**Supplemental Material**

**Fig. S1.** Schematic of pots and insect cages.

**Table S1**. Chemical composition of +Si and –Si plants in relation to the experimental design (N = replicate plants).

|  |  |  |  |
| --- | --- | --- | --- |
| **Details** | **K** | **Na** | **Ca** |
| **+ Si plants** | **–Si plants** | **+ Si plants** | **–Si plants** | **+ Si plants** | **–Si plants** |
| N | 20 | 20 | 20 | 20 | 20 | 20 |
| Delivery phase | Liquid | Liquid | Liquid | Liquid | Solid | Solid |
| Treatment solutions | K2O:SiO2\*(4 mM) + HCl (to neutralise pH)  | KCl (3.35 mM)  | Na2SiO3 (4 mM) + HCl (to neutralise pH)  | NaCl (8 mM)  | N/A | N/A |
| Initial delivery of solid Si or carrier element | N/A | N/A | N/A | N/A | 43.0 g granular calcium silicate# | 31.5 g CaCO3 per pot |
| Irrigation | 60 mL of treatment solution three times a week | 60 mL of treatment solution three times a week | 60 mL of treatment solution three times a week | 60 mL of treatment solution three times a week | 60 mL of water three times a week | 60 mL of water three times a week |
| Herbivore treatment | None | Herbivore | None | Herbivore | None | Herbivore | None | Herbivore | None | Herbivore | None | Herbivore |
| N | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |

\*AgSil32 contains K2O:SiO2 in the ratio of 1:2.4, density = 1.6 g/mL.

#Contains 29% Ca and 12.4% SiO2

**Table S2**. Results of ANOVA tests applied separately for each Si type (K, Na and Ca silicate) where there was a significant statistical interaction between Si type and other factors in the initial three-way ANOVA. Statistically significant results indicated in **bold**.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Si type** | **Plant response** | **Corresponding Figure** | **Si** | **Herbivory** | **Si 🞨 Herbivory** |
| F1,36 | *P* | F1,36 | *P* | F1,36 | *P* |
| K | Leaf mass | 1A | **9.64** | **0.004** | **4.62** | **0.038** | 0.80 | 0.378 |
| Leaf Si | 2A | **45.53** | **< 0.001** | **16.20** | **< 0.001** | 0.01 | 0.979 |
| Na | Leaf mass | 1B | 0.19 | 0.668 | **7.42** | **0.010** | 0.02 | 0.886 |
| Leaf Si | 2B | **45.55** | **< 0.001** | **15.15** | **< 0.001** | 0.72 | 0.400 |
| Ca | Leaf mass | 1C | 0.63 | 0.431 | **15.51** | **< 0.001** | 0.36 | 0.552 |
| Leaf Si | 2C | **168.71** | **< 0.001** | **18.58** | **< 0.001** | 2.14 | 0.152 |