|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Calibration Scenarios | Asteraceae | | MGCA | | Crown Asterales | |
| 95 % HPD interval | Mean | 95 % HPD interval | Mean | 95 % HPD interval | Mean |
| 1st Scenario  (*Dasyphyllum*, Fig. 5) | 82.4-91.5 | 85.9 | 90.95-103.3 | 96.5 | 98.66-113.55 | 106.59 |
| 2nd Scenario  (Asteraceae + Calyceraceae,  Fig. S5A) | 59.15-76.36 | 67.89 | 85.1-94.12 | 88.82 | 93.89-105.64 | 100.46 |
| 3rd Scenario  (Asteraceae + Calyceraceae + Goodeniaceae, Fig. S5B) | 56.38-69.37 | 63.37 | 82.93-90.49 | 85.71 | 92.55-104.8 | 98.81 |
| 4th Scenario  (Asteraceae + Calyceraceae + Goodeniaceae + Menyanthaceae,  Fig. S5C) | 54.94-65.46 | 58.94 | 78.92-82.89 | 80.9 | 89.45-122.74 | 97.76 |
| 5th Scenario  (Asteraceae + Calyceraceae + Goodeniaceae + Menyanthaceae + Stylidiaceae, Fig. S5D) | 53.57-62.9 | 58.2 | 72.4-80.56 | 76.29 | 87.92-99.47 | 93.2 |
| 6th Scenario  (Asteraceae + Calyceraceae + Goodeniaceae + Menyanthaceae + Stylidiaceae + Alseousmiaceae + Argophyllaceae +  Pentaphragmataceae, Fig. S5E) | 53.64-60.13 | 55.82 | 65.42-74.54 | 69.12 | 78.92-83.19 | 81.1 |

Calibration scenarios considered in the present study on the basis of the placement of the fossil both on the most parsimonious tree (MP, MP+1 and MP+2, see Fig. 2) and the bootstrap consensus tree (see Section SI–1.4). MGCA = Menyanthaceae + Goodeniaceae + Calyceraceae + Asteraceae. The chronograms of each calibration scenario are illustrated in Fig. S5.