(28) 19.91 | 85(34) 62.5(25)  20.54 | 100(40) 100(40) 25.64 | 95(38) 92.5(37)21.25 | 50(20) 32.5(13)  18.55 | 82.5(33) 65(26)  19.98 |
|  | GR | Assignment  Exclusion  -LOG(L) | 100(40) 92.5(27)  23.61 | 97.5(39) 87.5(35)  25.97 | 77.5(31) 52.5(21)  21.22 | 97.5(39) 95(38)  23.04 | 10(4) 15(6)  15.12 | 100(40) 92.5(37)  23.72 | 87.5(35) 80(32)  23.04 | 97.5(39) 97.5(39) 23.23 | 95(38) 85(34)  25.95 | 57.5(23) 35(14)  **17.61** | 100(40) 100(40) 26.64 | 97.5(39)  95(38) 23.43 | 100(40) 97.5(39)  24.37 | 100(40) 97.5(39) 26.68 | 97.5(39) 97.5(39) 23.12 | 80(32) 67.5(27) 20.36 | 95(38)  87.5(35) 23.83 | 100(40) 100(40) 25.50 | 95(38)  87.5(35) 23.82 | 100(40) 95(38)  23.88 |
|  | JD | Assignment  Exclusion  -LOG(L) | 85(34)  67.5(27) 18.57 | 79(28)  52.5(21) 22.06 | 97.5(39) 87.5(35)  22.66 | 72.5(29) 52.5(21)  17.44 | 97.5(39) 97.5(39)  24.15 | 5(2)  10(4)  14.68 | 70(28) 37.5(15)  19.20 | 80(32) 50(20)  **17.37** | 45(18) 10(4)  18.92 | 95(38) 90(36)  22.76 | 92.5(37) 90(36)  22.62 | 100(40)  37.5(39) 24.01 | 97.5(39) 77.5(31)  22.46 | 97.5(39) 90(32)  20.84 | 97.5(39) 87.5(35)  21.92 | 95(38) 62.5(25)  20.67 | 100(40) 97.5(39) 23.60 | 100(40)  92.5(37) 21.41 | 62.5(25) 42.5(17)  19.32 | 80(32) 50(20)  18.89 |
|  | SA2 | Assignment  Exclusion  -LOG(L) | 97.5(39)  92.5(37) 21.74 | 27.5(11) 17.5(7)  19.07 | 92.5(37) 92.5(37) 22.21 | 100(40) 100(40) 21.16 | 100(40) 100(40) 23.96 | 75(30)  65(26)  **18.93** | 7.5(3)  5(2)  15.06 | 100(40) 97.5(39)  22.08 | 50(20) 22.5(9)  19.23 | 87.5(35) 77.5(31)  21.10 | 100(40) 95(38)  24.30 | 97.5(39)  92.5(37)  21.91 | 97.5(39)  85(34) 23.45 | 97.5(39) 97.5(39) 23.08 | 97.5(39) 97.5(39) 24.44 | 100(40) 97.5(39)  24.84 | 95(38)  72.5(29) 21.84 | 100(40) 100(40) 25.67 | 92.5(37) 82.5(33)  22.49 | 92.5(37) 77.5(31)21.09 |
|  | WD | Assignment  Exclusion  -LOG(L) | 95(38)  80(32)  19.95 | 90(36) 70(28)  23.42 | 100(40) 97.5(39)  23.98 | 62.5(25) 30(12)  16.37 | 100(40) 92.5(37)  22.19 | 32.5(13) 27.5(11)  **15.62** | 75(30) 60(24)  20.41 | 17.5(7) 17.5(7)  13.37 | 70(28) 45(18)  21.67 | 92.5(37) 75(30)  21.35 | 92.5(37) 82.5(33)20.59 | 100(40)  100(40) 26.81 | 95(38)  65(26) 21.61 | 100(40) 90(36)  21.39 | 82.5(33) 60(24)  19.86 | 90(36) 62.5(25)  20.96 | 100(40) 97.5(39)  25.43 | 100(40) 100(40)22.69 | 87.5(35) 60(24)  20.80 | 72.5(29) 52.5(21)19.54 |
|  | CW | Assignment  Exclusion  -LOG(L) | 70(28)  50(20)  **17.47** | 40(16) 30(12)  20.37 | 85(34) 70(28)  21.45 | 97.5(39) 87.5(35)  20.79 | 100(40) 95(38)  24.98 | 72.5(29) 60(24)  18.94 | 57.5(23) 45(18)  19.41 | 100(40) 97.5(39)  22.81 | 7.5(3) 7.5(3)  15.32 | 90(36) 77.5(31)  22.54 | 100(40) 100(40) 24.73 | 80(32)  70(28)  20.77 | 100(40) 100(40) 25.95 | 97.5(39)  95(38) 23.51 | 100(40) 100(40)  26.28 | 92.5(37) 85(34)  23.38 | 97.5(39) 80(32)  22.82 | 95(38) 95(38)  20.76 | 77.5(31) 60(24)  20.51 | 82.5(33) 57.5(23)20.05 |
|  | KP | Assignment  Exclusion  -LOG(L) | 95(38)  95(38)  22.33 | 80(32) 55(22)  22.83 | 62.5(25) 37.5(15)  19.00 | 100(40) 100(40) 25.93 | 62.5(25) 37.5(15)  **18.63** | 100(40) 97.5(39)  24.15 | 90(36) 77.5(31)  21.84 | 100(40) 100(40) 23.66 | 95(38) 80(32)  24.54 | 10(4) 12.5(5)  15.92 | 100(40) 100(40) 25.89 | 87.5(35) 72.5(29)  20.28 | 92.5(37) 87.5(35)  22.80 | 100(40)  97.5(39)  25.77 | 100(40) 95(38)  22.77 | 95(38) 70(28)  20.88 | 90(36) 67.5(27)  21.31 | 100(40) 100(40) 25.22 | 100(40) 95(38)  24.25 | 100(40) 97.5(39)  23.93 |
|  | NYJ | Assignment  Exclusion  -LOG(L) | 100(40) 92.5(37)  23.28 | 82.5(33) 55(22)  22.76 | 100(40) 100(40) 25.91 | 80(32) 67.5(27)  **18.71** | 100(40) 100(40)  26.43 | 92.5(37) 67.5(27) 20.41 | 95(38)  62.5(25)  23.48 | 97.5(39) 90(36)  20.63 | 87.5(35) 65(26)  23.24 | 100(40) 100(40) 26.55 | 7.5(3) 10(4)  13.78 | 100(40) 97.5(39)  26.86 | 85(34) 57.5(23)  20.65 | 100(40)  85(34) 21.01 | 67.5(27) 52.5(21)  18.78 | 100(40) 85(34)  23.70 | 100(40) 95(38)  23.91 | 100(40) 100(40)25.22 | 100(40) 90(36)  22.96 | 85(34) 62.5(25)20.20 |
|  | CG | Assignment  Exclusion  -LOG(L) | 87.5(35)  80(32)  19.28 | 40(16) 25(10)  19.74 | 32.5(13) 17.5(7)  **16.83** | 100(40) 100(40)  26.45 | 97.5(39) 92.5(37)  23.48 | 97.5(39) 90(36)  22.71 | 75(30) 47.5(19)  19.76 | 100(40) 100(40)  26.60 | 72.5(29) 35(14)  19.66 | 67.5(27) 52.5(21)  19.43 | 100(40) 100(40)25.82 | 7.5(3) 12.5(5)  14.01 | 100(40) 90(36)  24.75 | 100(40) 95(38)  23.04 | 100(40) 100(40)  24.89 | 100(40)  82.5(33) 22.58 | 62.5(25) 52.5(21)  19.59 | 100(40) 100(40)21.96 | 90(36) 77.5(31)  22.66 | 87.5(35) 65(26)  20.76 |
|  | CN | Assignment  Exclusion  -LOG(L) | 100(40) 100(40) 23.88 | 65(26) 42.5(17)  20.93 | 95(38) 72.5(29)  22.10 | 100(40) 92.5(37)  22.25 | 97.5(39)  97.5(39) 24.45 | 100(40) 95(38)  22.63 | 95(38) 82.5(33)  23.45 | 100(40)  100(40) 23.02 | 100(40) 92.5(37)  25.59 | 92.5(37) 90(36)  22.80 | 97.5(39) 92.5(37)  23.32 | 100(40) 97.5(39)  25.14 | 5(2)  7.5(3)  16.17 | 97.5(39) 95(38)  23.66 | 62.5(25) 45(18)  **18.10** | 95(38) 90(32)  22.02 | 90(36) 82.5(33)  21.97 | 100(40) 97.5(39)  26.20 | 80(32) 57.5(23)  20.94 | 100(40) 95(38)  22.69 |
|  | GS | Assignment  Exclusion  -LOG(L) | 75(30)  97.5(39) 20.79 | 75(30) 67.5(27)  22.24 | 95(38)  70(28)  20.63 | 100(40) 97.5(39)  22.93 | 100(40)  100(40) 25.44 | 95(38) 87.5(35)  20.46 | 95(38) 65(26)  20.51 | 100(40) 100(40)  22.11 | 87.5(35) 65(26)  21.95 | 100(40) 97.5(39)  23.10 | 100(40) 90(36)  21.93 | 100(40) 100(40)  22.33 | 100(40) 85(34)  22.25 | 2.5(1)  5(2)  12.90 | 95(38) 65(26)  19.50 | 87.5(35) .5(23)  19.30 | 52.5(21) 27.5(11)  **18.07** | 100(40) 97.5(39)  22.27 | 65(26) 32.5(13)  19.29 | 87.5(35) 57.5(23)  18.54 |
|  | MY | Assignment  Exclusion  -LOG(L) | 97.5(39)  96(38) 21.95 | 100(40) 90(36)  24.43 | 90(36) 77.5(31)  21.94 | 100(40) 85(34)  20.26 | 97.5(39) 90(36)  24.08 | 97.5(39) 85(34)  21.15 | 97.5(39) 85(34)  23.40 | 100(40) 97.5(39)  20.39 | 100(40) 87.5(35)  25.44 | 90(36) 87.5(35)  23.37 | 92.5(37) 90(32)  21.16 | 100(40) 100(40)  26.00 | 50(20) 7.5(3)  **17.48** | 95(38) 82.5(33)  20.51 | 2.5(1)  5(2)  15.59 | 92.5(37) 70(28)  21.20 | 90(36) 80(32)  21.32 | 100(40) 100(40)  24.79 | 65(26) 47.5(19)  19.38 | 92.5(37) 87.5(35)  20.66 |
| Bangladesh | B5 | Assignment  Exclusion  -LOG(L) | 97.5(39)  75(30)  19.71 | 87.5(35) 75(30)  24.22 | 85(34) 62.5(25)  20.07 | 97.5(39) 95(39)  21.55 | 87.5(35) 65(26)  19.54 | 97.5(39) 90(36)  20.64 | 95(3) 90(36)  23.17 | 100(40) 100(40)  22.44 | 90(36) 72.5(29)  23.15 | 82.5(33) 72.5(19)219.12 | 100(40) 100(40)24.09 | 100(40) 100(40)  23.01 | 77.5(31) 40(16)  19.77 | 97.5(39) 90(32)  20.24 | 70(28) 50(20)  18.63 | 7.5(3) 7.5(3)  13.64 | 80(32) 72.5(29)  20.27 | 92.5(37) 87.5(35)  19.63 | 40(16) 27.5(11)  **17.04** | 92.5(37) 72.5(29)  20.48 |
|  | B6 | Assignment  Exclusion  -LOG(L) | 97.5(39) 95(38)  23.31 | 80(32) 62.5(25)  22.83 | 90(36) 72.5(29)  22.18 | 100(40) 100(40)  26.72 | 100(40) 97.5(39)  25.1037 | 100(40) 100(40)  24.06 | 92.5(37) 80(32)  22.37 | 100(40) 100(40)  26.23 | 100(40) 82.5(33)  25.01 | 90(36) 70(28)  22.11 | 100(40) 97.5(39)25.39 | 95(38) 90(36)  22.96 | 90(36) 23. 57.5(23)  22.00 | 97.5(39) 82.5(33)  22.37 | 87.5(35) 70(28)  **21.27** | 97.5(39) 77.5(31)  22.54 | 7.5(3) 10(4)  17.05 | 100(40) 100(40)25.66 | 75(30) 67.5(27)  21.37 | 97.5(39) 85(34)  22.33 |
| China | CH | Assignment  Exclusion  -LOG(L) | 87.5 (35) 75(30)  **17.72** | 87.5(35) 75(30)  23.06 | 92.5(37) 75(30)  20.65 | 97.5(39) 85(34)  21.44 | 100(40) 95(38)  24.02 | 85 (34) 77.5(31)  20.04 | 100(40) 87.5(35)  22.99 | 100(40) 97.5(39)  23.84 | 55(22) 7.5(3)  18.70 | 97.5(39) 92.5(37)  22.92 | 100(40) 40(100)  25.09 | 100(40) 95(38)  21.27 | 100(40) 92.5(37)  23.84 | 97.5(39) 77.5(31)  20.94 | 100(40) 100(40)  23.45 | 82.5(33) 57.5(23)  18.80 | 100(40) 80(32)  22.01 | 0(0)  0(0)  12.61 | 0(0) 42.5(17)  18.63 | 97.5(39) 87.5(35)  21.50 |
| Nepal | NE | Assignment  Exclusion  -LOG(L) | 97.5(39)  85(34)  20.30 | 85 (34) 75(30)  23.58 | 100(40) 100(40)  23.52 | 100(40) 92.5(37)  20.13 | 100(40) 97.5(39)  24.03 | 92.5(37) 85(34)  20.61 | 97.5(39) 77.5(31)  22.53 | 100(40) 97.5(39)  23.00 | 82.5(33) 70(28)  22.43 | 97.5(39)  97.5(39)  24.07 | 100(40) 100(40)  24.15 | 100(40) 100(40)  25.28 | 85(34) 65(26)  20.59 | 95(38) 92.5(37)  20.87 | 85(34) 72.5(29)  19.15 | 72.5(29) 32.5(13)  **18.20** | 95(38) 77.5(31)  20.47 | 100(40)  100(40)  21.95 | 2.5(1) 7.5(3)  15.51 | 95(38) 70(28)  20.87 |
| Thailand | TH | Assignment  Exclusion  -LOG(L) | 97.5(39) 90(36)  21.65 | 92.5(37) 65(26)  23.10 | 97.5(39) 90(36)  22.49 | 95(38) 87.5(35)  21.27 | 100(40) 97.5(39)  24.70 | 80(32) 72.5(29)  **19.68** | 92.5(37) 65(26)  20.60 | 100(40) 92.5(37)  21.54 | 82.5(33) 40(16)  21.62 | 95(38) 90(36)  22.17 | 100(40) 92.5(37)22.45 | 100(40) 92.5(37)  22.61 | 97.5(39) 85(34)  22.97 | 95(38) 80(32)  20.74 | 97.5(39) 87.5(35)  21.49 | 100(40) 87.5(35)  22.67 | 92.5(37) 80(32)  20.67 | 100(40) 100(40)284.89 | 85(34) 67.5(27)  21.07 | 2.5(1) 12.5(5)  14.96 |

1 The assignment test was conducted using the direct approach without possibility computation (Cornuet *et al*., 1999). Applied the Bayesian statistical approach explained by Rannala & Mountain (1997). The simulation method developed by Paetkau *et al*. (2004) was used in the exclusion test.

2 The number of individuals assigned to the most related population is described in parentheses.

3The number of individuals excluded from the reference population for *a*=0.01 is shown in parenthese.

4 Mean assignment –log likelihood (*L*) value for individuals from a sample population. Bold means the value the most similar and related to the sample population which means the most likely originated population.