Table S4 Linkage disequilibrium analysis for microsatellite loci developed for *Gracilaria vermiculophylla*.Darkened cells indicate pairs of loci that show significant linkage disequilibrium after Bonferroni correction (*p*-value threshold < 0.006 at α = 0.05).

A) Akkeshi

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Gverm\_6311 |  |  |  |  |  |  |  |  |
| Gverm\_8036 |  |  |  |  |  |  |  |  |
| Gverm\_3003 |  |  |  |  |  |  |  |  |
| Gverm\_1203 |  |  |  |  |  |  |  |  |
| Gverm\_1803 |  |  |  |  |  |  |  |  |
| Gverm\_804 |  |  |  |  |  |  |  |  |
| Gverm\_10367 |  |  |  |  |  |  |  |  |
| Gverm\_2790 |  |  |  |  |  |  |  |  |
|  | Gverm\_5276 | Gverm\_6311 | Gverm\_8036 | Gverm\_3003 | Gverm\_1203 | Gverm\_1803 | Gverm\_804 | Gverm\_10367 |

B) Elkhorn Slough

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Gverm\_6311 |  |  |  |  |  |  |  |  |
| Gverm\_8036 |  |  |  |  |  |  |  |  |
| Gverm\_3003 |  |  |  |  |  |  |  |  |
| Gverm\_1203 |  |  |  |  |  |  |  |  |
| Gverm\_1803 |  |  |  |  |  |  |  |  |
| Gverm\_804 |  |  |  |  |  |  |  |  |
| Gverm\_10367 |  |  |  |  |  |  |  |  |
| Gverm\_2790 |  |  |  |  |  |  |  |  |
|  | Gverm\_5276 | Gverm\_6311 | Gverm\_8036 | Gverm\_3003 | Gverm\_1203 | Gverm\_1803 | Gverm\_804 | Gverm\_10367 |

C) Fort Johnson

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Gverm\_6311 |  |  |  |  |  |  |  |  |
| Gverm\_8036 |  |  |  |  |  |  |  |  |
| Gverm\_3003 |  |  |  |  |  |  |  |  |
| Gverm\_1203 |  |  |  |  |  |  |  |  |
| Gverm\_1803 |  |  |  |  |  |  |  |  |
| Gverm\_804 |  |  |  |  |  |  |  |  |
| Gverm\_10367 |  |  |  |  |  |  |  |  |
| Gverm\_2790 |  |  |  |  |  |  |  |  |
|  | Gverm\_5276 | Gverm\_6311 | Gverm\_8036 | Gverm\_3003 | Gverm\_1203 | Gverm\_1803 | Gverm\_804 | Gverm\_10367 |

D) Nordstrand

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Gverm\_6311 |  |  |  |  |  |  |  |  |
| Gverm\_8036 |  |  |  |  |  |  |  |  |
| Gverm\_3003 |  |  |  |  |  |  |  |  |
| Gverm\_1203 |  |  |  |  |  |  |  |  |
| Gverm\_1803 |  |  |  |  |  |  |  |  |
| Gverm\_804 |  |  |  |  |  |  |  |  |
| Gverm\_10367 |  |  |  |  |  |  |  |  |
| Gverm\_2790 |  |  |  |  |  |  |  |  |
|  | Gverm\_5276 | Gverm\_6311 | Gverm\_8036 | Gverm\_3003 | Gverm\_1203 | Gverm\_1803 | Gverm\_804 | Gverm\_10367 |