

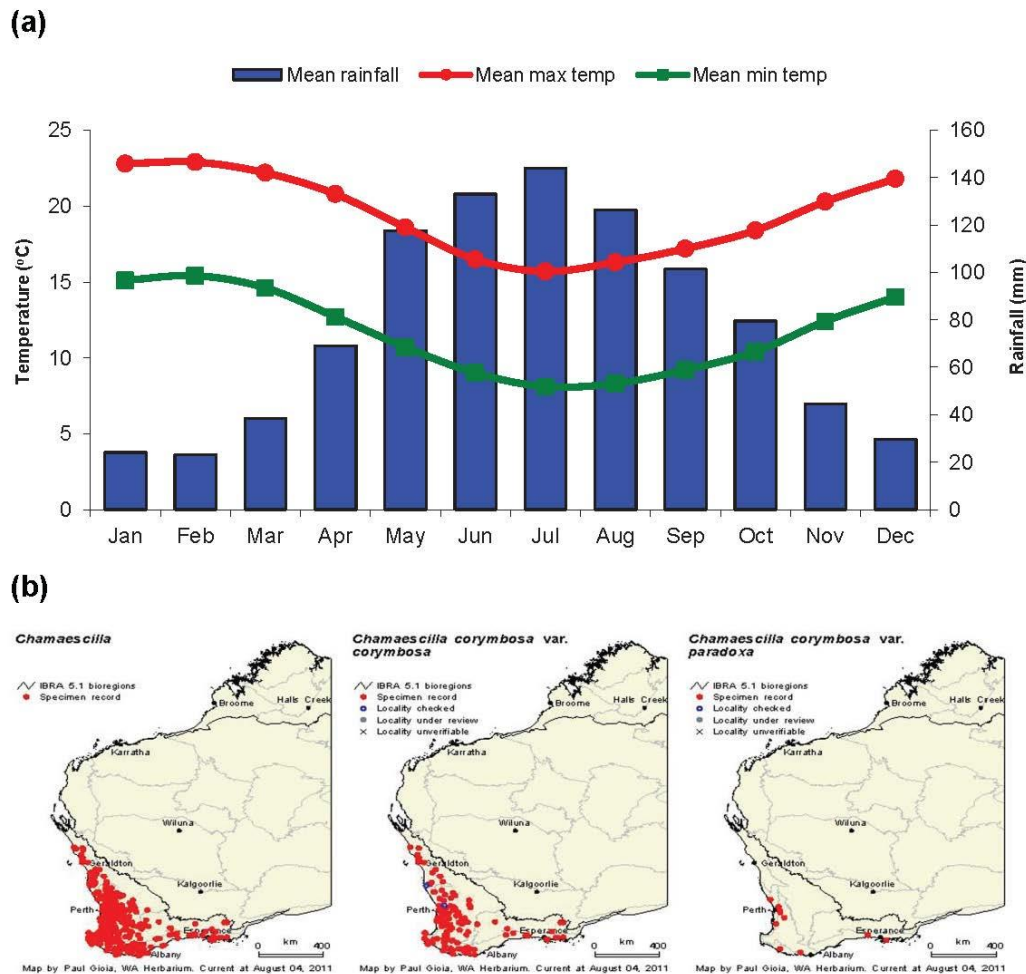
## Supplementary Material

### Survival strategies of the root tuberous geophyte *Chamaescilla corymbosa* in a Mediterranean-climate rock-outcrop environment

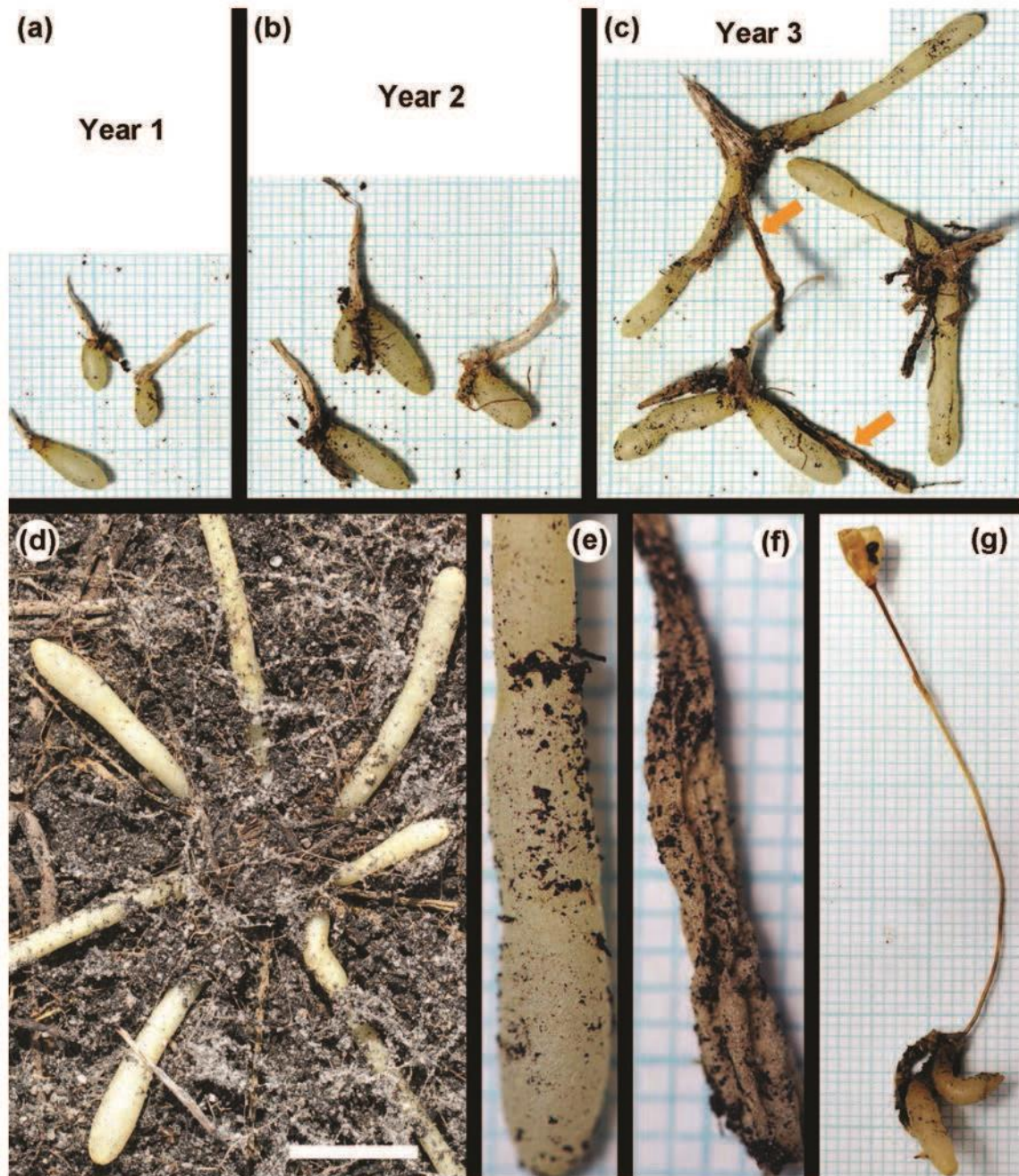
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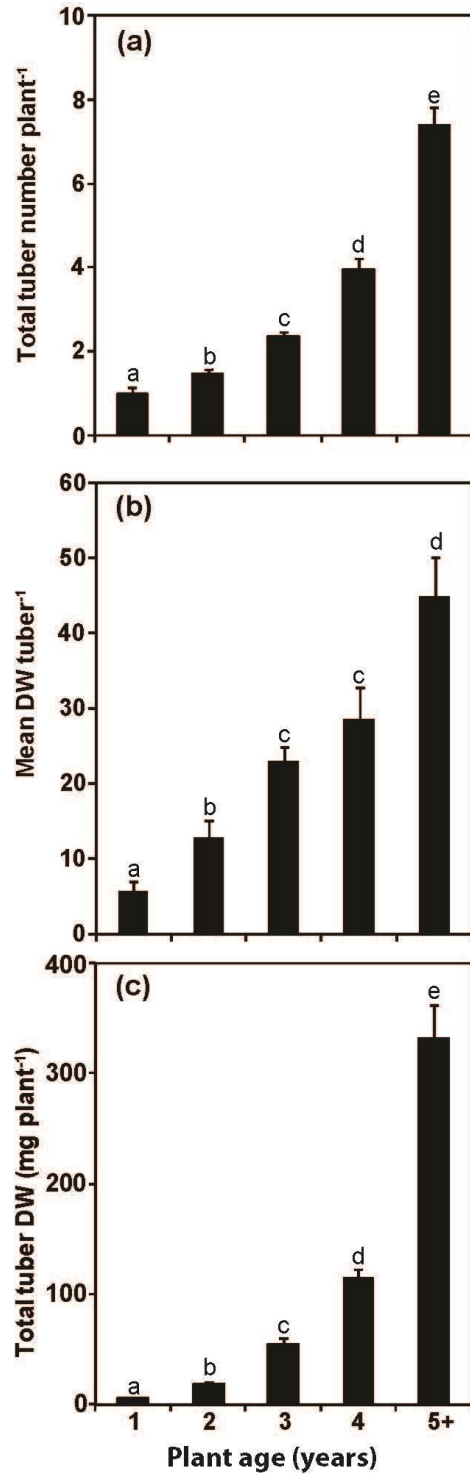
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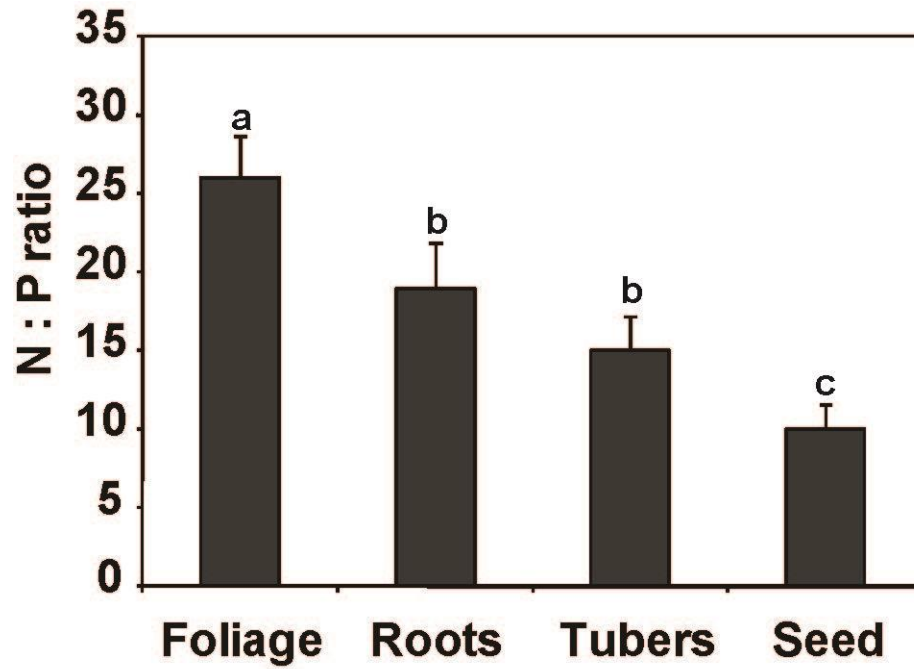
**Fig. S1.** (a) Regional temperature and rainfall and (b) species distribution maps for *Chamaescilla corymbosa*.



**Fig. S2.** Summer dormant *Chamaescilla corymbosa* at different ages (a) one-year old plant (b) two-year old plant (c) three-year old plant (d) four-year old plant (e) new season's root tuber from a four-year old plant (f) senesced root tuber from the previous season from four-year old plant (g) One-year old plant. Scale bar in S2d is 20 mm.



**Fig. S3.** Relationship between plant age and (a) number of root tubers (b) dry weight root tuber<sup>-1</sup> and (c) root tuber dry weight plant<sup>-1</sup> for *Chamaescilla corymbosa*. The letters denote statistically significant differences ( $P < 0.05$ ). All values represent the mean ( $\pm$ SE) of  $n=5$  biological replicates.



**Fig. S4.** N:P ratios for foliage, roots, root tubers and seed of *Chamaescilla corymbosa*. The letters denote statistically significant differences ( $P < 0.05$ ). All values represent the mean ( $\pm$ SE) of  $n=5$  biological replicates.

**Table S1. Nutrient mobilisation, investment and productivity in three to four year-old plants of *Chamaescilla corymbosa***

|                   | <b>Effectiveness in mobilisation to new seasons tubers and seed*</b> | <b>Proportional investment in seed vs. tubers*</b> | <b>Net seasons productivity*</b>              |
|-------------------|--|--|---|
|                   | <b><math>[(D + E) / (B + C) \times 100]</math></b>                   | <b><math>[(E / (D + E)) \times 100]</math></b>     | <b><math>[(D + E) / A] \times 100]</math></b> |
| Nutrient Elements | %  | %  | %   |
| <b>K</b>          | 27   | 4.3  | 116   |
| <b>N</b>          | 72   | 39.8   | 166   |
| <b>Ca</b>         | 53   | 26.6   | 125   |
| <b>S</b>          | 36   | 30.7   | 162   |
| <b>Mg</b>         | 65   | 15.6   | 166   |
| <b>P</b>          | 121  | 48.1   | 217   |
| <b>Fe</b>         | 18   | 15.6   | 128   |
| <b>Mn</b>         | 41   | 12.3   | 172   |
| <b>Zn</b>         | 42   | 15   | 141   |
| <b>Cu</b>         | 88   | 44   | 180   |

\*Data derived from Table 3