Data for:

**Elevated atmospheric CO2 changes plant defence allocation but resistance to herbivores persists**

The Excel worksheet contains three tabs corresponding to the measurements taken on different sets of plants (see Fig. S1 of the supplemental material). Where data values are not given, mostly due sub-sampling of plants (see Fig. S1 for details), this is indicated with ‘n/a’ in the corresponding Excel cell.

1. Destructive plant measurements
2. RGR, est. damage, transpiration
3. Mandible wear

**TAB 1: Destructive plant measurements**

|  |  |  |
| --- | --- | --- |
| **Column Letter** | **Column label** | **Description** |
| A | cultivar | Which of the three cultivars the plant was (Coolah, EGA Gregory or Mitch) |
| B | Si treatment | Which of the three silicon supplies the plant received (0, 1 or 2mM) |
| C | CO2 | Which of the two CO2 concentrations the plants were grown in (ambient or elevated) |
| D | plant number | Distinguishing label |
| E | phenolics concentration | Leaf phenolics concentration |
| F | shoots (g) | Shoot dry mass |
| G | roots (g) | Root dry mass |
| H | total mass (g) | Total plant dry mass |
| I | Si (%) | Leaf silicon concentration |
| J | %N | Leaf nitrogen concentration |
| K | %C | Leaf carbon concentrations |

**TAB 2: RGR, est. damage, transpiration**

|  |  |  |
| --- | --- | --- |
| **Column Letter** | **Column label** | **Description** |
| A | plant number | Distinguishing label |
| B | Cultivar | Which of the three cultivars the plant was (Coolah, EGA Gregory or Mitch) |
| C | Si treatment | Which of the three silicon supplies the plant received (0, 1 or 2mM) |
| D | CO2 | Which of the two CO2 concentrations the plants were grown in (ambient or elevated) |
| E | RGR | Relative growth rates of insect herbivores |
| F | Si (%) | Leaf silicon concentration |
| G | 1.Tr (mm-2s-1) | First transpiration rate measurement |
| H | 2.Tr (mm-2s-1) | Second transpiration rate measurement |
| I | Av.Tr (mm-2s-1) | Average transpiration rate |
| J | Phenolics concentration | Leaf phenolics concentration |
| K | Estimated Insect damage | Estimated plant damage by herbivores |

**TAB 3: Mandible wear**

|  |  |  |
| --- | --- | --- |
| **Column Letter** | **Column label** | **Description** |
| A | Si treatment | Which of the two silicon supplies the plant received (0 or 2mM) |
| B | Si (%) | Leaf Si concentrations – transposed from tab 2 |
| C | Caterpillar number | Distinguishing label |
| D | Mandible wear | Mandible wear index (higher numbers reflect greater wear) |
| E | RGR | Relative growth rates of insect herbivores – transposed from tab 2 |