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*Functional Plant Biology*

### Supplementary Material

#### **Morpho-physiological adaptations to weed competition impair green bean (*Phaseolus vulgaris*) ability to overcome moderate salt stress**

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## Supplementary materials

Table S1. Soil electrical conductivity (EC) at the end of the experiment.

|              |  | EC     |
|--------------|--|--------|
|              |  | ds/m   |
| Salinity (S) |  |        |
| 0 mM NaCl    |  | 0.73 b |
| 50 mM NaCl   |  | 2.08 a |
| Weeds (W)    |  |        |
| Weed-free    |  | 1.47   |
| Weedy        |  | 1.33   |
| Interaction  |  |        |
| S            |  | ***    |
| W            |  | ns     |
| SxW          |  | ns     |

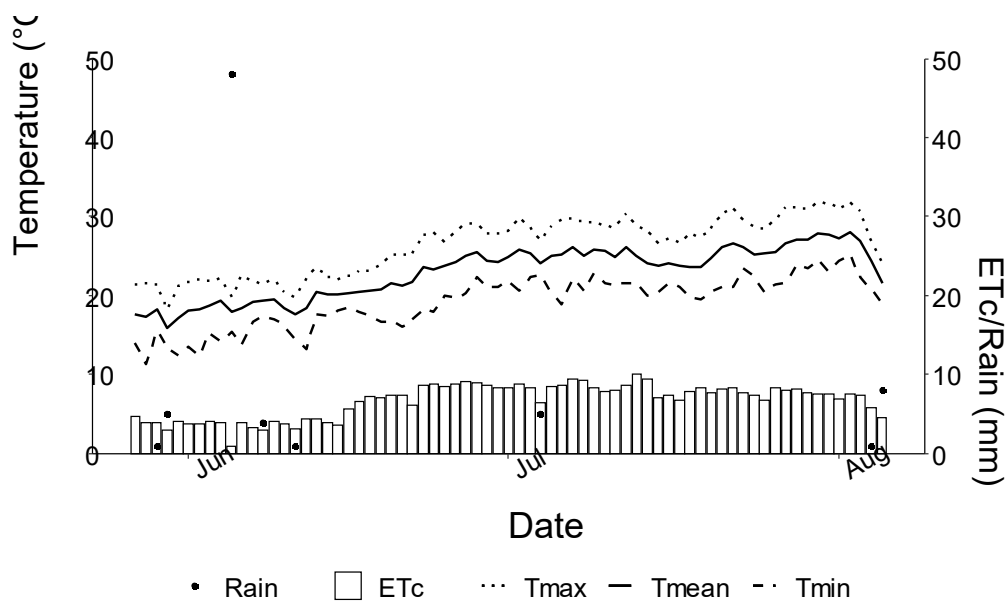


Figure S1. Daily temperatures (min, average, and max), rain and evapotranspiration during the growth cycle of green beans.

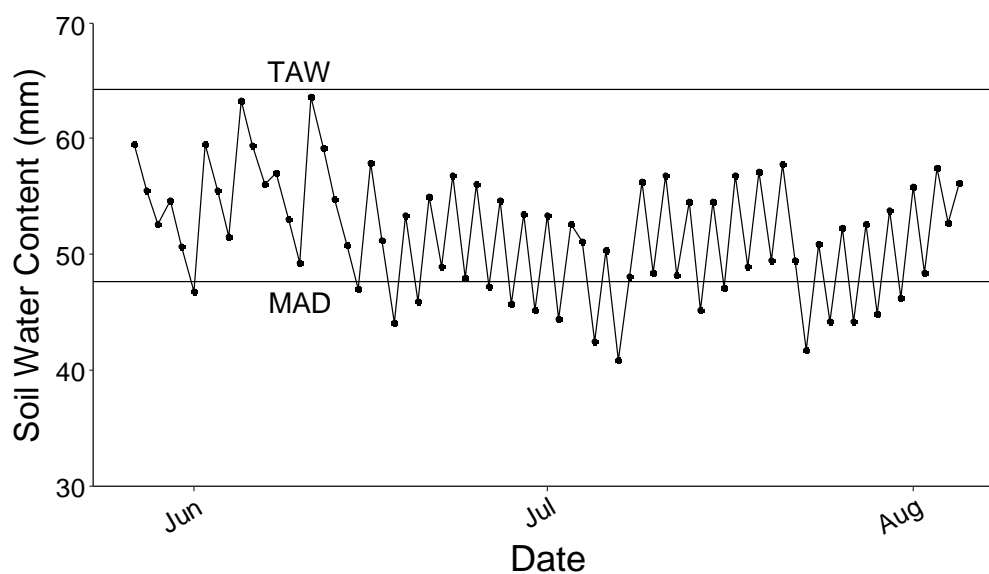


Figure S2. Soil water content during the growth cycle of green beans. TAW = total available water; MAD = management allowable depletion.

Table S2. Results of the ANOVA (F-statistics and p-value) performed on biometric and morpho-physiological parameters of green beans. Plants were subjected to weeds (weed-free vs weedy) and salinity (0 mM NaCl vs 80 mM NaCl). p-value < 0.05, n= 6

|              | Shoot FW |                 | Leaf area |                 | Yield |                 | SD    |                 | CO <sub>2</sub> assimilation |                 | Transpiration rate |                 | WUE  |                 |
|--------------|----------|-----------------|-----------|-----------------|-------|-----------------|-------|-----------------|------------------------------|-----------------|--------------------|-----------------|------|-----------------|
|              | F        | <i>p</i> -value | F         | <i>p</i> -value | F     | <i>p</i> -value | F     | <i>p</i> -value | F                            | <i>p</i> -value | F                  | <i>p</i> -value | F    | <i>p</i> -value |
| Weeds (W)    | 12.0     | .002            | 2.26      | .148            | 58.4  | .000            | 0.003 | .958            | 4.90                         | .039            | 2.39               | .138            | 0.56 | .462            |
| Salinity (S) | 11.3     | .003            | 13.1      | .002            | 32.1  | .000            | 16.78 | .001            | 19.1                         | .001            | 40.7               | .000            | 4.77 | .041            |
| WxS          | 15.2     | .001            | 41.0      | .000            | 10.3  | .004            | 19.83 | .001            | 7.41                         | .013            | 0.82               | .736            | 6.35 | .020            |

Table S3. Results of the ANOVA (F-statistics and p-value) performed on ion content of green beans plants. Plants were subjected to weeds (weed-free vs weedy) and salinity (0 mM NaCl vs 80 mM NaCl). p-value < 0.05, n= 6

|              | NO <sub>3</sub> <sup>-</sup> |                 | K <sup>+</sup> |                 | Na <sup>+</sup> |                 | Ca <sup>2+</sup> |                 | Organic acids |                 | Na:K |                 |
|--------------|------------------------------|-----------------|----------------|-----------------|-----------------|-----------------|------------------|-----------------|---------------|-----------------|------|-----------------|
|              | F                            | <i>p</i> -value | F              | <i>p</i> -value | F               | <i>p</i> -value | F                | <i>p</i> -value | F             | <i>p</i> -value | F    | <i>p</i> -value |
| Weeds (W)    | 57.4                         | .000            | 15.2           | .000            | 73.1            | .000            | 15.3             | 0.001           | 6.38          | .020            | 56.6 | .000            |
| Salinity (S) | 9.29                         | .006            | 3.21           | .032            | 10.3            | .004            | 2.55             | 0.126           | 23.5          | .000            | 36.6 | .000            |
| WxS          | 5.52                         | .029            | 4.52           | .046            | 6.68            | .018            | 12.4             | 0.002           | 6.60          | .018            | 20.8 | .000            |