

## SUPPLEMENTARY LEGENDS

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2 **Possible Source Populations of the White-backed Planthopper in the Greater Mekong**  
3 **Subregion Revealed by Mitochondrial DNA Analysis**

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Table S2 Unidirectional estimates of M of *Sogatella furcifera* populations in the Greater Mekong Subregion (GMS)

| Population, <i>i</i> | $\Theta_i$ | JP→ <i>i</i> | KY→ <i>i</i> | YS→ <i>i</i> | FN→ <i>i</i> | MD→ <i>i</i> | BS→ <i>i</i> | MS→ <i>i</i> | YIJ→ <i>i</i> | LC→ <i>i</i> | NE→ <i>i</i> | MH→ <i>i</i> | SJ→ <i>i</i> |
|----------------------|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|
| JP                   | 0.08934    | -            | 746.1        | 832.6        | 694.7        | 405.8        | 795.3        | 680.8        | 373.3         | 869.4        | 630.0        | 150.6        | 914.6        |
| KY                   | 0.00002    | 286.1        | -            | 708.2        | 630.3        | 143.2        | 406.3        | 140.3        | 145.6         | 357.7        | 781.7        | 150.8        | 75.2         |
| YS                   | 0.06539    | 430.3        | 898.8        | -            | 90.4         | 568.9        | 926.8        | 886.2        | 795.5         | 212.5        | 797.3        | 783.9        | 690.9        |
| FN                   | 0.00003    | 779.6        | 787.7        | 243.9        | -            | 477.0        | 912.7        | 362.6        | 556.8         | 226.7        | 457.5        | 569.6        | 682.0        |
| MD                   | 0.00005    | 757.5        | 500.6        | 99.6         | 818.3        | -            | 723.6        | 183.4        | 353.7         | 372.3        | 564.6        | 402.0        | 646.8        |
| BS                   | 0.00007    | 181.2        | 814.8        | 886.3        | 317.8        | 290.7        | -            | 479.8        | 415.8         | 813.1        | 897.4        | 803.9        | 733.1        |
| MS                   | 0.01343    | 933.5        | 629.1        | 133.5        | 905.7        | 153.6        | 804.3        | -            | 680.8         | 885.2        | 851.4        | 249.7        | 899.8        |
| YIJ                  | 0.00001    | 557.5        | 505.7        | 350.5        | 578.2        | 226.8        | 796.6        | 874.0        | -             | 925.6        | 769.5        | 811.8        | 207.9        |
| LC                   | 0.00004    | 895.0        | 915.8        | 373.5        | 883.4        | 738.3        | 716.0        | 128.2        | 725.5         | -            | 645.8        | 95.0         | 775.3        |
| NE                   | 0.00002    | 679.9        | 289.1        | 572.0        | 583.5        | 290.9        | 97.0         | 527.2        | 187.1         | 664.1        | -            | 883.9        | 51.5         |
| MH                   | 0.09457    | 292.9        | 731.4        | 584.2        | 678.8        | 196.2        | 887.5        | 496.7        | 711.9         | 437.5        | 770.0        | -            | 830.4        |
| SJ                   | 0.03453    | 149.2        | 257.7        | 382.2        | 334.5        | 530.5        | 680.4        | 357.6        | 610.4         | 582.1        | 816.9        | 768.4        | -            |
| GM                   | 0.00003    | 831.2        | 585.8        | 419.4        | 601.8        | 87.8         | 318.8        | 850.9        | 110.4         | 764.5        | 300.8        | 150.5        | 116.0        |
| CY                   | 0.00256    | 644.8        | 444.5        | 396.6        | 666.2        | 805.0        | 681.2        | 871.9        | 162.0         | 510.2        | 323.1        | 407.8        | 393.3        |
| CX                   | 0.06575    | 919.2        | 805.7        | 864.8        | 671.7        | 782.7        | 905.1        | 330.7        | 362.8         | 846.4        | 880.5        | 909.0        | 326.1        |
| SM                   | 0.00006    | 72.7         | 339.4        | 807.2        | 97.2         | 664.2        | 552.9        | 230.5        | 161.2         | 209.8        | 898.2        | 742.4        | 103.9        |
| XP                   | 0.01418    | 825.6        | 67.6         | 544.0        | 884.2        | 890.0        | 600.8        | 928.4        | 735.4         | 902.9        | 321.9        | 810.6        | 81.0         |
| YUJ                  | 0.06249    | 824.7        | 718.7        | 899.8        | 534.6        | 640.9        | 676.1        | 208.0        | 136.3         | 848.8        | 683.3        | 869.1        | 733.1        |
| SY                   | 0.03726    | 834.9        | 823.8        | 317.8        | 795.6        | 487.6        | 766.5        | 695.0        | 740.3         | 486.8        | 858.4        | 576.6        | 116.3        |
| SZ                   | 0.01998    | 626.6        | 397.5        | 168.5        | 535.7        | 226.1        | 717.5        | 731.7        | 493.0         | 312.7        | 545.6        | 143.1        | 457.9        |
| L1                   | 0.00023    | 420.8        | 140.7        | 699.6        | 511.8        | 161.4        | 398.9        | 804.4        | 154.6         | 800.4        | 885.7        | 726.1        | 407.8        |
| L2                   | 0.03014    | 641.5        | 649.3        | 863.3        | 227.7        | 844.6        | 584.8        | 638.4        | 734.8         | 864.6        | 781.8        | 907.9        | 144.1        |
| L3                   | 0.00001    | 148.9        | 781.7        | 180.5        | 131.4        | 648.0        | 321.0        | 682.5        | 723.3         | 644.2        | 419.2        | 247.4        | 496.6        |
| L4                   | 0.00000    | 912.4        | 825.0        | 667.5        | 402.9        | 933.2        | 630.0        | 349.6        | 405.4         | 784.5        | 172.8        | 790.6        | 848.0        |
| L5                   | 0.09400    | 738.7        | 222.0        | 528.2        | 705.9        | 242.5        | 837.6        | 826.7        | 374.2         | 472.1        | 744.6        | 331.1        | 737.2        |
| L6                   | 0.06442    | 421.7        | 307.1        | 199.5        | 190.2        | 292.8        | 210.6        | 731.9        | 215.0         | 190.7        | 453.0        | 376.8        | 341.2        |
| L7                   | 0.00001    | 289.8        | 288.7        | 133.4        | 573.5        | 627.6        | 122.6        | 418.6        | 484.9         | 181.7        | 193.2        | 717.0        | 221.8        |
| L8                   | 0.02505    | 854.1        | 928.1        | 189.4        | 910.2        | 114.1        | 674.0        | 642.4        | 423.7         | 780.9        | 611.5        | 812.0        | 527.1        |
| T1                   | 0.04210    | 747.1        | 596.2        | 626.1        | 814.6        | 804.2        | 237.6        | 108.5        | 429.8         | 282.5        | 54.3         | 130.3        | 135.0        |
| T2                   | 0.03474    | 382.4        | 136.0        | 331.5        | 182.8        | 290.5        | 468.1        | 75.3         | 567.9         | 381.9        | 792.7        | 470.0        | 803.6        |
| C1                   | 0.06384    | 149.8        | 845.2        | 758.2        | 503.9        | 485.3        | 152.8        | 758.8        | 622.7         | 877.4        | 397.9        | 675.3        | 746.6        |
| C2                   | 0.08735    | 697.4        | 599.2        | 224.2        | 149.6        | 658.9        | 122.9        | 862.4        | 639.6         | 207.5        | 95.2         | 260.3        | 106.4        |
| C3                   | 0.08389    | 81.6         | 648.4        | 499.2        | 764.0        | 105.8        | 581.2        | 577.8        | 865.1         | 128.9        | 102.2        | 219.5        | 297.9        |
| C4                   | 0.00002    | 448.4        | 702.8        | 190.1        | 377.8        | 568.7        | 72.2         | 693.3        | 187.3         | 539.2        | 55.9         | 160.7        | 114.4        |
| V1                   | 0.00002    | 241.0        | 284.0        | 833.6        | 879.1        | 773.7        | 531.5        | 758.9        | 703.1         | 594.7        | 266.5        | 729.2        | 711.8        |
| V2                   | 0.06373    | 383.0        | 230.6        | 397.9        | 880.5        | 918.3        | 798.4        | 902.5        | 135.7         | 855.7        | 900.1        | 869.8        | 858.3        |
| V3                   | 0.02542    | 229.2        | 741.1        | 841.3        | 877.5        | 848.8        | 774.9        | 574.9        | 683.8         | 517.8        | 935.7        | 842.4        | 219.7        |
| V4                   | 0.02338    | 254.7        | 694.5        | 214.1        | 90.2         | 309.6        | 903.1        | 166.9        | 246.5         | 473.8        | 73.8         | 480.5        | 829.0        |
| M1                   | 0.03383    | 754.4        | 354.0        | 132.9        | 280.3        | 119.2        | 361.8        | 367.0        | 412.7         | 276.3        | 280.9        | 690.6        | 492.2        |
| M2                   | 0.00002    | 709.9        | 105.1        | 98.1         | 409.1        | 748.8        | 258.2        | 420.7        | 94.6          | 98.3         | 287.5        | 256.7        | 344.2        |
| M3                   | 0.03151    | 311.4        | 862.9        | 423.5        | 892.6        | 631.5        | 755.3        | 238.7        | 740.8         | 690.7        | 823.0        | 649.3        | 816.5        |
| M4                   | 0.01172    | 102.6        | 369.8        | 663.3        | 362.4        | 370.4        | 192.2        | 315.2        | 643.9         | 159.5        | 193.0        | 585.5        | 680.0        |

$\Theta$ : mutation-scaled population size, which is effective population size  $\times$  mutation rate per site per generation divided by the mutation rate; M: mutation-scaled immigration rate, which is the immigration rate

Table S2 Unidirectional estimates of M of *Sogatella furcifera* populations in the Greater Mekong Subregion (GMS) (Continued)

| Population, <i>i</i> | GM→ <i>i</i> | CY→ <i>i</i> | CX→ <i>i</i> | SM→ <i>i</i> | XP→ <i>i</i> | YUJ→ <i>i</i> | SY→ <i>i</i> | SZ→ <i>i</i> | L1→ <i>i</i> | L2→ <i>i</i> | L3→ <i>i</i> | L4→ <i>i</i> | L5→ <i>i</i> |
|----------------------|--------------|--------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| JP                   | 404.4        | 694.9        | 899.7        | 197.3        | 887.8        | 606.9         | 180.1        | 330.6        | 131.9        | 405.1        | 344.1        | 349.4        | 829.7        |
| KY                   | 732.1        | 374.3        | 484.3        | 318.2        | 97.9         | 437.6         | 735.2        | 507.0        | 851.7        | 686.7        | 437.1        | 939.2        | 234.2        |
| YS                   | 715.6        | 404.7        | 851.8        | 763.4        | 880.4        | 564.8         | 265.3        | 328.7        | 194.0        | 206.8        | 508.5        | 899.8        | 208.1        |
| FN                   | 618.6        | 309.2        | 342.3        | 903.5        | 321.9        | 105.2         | 96.3         | 348.2        | 435.7        | 537.0        | 476.2        | 248.1        | 222.6        |
| MD                   | 824.9        | 269.3        | 670.6        | 567.3        | 146.8        | 877.3         | 498.9        | 679.0        | 818.0        | 701.6        | 904.6        | 902.9        | 673.6        |
| BS                   | 769.9        | 861.2        | 838.0        | 426.3        | 519.7        | 808.5         | 910.8        | 892.3        | 465.7        | 893.6        | 219.3        | 218.1        | 895.9        |
| MS                   | 357.4        | 201.9        | 358.0        | 425.9        | 81.5         | 705.0         | 834.4        | 712.6        | 311.8        | 926.5        | 712.8        | 195.4        | 777.9        |
| YIJ                  | 901.7        | 914.4        | 843.5        | 631.0        | 799.6        | 874.7         | 940.5        | 272.9        | 859.0        | 738.5        | 847.9        | 785.9        | 504.9        |
| LC                   | 528.2        | 469.2        | 416.0        | 107.0        | 829.3        | 689.2         | 211.3        | 59.8         | 918.5        | 138.8        | 864.7        | 741.5        | 297.8        |
| NE                   | 170.8        | 419.8        | 448.2        | 530.4        | 690.6        | 301.9         | 651.9        | 156.3        | 133.6        | 744.6        | 933.0        | 332.8        | 494.2        |
| MH                   | 595.0        | 454.2        | 883.9        | 909.9        | 920.1        | 810.3         | 88.7         | 364.9        | 84.0         | 725.2        | 836.4        | 92.4         | 289.0        |
| SJ                   | 422.4        | 159.4        | 492.3        | 836.8        | 190.5        | 61.9          | 95.1         | 370.9        | 55.3         | 132.7        | 747.8        | 395.5        | 274.4        |
| GM                   | -            | 541.0        | 779.2        | 737.2        | 751.1        | 156.1         | 901.0        | 633.3        | 874.2        | 902.6        | 532.1        | 460.5        | 928.0        |
| CY                   | 718.6        | -            | 140.6        | 587.4        | 808.7        | 742.8         | 406.0        | 231.4        | 823.5        | 396.2        | 385.7        | 199.8        | 215.2        |
| CX                   | 729.1        | 846.7        | -            | 555.9        | 185.1        | 888.1         | 723.5        | 439.4        | 754.4        | 57.7         | 274.1        | 950.9        | 248.2        |
| SM                   | 69.4         | 171.2        | 579.0        | -            | 77.2         | 806.2         | 438.5        | 171.2        | 250.9        | 747.8        | 880.0        | 743.5        | 892.2        |
| XP                   | 750.1        | 410.6        | 508.9        | 829.3        | -            | 772.5         | 275.1        | 185.4        | 376.1        | 881.0        | 320.5        | 428.2        | 533.2        |
| YUJ                  | 666.5        | 769.6        | 813.4        | 419.9        | 648.0        | -             | 583.0        | 319.4        | 81.3         | 617.7        | 859.6        | 155.5        | 382.9        |
| SY                   | 837.7        | 575.6        | 322.7        | 602.1        | 729.4        | 296.2         | -            | 929.8        | 570.3        | 518.8        | 112.9        | 918.1        | 870.4        |
| SZ                   | 875.6        | 852.5        | 140.3        | 58.3         | 105.4        | 266.4         | 526.6        | -            | 667.9        | 223.5        | 827.4        | 490.9        | 289.9        |
| L1                   | 709.8        | 376.5        | 229.9        | 290.6        | 743.8        | 874.7         | 661.9        | 268.3        | -            | 62.6         | 777.7        | 530.1        | 836.1        |
| L2                   | 738.7        | 614.7        | 815.6        | 918.9        | 321.2        | 555.2         | 801.8        | 732.9        | 471.0        | -            | 444.9        | 853.7        | 785.3        |
| L3                   | 653.4        | 307.3        | 141.6        | 698.7        | 635.3        | 878.2         | 197.6        | 104.2        | 798.1        | 651.1        | -            | 885.9        | 519.4        |
| L4                   | 779.2        | 697.2        | 808.1        | 127.8        | 742.4        | 187.5         | 534.0        | 155.4        | 546.1        | 600.9        | 464.5        | -            | 838.1        |
| L5                   | 314.8        | 139.4        | 472.8        | 875.1        | 796.1        | 535.0         | 592.7        | 802.6        | 766.7        | 733.3        | 419.1        | 864.2        | -            |
| L6                   | 157.1        | 419.9        | 313.2        | 124.6        | 233.1        | 752.5         | 387.2        | 74.2         | 425.1        | 73.3         | 250.8        | 85.8         | 214.5        |
| L7                   | 211.1        | 209.4        | 495.3        | 614.1        | 571.0        | 344.6         | 181.4        | 820.1        | 82.2         | 467.0        | 497.0        | 377.3        | 878.8        |
| L8                   | 887.8        | 599.0        | 839.5        | 745.9        | 827.2        | 549.0         | 712.6        | 156.5        | 946.8        | 926.3        | 280.5        | 479.7        | 713.8        |
| T1                   | 716.9        | 703.9        | 484.3        | 76.4         | 614.9        | 733.7         | 871.1        | 174.4        | 389.4        | 223.2        | 209.9        | 700.0        | 91.9         |
| T2                   | 171.6        | 320.8        | 297.4        | 364.4        | 311.0        | 496.1         | 370.2        | 112.6        | 640.9        | 353.2        | 408.4        | 300.0        | 584.4        |
| C1                   | 337.2        | 883.0        | 431.4        | 220.1        | 463.4        | 600.5         | 168.7        | 723.9        | 814.4        | 138.1        | 877.8        | 120.1        | 569.8        |
| C2                   | 181.6        | 427.6        | 166.9        | 161.5        | 415.7        | 302.9         | 873.7        | 325.9        | 509.9        | 194.6        | 253.2        | 597.2        | 544.4        |
| C3                   | 283.1        | 261.6        | 128.4        | 294.3        | 772.5        | 531.7         | 681.7        | 583.9        | 823.2        | 885.8        | 308.2        | 205.5        | 99.8         |
| C4                   | 187.7        | 228.4        | 227.8        | 780.8        | 353.5        | 671.4         | 609.1        | 229.2        | 469.8        | 137.1        | 546.0        | 583.0        | 509.9        |
| V1                   | 909.6        | 837.0        | 918.2        | 512.8        | 930.2        | 667.7         | 899.4        | 453.1        | 137.3        | 144.5        | 243.6        | 812.8        | 729.7        |
| V2                   | 269.3        | 494.7        | 737.0        | 893.1        | 261.9        | 664.8         | 668.1        | 463.7        | 468.2        | 575.7        | 134.6        | 851.8        | 757.1        |
| V3                   | 446.2        | 404.8        | 168.0        | 798.1        | 657.6        | 214.1         | 891.9        | 431.5        | 727.2        | 596.2        | 606.6        | 532.1        | 900.4        |
| V4                   | 901.2        | 813.0        | 349.0        | 880.6        | 921.6        | 739.2         | 322.6        | 263.5        | 88.9         | 531.6        | 165.9        | 571.3        | 91.0         |
| M1                   | 539.4        | 383.2        | 161.6        | 599.5        | 722.7        | 779.7         | 696.8        | 145.8        | 710.5        | 54.1         | 282.6        | 669.7        | 854.2        |
| M2                   | 130.7        | 704.6        | 915.3        | 852.7        | 591.6        | 874.3         | 475.3        | 257.6        | 854.1        | 219.6        | 237.6        | 191.4        | 117.1        |
| M3                   | 324.9        | 711.4        | 876.4        | 815.8        | 872.5        | 857.5         | 820.0        | 770.7        | 320.9        | 775.7        | 573.5        | 291.3        | 107.9        |
| M4                   | 923.3        | 484.9        | 539.0        | 797.8        | 168.1        | 316.5         | 279.2        | 89.9         | 546.1        | 715.3        | 76.1         | 86.8         | 773.3        |

Table S2 Unidirectional estimates of M of *Sogatella furcifera* populations in the Greater Mekong Subregion (GMS) (Continued)

| Population, <i>i</i> | L6→ <i>i</i> | L7→ <i>i</i> | L8→ <i>i</i> | T1→ <i>i</i> | T2→ <i>i</i> | C1→ <i>i</i> | C2→ <i>i</i> | C3→ <i>i</i> | C4→ <i>i</i> | V1→ <i>i</i> | V2→ <i>i</i> | V3→ <i>i</i> | V4→ <i>i</i> |
|----------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| JP                   | 863.6        | 244.4        | 616.5        | 898.6        | 629.2        | 100.4        | 428.1        | 278.6        | 631.9        | 904.4        | 213.1        | 240.3        | 80.6         |
| KY                   | 237.0        | 832.5        | 899.7        | 137.8        | 556.1        | 355.6        | 464.5        | 170.0        | 289.5        | 61.9         | 890.9        | 558.0        | 793.3        |
| YS                   | 188.2        | 128.8        | 598.1        | 801.6        | 468.1        | 308.8        | 377.3        | 220.5        | 643.2        | 489.7        | 749.1        | 500.0        | 172.5        |
| FN                   | 883.2        | 950.4        | 681.4        | 824.7        | 498.6        | 199.6        | 812.9        | 828.3        | 440.3        | 373.4        | 800.7        | 827.0        | 844.2        |
| MD                   | 904.9        | 712.1        | 559.2        | 550.8        | 833.0        | 677.4        | 684.3        | 327.7        | 907.0        | 724.4        | 676.7        | 390.9        | 793.1        |
| BS                   | 741.1        | 600.3        | 293.1        | 420.4        | 754.6        | 813.2        | 315.9        | 837.1        | 870.1        | 780.5        | 178.2        | 875.3        | 892.1        |
| MS                   | 909.8        | 360.5        | 645.7        | 127.5        | 805.4        | 302.7        | 272.4        | 236.3        | 490.9        | 574.8        | 940.2        | 493.5        | 521.5        |
| YIJ                  | 420.2        | 551.0        | 785.4        | 703.6        | 259.4        | 103.0        | 471.1        | 821.6        | 253.3        | 847.3        | 307.7        | 654.2        | 489.6        |
| LC                   | 899.9        | 855.8        | 834.6        | 848.5        | 334.9        | 885.8        | 852.4        | 550.1        | 352.1        | 715.0        | 229.2        | 282.3        | 686.6        |
| NE                   | 646.6        | 877.7        | 676.7        | 358.3        | 907.3        | 762.2        | 186.4        | 560.2        | 796.9        | 863.9        | 454.8        | 469.5        | 833.1        |
| MH                   | 749.8        | 707.5        | 82.4         | 774.9        | 695.2        | 801.8        | 132.0        | 440.1        | 185.7        | 415.4        | 403.7        | 237.5        | 592.1        |
| SJ                   | 692.2        | 164.9        | 934.6        | 843.3        | 87.1         | 315.8        | 268.6        | 151.9        | 606.0        | 211.3        | 177.6        | 158.0        | 91.9         |
| GM                   | 653.5        | 438.2        | 680.9        | 299.4        | 69.1         | 801.0        | 456.0        | 876.3        | 469.3        | 570.8        | 487.9        | 311.5        | 645.6        |
| CY                   | 263.2        | 543.5        | 334.9        | 642.4        | 165.2        | 522.9        | 128.8        | 532.1        | 143.2        | 844.8        | 562.6        | 119.3        | 149.6        |
| CX                   | 887.1        | 289.6        | 637.7        | 596.5        | 301.9        | 902.7        | 826.9        | 558.8        | 455.6        | 739.6        | 235.9        | 854.4        | 920.0        |
| SM                   | 919.0        | 696.2        | 820.6        | 771.8        | 811.8        | 225.2        | 464.5        | 364.7        | 777.0        | 665.7        | 679.2        | 546.3        | 295.7        |
| XP                   | 862.8        | 874.0        | 717.0        | 586.9        | 889.1        | 546.1        | 270.4        | 502.0        | 374.4        | 419.3        | 715.8        | 295.5        | 840.1        |
| YUJ                  | 756.9        | 322.3        | 917.0        | 761.3        | 925.6        | 874.0        | 167.3        | 599.3        | 449.3        | 446.9        | 557.8        | 444.3        | 215.7        |
| SY                   | 132.8        | 185.0        | 872.6        | 874.4        | 551.4        | 909.9        | 545.7        | 176.2        | 470.9        | 408.6        | 560.1        | 882.1        | 686.4        |
| SZ                   | 875.5        | 444.0        | 108.1        | 421.9        | 252.2        | 735.7        | 524.6        | 100.1        | 410.0        | 299.2        | 825.4        | 164.7        | 770.1        |
| L1                   | 277.9        | 324.2        | 463.1        | 866.6        | 573.4        | 470.0        | 363.9        | 802.4        | 887.8        | 177.4        | 823.5        | 79.0         | 271.1        |
| L2                   | 747.6        | 501.1        | 857.4        | 187.9        | 807.0        | 870.3        | 598.8        | 582.6        | 306.1        | 884.4        | 764.0        | 87.8         | 386.6        |
| L3                   | 876.5        | 746.4        | 816.1        | 467.7        | 705.9        | 786.1        | 739.6        | 314.2        | 885.7        | 462.5        | 318.4        | 572.7        | 735.2        |
| L4                   | 909.9        | 726.7        | 425.0        | 135.0        | 732.9        | 762.6        | 294.2        | 354.7        | 808.6        | 498.4        | 513.0        | 260.5        | 836.6        |
| L5                   | 402.0        | 478.4        | 671.6        | 444.0        | 255.6        | 134.3        | 124.2        | 753.1        | 676.9        | 161.0        | 109.0        | 579.7        | 877.8        |
| L6                   | -            | 747.0        | 412.3        | 159.7        | 95.1         | 887.7        | 135.9        | 902.4        | 437.4        | 201.1        | 127.2        | 195.3        | 469.3        |
| L7                   | 179.7        | -            | 893.2        | 864.1        | 724.2        | 301.9        | 414.0        | 894.3        | 839.9        | 529.2        | 430.7        | 917.4        | 805.3        |
| L8                   | 778.7        | 158.8        | -            | 83.6         | 237.8        | 295.1        | 790.5        | 815.7        | 288.8        | 559.1        | 375.0        | 61.5         | 286.7        |
| T1                   | 732.9        | 243.9        | 730.7        | -            | 331.4        | 312.9        | 496.8        | 141.5        | 239.5        | 114.1        | 366.7        | 89.1         | 379.4        |
| T2                   | 369.9        | 329.8        | 451.2        | 815.0        | -            | 548.7        | 831.3        | 867.0        | 621.6        | 526.1        | 781.9        | 827.5        | 894.4        |
| C1                   | 787.8        | 602.4        | 440.6        | 272.9        | 366.3        | -            | 98.2         | 333.6        | 681.9        | 302.6        | 220.3        | 374.5        | 793.6        |
| C2                   | 483.8        | 153.2        | 742.6        | 116.9        | 164.3        | 567.1        | -            | 491.7        | 452.5        | 658.9        | 159.4        | 859.6        | 406.2        |
| C3                   | 420.0        | 248.4        | 739.6        | 159.4        | 582.1        | 143.1        | 109.3        | -            | 212.8        | 271.4        | 255.0        | 94.8         | 456.2        |
| C4                   | 241.0        | 189.5        | 126.6        | 273.6        | 140.9        | 292.1        | 124.2        | 294.1        | -            | 741.5        | 171.5        | 723.2        | 723.6        |
| V1                   | 408.5        | 880.5        | 171.4        | 283.1        | 262.6        | 577.1        | 637.1        | 609.5        | 404.9        | -            | 641.6        | 782.9        | 544.4        |
| V2                   | 611.8        | 606.1        | 459.9        | 492.9        | 872.6        | 773.5        | 420.0        | 730.6        | 423.4        | 752.5        | -            | 338.5        | 912.2        |
| V3                   | 355.4        | 528.6        | 90.5         | 558.9        | 530.5        | 540.4        | 766.0        | 231.7        | 696.7        | 882.1        | 741.6        | -            | 212.7        |
| V4                   | 81.0         | 161.8        | 56.4         | 495.0        | 186.5        | 120.7        | 353.9        | 66.0         | 263.8        | 847.2        | 252.5        | 190.2        | -            |
| M1                   | 83.7         | 622.5        | 144.1        | 162.7        | 561.8        | 131.5        | 433.0        | 572.5        | 865.0        | 479.3        | 155.8        | 313.8        | 158.8        |
| M2                   | 812.6        | 832.6        | 181.9        | 366.3        | 97.9         | 341.5        | 98.7         | 143.8        | 202.1        | 183.8        | 50.0         | 192.2        | 160.4        |
| M3                   | 556.8        | 187.7        | 858.9        | 415.2        | 701.5        | 377.5        | 720.6        | 897.7        | 640.4        | 854.2        | 688.2        | 753.9        | 537.2        |
| M4                   | 199.3        | 796.2        | 854.0        | 153.2        | 94.5         | 147.4        | 861.8        | 841.4        | 332.1        | 504.6        | 465.8        | 612.0        | 242.6        |

Table S2 Unidirectional estimates of M of *Sogatella furcifera* populations in the Greater Mekong Subregion (GMS) (Continued)

| Population, <i>i</i> | M1→ <i>i</i> | M2→ <i>i</i> | M3→ <i>i</i> | M4→ <i>i</i> | Total <i>i</i> |
|----------------------|--------------|--------------|--------------|--------------|----------------|
| JP                   | 835.9        | 436.3        | 709.9        | 89.3         | 7093.1         |
| KY                   | 492.2        | 389.0        | 488.7        | 833.5        | 3825.3         |
| YS                   | 774.2        | 627.1        | 130.0        | 166.9        | 7081.4         |
| FN                   | 866.7        | 622.9        | 665.8        | 138.7        | 6056.0         |
| MD                   | 602.0        | 740.9        | 185.5        | 591.9        | 5422.4         |
| BS                   | 810.1        | 908.6        | 551.1        | 188.0        | 6633.9         |
| MS                   | 826.1        | 811.9        | 885.1        | 920.5        | 7126.7         |
| YIJ                  | 368.4        | 902.8        | 458.1        | 656.9        | 6604.0         |
| LC                   | 204.5        | 408.9        | 357.5        | 714.0        | 6891.8         |
| NE                   | 929.0        | 567.1        | 341.1        | 852.0        | 4826.2         |
| MH                   | 106.4        | 249.0        | 370.1        | 652.8        | 6617.6         |
| SJ                   | 68.0         | 173.5        | 333.3        | 197.0        | 5469.9         |
| GM                   | 429.8        | 284.9        | 741.3        | 389.4        | 5137.9         |
| CY                   | 251.0        | 154.2        | 277.7        | 220.4        | 6306.6         |
| CX                   | 279.4        | 915.8        | 806.9        | 789.9        | 8604.8         |
| SM                   | 884.4        | 789.6        | 535.0        | 654.7        | 4879.6         |
| XP                   | 919.1        | 689.0        | 500.0        | 459.0        | 7592.4         |
| YUJ                  | 708.2        | 766.3        | 233.2        | 665.5        | 7773.5         |
| SY                   | 729.6        | 389.6        | 195.7        | 338.5        | 7499.6         |
| SZ                   | 332.0        | 82.2         | 327.6        | 641.4        | 5355.7         |
| L1                   | 424.4        | 533.6        | 814.0        | 413.0        | 6112.2         |
| L2                   | 671.1        | 684.4        | 858.4        | 891.4        | 7882.8         |
| L3                   | 907.0        | 162.1        | 732.9        | 855.5        | 5424.4         |
| L4                   | 564.3        | 142.1        | 394.9        | 627.2        | 7721.8         |
| L5                   | 93.2         | 174.6        | 190.1        | 826.2        | 6760.8         |
| L6                   | 643.1        | 126.4        | 668.4        | 325.1        | 3930.5         |
| L7                   | 867.8        | 890.2        | 904.2        | 120.3        | 4252.6         |
| L8                   | 410.0        | 222.7        | 390.4        | 492.9        | 7467.5         |
| T1                   | 233.8        | 48.6         | 236.1        | 858.9        | 4966.0         |
| T2                   | 885.0        | 774.5        | 830.5        | 264.9        | 4882.7         |
| C1                   | 657.2        | 296.4        | 153.2        | 628.9        | 6973.7         |
| C2                   | 142.9        | 391.8        | 384.2        | 808.2        | 4623.6         |
| C3                   | 681.3        | 331.5        | 426.7        | 252.3        | 4871.6         |
| C4                   | 726.0        | 823.9        | 124.7        | 711.5        | 4110.8         |
| V1                   | 547.7        | 68.4         | 584.7        | 142.2        | 7307.1         |
| V2                   | 681.6        | 775.9        | 263.7        | 643.0        | 8130.7         |
| V3                   | 640.1        | 273.3        | 51.4         | 295.9        | 8087.2         |
| V4                   | 442.5        | 187.2        | 754.6        | 173.1        | 4736.9         |
| M1                   | -            | 426.7        | 339.9        | 512.2        | 4522.1         |
| M2                   | 500.4        | -            | 485.6        | 763.4        | 3831.2         |
| M3                   | 636.6        | 838.9        | -            | 267.3        | 7836.2         |
| M4                   | 368.1        | 849.3        | 97.0         | -            | 4637.9         |