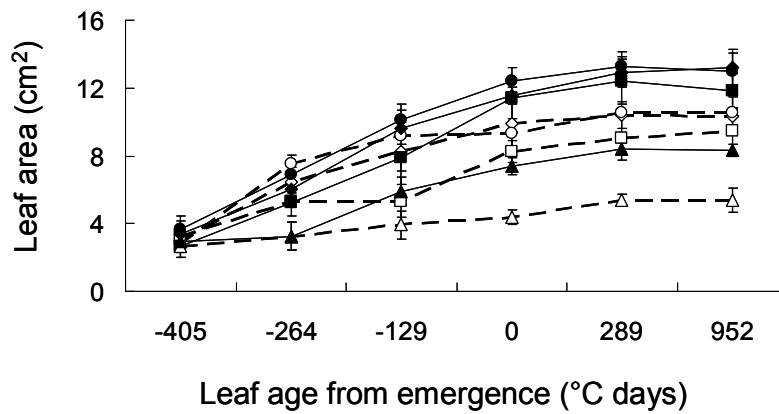


### Accessory Publication

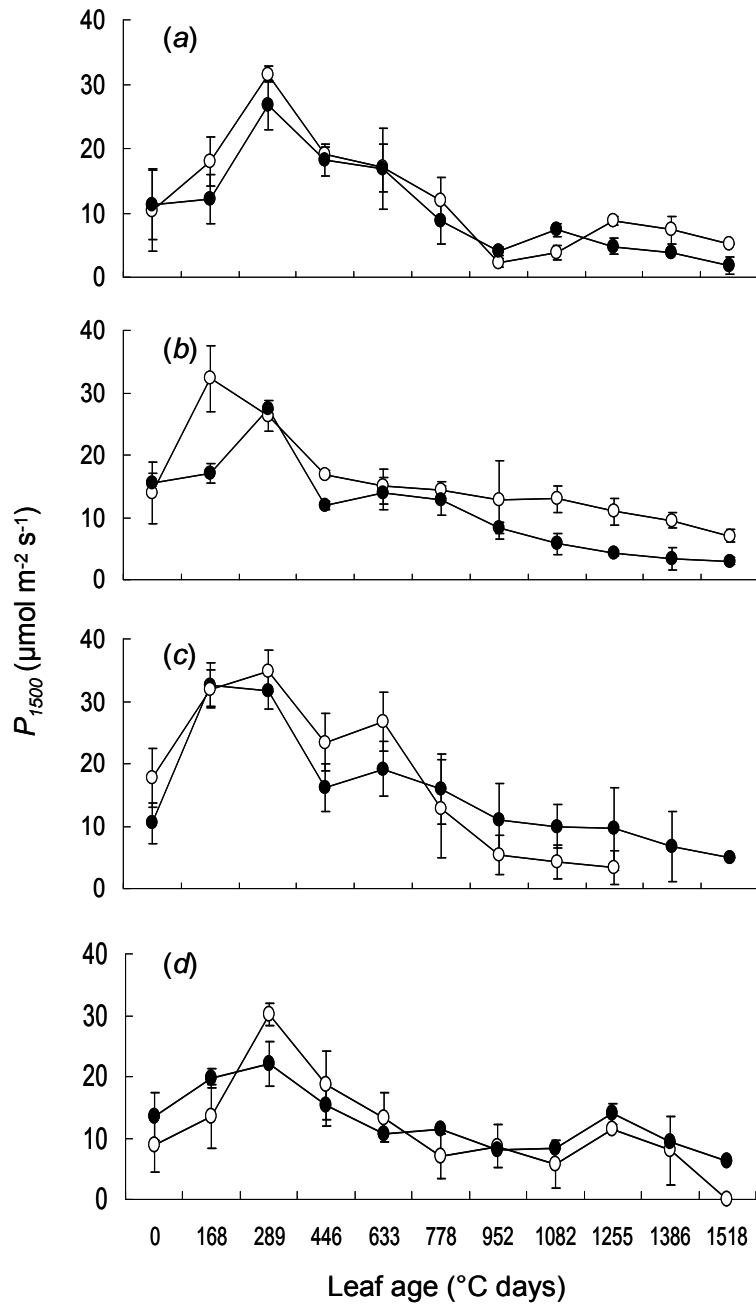
**Table S1.** Leaf [P] ( $\text{g m}^{-2}$ ), total plant P content ( $\text{mg plant}^{-1}$ ), specific leaf area (SLA;  $\text{m}^2 \text{kg}^{-1}$ ) and leaf area index (LAI;  $\text{m}^2 \text{m}^{-2}$ ) at harvest for *Cullen australasicum* accession SA4966 (Ca1), *C. australasicum* accession SA42762 (Ca2), *C. pallidum* accession SA44387 (Cp) and *Medicago sativa* cv. SARDI-10 (Luc), treated with either 3 mg P  $\text{kg}^{-1}$  dry soil (P3) or 30 mg P  $\text{kg}^{-1}$  dry soil (P30)

Values are means  $\pm$  s.e.;  $n = 3$

| Character           | P3               |                  |                  |                  | P30              |                  |                  |                  |
|---------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                     | Ca1              | Ca2              | Cp               | Luc              | Ca1              | Ca2              | Cp               | Luc              |
| [P] <sub>area</sub> | 0.02 $\pm$ 0.003 | 0.03 $\pm$ 0.007 | 0.02 $\pm$ 0.002 | 0.02 $\pm$ 0.002 | 0.05 $\pm$ 0.003 | 0.06 $\pm$ 0.007 | 0.04 $\pm$ 0.004 | 0.03 $\pm$ 0.002 |
| Total-P             | 5.0 $\pm$ 1.1    | 4.6 $\pm$ 2.1    | 3.9 $\pm$ 2.0    | 4.9 $\pm$ 1.9    | 12.7 $\pm$ 1.4   | 19.7 $\pm$ 3.2   | 9.1 $\pm$ 2.5    | 22.5 $\pm$ 4.7   |
| SLA                 | 11.6 $\pm$ 1.0   | 11.2 $\pm$ 1.1   | 13.0 $\pm$ 0.5   | 21.6 $\pm$ 2.7   | 10.6 $\pm$ 1.1   | 9.7 $\pm$ 1.0    | 11.7 $\pm$ 0.7   | 22.9 $\pm$ 2.2   |
| LAI                 | 1.6 $\pm$ 0.1    | 1.5 $\pm$ 0.2    | 0.9 $\pm$ 0.1    | 1.7 $\pm$ 0.3    | 2.2 $\pm$ 0.2    | 2.3 $\pm$ 0.2    | 1.4 $\pm$ 0.2    | 2.7 $\pm$ 0.3    |



**Fig. S1.** Leaf area of leaves on the 8th main stem node as dependent on leaf age for *Cullen australasicum* accession SA4966 (diamonds), *C. australasicum* accession SA42762 (circles), *C. pallidum* accession SA44387 (squares) and *Medicago sativa* cv. SARDI-10 (triangles), treated with either 3 mg P kg<sup>-1</sup> dry soil (open symbols with dashed lines) or 30 mg P kg<sup>-1</sup> dry soil (filled symbols with solid lines). Bars represent s.e. of the means,  $n = 3$ . Note that the date on which the first photosynthetic measurements were taken is denoted as 0°C day.



**Fig. S2.** Effect of leaf age on leaf photosynthesis at PPFD=1500  $\mu\text{mol m}^{-2} \text{s}^{-1}$  ( $P_{1500}$ ) for (a) *Cullen australasicum* accession SA4966, (b) *C. australasicum* accession SA42762, (c) *C. pallidum* accession SA44387 and (d) *Medicago sativa* cv. SARDI-10, treated with either 3 mg P kg<sup>-1</sup> dry soil (open circles) or 30 mg P kg<sup>-1</sup> dry soil (filled circles). Bars represent s.e. of the means,  $n = 3$ .