**Table S1** The area change of suitable habitat of *Sapindus* under different future climate scenarios on different continents.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Continent** |  | **ssp126** |  | **ssp245** |  | **ssp370** |  | **ssp585** |
|  | **2020-2040** | **2041-2060** | **2061-2080** | **2081-2100** |  | **2020-2040** | **2041-2060** | **2061-2080** | **2081-2100** |  | **2020-2040** | **2041-2060** | **2061-2080** | **2081-2100** |  | **2020-2040** | **2041-2060** | **2061-2080** | **2081-2100** |
| Asia | Expansion | 267.54  | 269.56  | 164.84  | 277.24  |  | 265.51  | 276.24  | 293.40  | 277.73  |  | 288.51  | 291.69  | 184.88  | 178.77  |  | 286.30  | 278.42  | 281.38  | 283.46  |
| Unchange | 569.16  | 570.14  | 547.17  | 569.69  |  | 558.92  | 570.32  | 575.23  | 579.92  |  | 560.71  | 570.39  | 551.21  | 542.96  |  | 563.09  | 568.73  | 567.83  | 571.71  |
| Contraction | 174.92  | 173.94  | 196.90  | 174.39  |  | 185.15  | 173.75  | 168.85  | 164.16  |  | 183.37  | 173.69  | 192.86  | 201.12  |  | 180.99  | 175.35  | 176.25  | 172.37  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Europe | Expansion | 27.56  | 24.51  | 17.55  | 28.99  |  | 32.34  | 29.67  | 25.22  | 21.47  |  | 23.74  | 29.05  | 3.94  | 11.68  |  | 31.41  | 32.18  | 29.24  | 27.75  |
| Unchange | 9.16  | 9.29  | 5.33  | 10.11  |  | 10.56  | 9.53  | 8.58  | 8.13  |  | 7.62  | 9.77  | 0.90  | 2.51  |  | 9.98  | 10.51  | 9.49  | 9.73  |
| Contraction | 16.11  | 15.99  | 19.95  | 15.17  |  | 14.72  | 15.75  | 16.69  | 17.15  |  | 17.66  | 15.51  | 24.38  | 22.77  |  | 15.30  | 14.77  | 15.79  | 15.55  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Africa | Expansion | 319.07  | 322.31  | 223.97  | 323.00  |  | 331.28  | 321.22  | 352.16  | 329.45  |  | 328.69  | 340.75  | 191.11  | 211.47  |  | 337.49  | 338.10  | 359.15  | 378.75  |
| Unchange | 319.40  | 318.21  | 281.02  | 318.84  |  | 328.75  | 325.80  | 327.79  | 316.31  |  | 316.54  | 323.88  | 251.34  | 249.69  |  | 318.18  | 327.92  | 313.07  | 310.40  |
| Contraction | 332.79  | 333.98  | 371.17  | 333.35  |  | 323.44  | 326.39  | 324.40  | 335.88  |  | 335.65  | 328.31  | 400.85  | 402.50  |  | 334.01  | 324.27  | 339.12  | 341.79  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| North America | Expansion | 117.39  | 111.42  | 90.55  | 120.59  |  | 127.39  | 128.12  | 119.96  | 114.93  |  | 120.51  | 122.43  | 79.19  | 76.87  |  | 119.58  | 118.40  | 122.19  | 124.51  |
| Unchange | 398.53  | 394.27  | 402.48  | 400.38  |  | 402.36  | 405.31  | 402.33  | 397.28  |  | 396.85  | 401.34  | 393.69  | 393.71  |  | 399.16  | 404.46  | 399.30  | 399.94  |
| Contraction | 86.11  | 90.36  | 82.15  | 84.25  |  | 82.27  | 79.32  | 82.30  | 87.35  |  | 87.78  | 83.30  | 90.94  | 90.93  |  | 85.47  | 80.17  | 85.34  | 84.69  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| South America | Expansion | 131.78  | 133.80  | 118.79  | 127.99  |  | 136.80  | 126.74  | 133.61  | 120.73  |  | 136.70  | 136.88  | 113.93  | 109.28  |  | 135.22  | 132.11  | 132.83  | 134.99  |
| Unchange | 387.67  | 389.11  | 370.80  | 388.69  |  | 387.28  | 372.13  | 377.78  | 351.34  |  | 384.52  | 383.38  | 330.25  | 323.27  |  | 386.08  | 384.55  | 378.18  | 373.63  |
| Contraction | 406.97  | 405.54  | 423.84  | 405.95  |  | 407.36  | 422.51  | 416.86  | 443.30  |  | 410.13  | 411.26  | 464.40  | 471.38  |  | 408.56  | 410.09  | 416.46  | 421.02  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Oceania | Expansion | 100.91  | 88.81  | 53.56  | 87.78  |  | 93.95  | 85.25  | 93.42  | 86.81  |  | 83.19  | 91.25  | 10.22  | 12.39  |  | 85.03  | 87.65  | 108.47  | 126.73  |
| Unchange | 84.96  | 92.26  | 66.79  | 92.08  |  | 115.06  | 101.89  | 98.49  | 93.21  |  | 78.50  | 83.44  | 50.82  | 49.83  |  | 86.85  | 93.25  | 89.28  | 74.26  |
| Contraction | 124.57  | 117.26  | 142.73  | 117.44  | 　 | 94.46  | 107.63  | 111.04  | 116.31  | 　 | 131.03  | 126.08  | 158.70  | 159.70  | 　 | 122.67  | 116.28  | 120.24  | 135.27  |