### Table S1. The basic characteristics of five Stemonaceae chloroplast genomes.

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>C. japonica</th>
<th>C. heterosepala</th>
<th>C. pauciflora</th>
<th>S. japonica</th>
<th>S. mairei</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean reads</td>
<td>29,120,480</td>
<td>14,478,324</td>
<td>31,094,272</td>
<td>17,784,508</td>
<td>14,163,520</td>
</tr>
<tr>
<td>Average reads length (bp)</td>
<td>125</td>
<td>150</td>
<td>125</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Number of contigs</td>
<td>83,092</td>
<td>50,369</td>
<td>111,071</td>
<td>105,805</td>
<td>123,479</td>
</tr>
<tr>
<td>Total length of contigs</td>
<td>29,978,872</td>
<td>19,017,346</td>
<td>47,503,502</td>
<td>41,588,737</td>
<td>45,904,433</td>
</tr>
<tr>
<td>Total cpDNA size (bp)</td>
<td>154,672</td>
<td>154,407</td>
<td>155,261</td>
<td>154,224</td>
<td>154,307</td>
</tr>
<tr>
<td>LSC length (bp)</td>
<td>81,981</td>
<td>81,844</td>
<td>82,429</td>
<td>82,117</td>
<td>82,254</td>
</tr>
<tr>
<td>SSC length (bp)</td>
<td>18,271</td>
<td>18,145</td>
<td>18,346</td>
<td>17,943</td>
<td>17,889</td>
</tr>
<tr>
<td>IR length (bp)</td>
<td>27,210</td>
<td>27,210</td>
<td>27,243</td>
<td>27,082</td>
<td>27,082</td>
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<tr>
<td>Total CDS length (bp)</td>
<td>79,452</td>
<td>79,488</td>
<td>79,611</td>
<td>79,398</td>
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<tr>
<td>Total tRNA length (bp)</td>
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<td>2901</td>
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<tr>
<td>Total rRNA length (bp)</td>
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<tr>
<td>Total GC content (%)</td>
<td>38.3</td>
<td>38.3</td>
<td>38.3</td>
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<tr>
<td>LSC</td>
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<tr>
<td>SSC</td>
<td>32.3</td>
<td>32.3</td>
<td>32.5</td>
<td>32.1</td>
<td>32.1</td>
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<tr>
<td>IR</td>
<td>42.8</td>
<td>42.8</td>
<td>42.9</td>
<td>42.7</td>
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<tr>
<td>Total number of genes</td>
<td>134</td>
<td>134</td>
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<td>134</td>
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<tr>
<td>Protein-coding genes</td>
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<tr>
<td>tRNA genes</td>
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<tr>
<td>rRNA genes</td>
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<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Duplicated genes</td>
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<td>20</td>
<td>20</td>
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</tr>
</tbody>
</table>

### Table S2. The location information of the five Stemonaceae species.

<table>
<thead>
<tr>
<th>Species</th>
<th>Location</th>
<th>Latitude</th>
<th>Longitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croomia japonica</td>
<td>Hangzhou, China</td>
<td>30.3303</td>
<td>119.4377</td>
</tr>
<tr>
<td>Croomia heterosepala</td>
<td>Nara, Japan</td>
<td>34.5166</td>
<td>135.6833</td>
</tr>
<tr>
<td>Croomia pauciflora</td>
<td>Alabama, USA</td>
<td>32.8605</td>
<td>−85.7975</td>
</tr>
<tr>
<td>Stemona japonica</td>
<td>Hangzhou, China</td>
<td>30.2283</td>
<td>119.1544</td>
</tr>
<tr>
<td>Stemona mairei</td>
<td>Zhongdian, China</td>
<td>27.8231</td>
<td>99.7060</td>
</tr>
</tbody>
</table>