

Table S1: Effects of halophyte genotype (HG) and the four (Ctrl, 90, 180, 360 mM NaCl) water salinity levels (WS) on the physiological traits at seven days from the salt stress initiation (7 DAS). Significance codes: ^{ns}, ⁽⁺⁾, *, **, and *** mean, respectively, not significant and significant at $p \leq 0.1$, $p \leq 0.05$, $p \leq 0.01$ and $p \leq 0.001$. Different letters indicate significant differences at $P \leq 0.05$ (n=4).

| Halophyte Genotype | SPAD | A ($\mu\text{mol m}^{-2} \text{ s}^{-1}$) | GS ($\text{mol m}^{-2} \text{ s}^{-1}$) | E ($\text{mol m}^{-2} \text{ s}^{-1}$) | ΦPSII | Fv'/Fm' | ETR ($\mu\text{mol m}^{-2} \text{ s}^{-1}$) | qP | iWUE ($\mu\text{mol CO}_2 \text{ mol}^{-1} \text{ H}_2\text{O}$) | RWC (%) | LWP (-Mpa) | |
|--------------------|----------------------|--|--|---|----------------------|----------------------|--|----------------------|---|----------------------|----------------------|----------|
| AH | 29.8 b | 5.20 a | 0.054 bc | 093 b | 0.511 c | 0.568 c | 43.8 c | 0.88 b | 6.22 a | 86.71 a | -9.23 c | |
| AG | 15.9 c | 5.46 a | 0.089 a | 1.43 a | 0.613 a | 0.675 a | 54.7 a | 0.93 a | 4.40 b | 73.30 c | -3.47 a | |
| AR | 13.6 d | 4.23 b | 0.066 b | 1.06 b | 0.539 b | 0.641 b | 47.6 b | 0.85 c | 4.31 b | 81.96 b | -2.99 a | |
| AS | 36.4 a | 5.01 a | 0.045 c | 0.70 c | 0.486 c | 0.644 b | 43.1 c | 0.76d | 7.32 b | 71.13 c | -5.03 b | |
| P | < 0.0000 *** | 0.0000 *** | 0.0000 *** | <0.0000 *** | < 0.0000 *** | <0.0000 *** | <0.0000 *** | < 0.0000 *** | 0.0000 *** | 0.0000 *** | < 0.0000 *** | |
| Water Salinity | | | | | | | | | | | | |
| Ctrl | 25 | 5.63 a | 0.093 a | 1.42 a | 0.55 | 0.643 | 47.5 | 0.85 | 4.35 c | 80.09 | -3.73 a | |
| 90 | 23.7 | 5.14 ab | 0.071 b | 1.17 b | 0.55 | 0.3 | 47.6 | 0.86 | 4.98 bc | 79.00 | -4.11 ab | |
| 180 | 23.5 | 4.80 bc | 0.053 c | 0.90 c | 0.52 | 0.626 | 46.6 | 0.84 | 5.72 b | 77.74 | -5.71 ab | |
| 360 | 23.4 | 4.35 c | 0.040 c | 0.64 d | 0.52 | 0.626 | 47.4 | 0.86 | 7.19 a | 76.25 | -7.16 b | |
| P | 0.9118 ^{ns} | 0.0000 *** | 0.0000 *** | < 0.0000 *** | 0.9882 ^{ns} | 0.5440 ^{ns} | 0.9972 ^{ns} | 0.9072 ^{ns} | 0.0000 *** | 0.1347 ^{ns} | 0.060 ⁽⁺⁾ | |
| HG x WS | | | | | | | | | | | | |
| Ctrl | AG | 17.3 c | 6.35 a | 0.137 a | 2.08 a | 0.64 a | 0.68 a | 55.4 a | 55.4 ab | 5.62 | 73.9 | -3.15 bc |
| 90 | AG | 16.5 cd | 5.58 ab | 0.11 ab | 1.73 ab | 0.64 a | 0.68 ab | 55.7 a | 55.7 a | 3.23 | 74.5 | -3.54 bc |
| 180 | AG | 14.9 de | 5.43 ab | 0.068 cde | 1.18 cde | 0.60 ab | 0.68 abc | 54.2 ab | 54.2 bcd | 3.64 | 73.5 | -3.08 b |
| 360 | AG | 15 de | 4.54 bc | 0.046 de | 0.71 efg | 0.58 ab | 0.66 bcd | 53.6 ab | 53.6 abc | 7.42 | 71.3 | -4.09 cd |
| Ctrl | AR | 14.3 ef | 4.74 bc | 0.092 bc | 1.42 bc | 0.57 cd | 0.64 de | 47.3 cd | 47.3 g | 5.62 | 85.9 | -2.22 a |
| 90 | AR | 12.8 f | 4.49 bc | 0.078 bcd | 1.24 bcd | 0.53 cde | 0.64 de | 46.7 cde | 46.7 g | 4.80 | 81.8 | -2.89 ab |
| 180 | AR | 13.2 ef | 3.86 c | 0.047 de | 0.83 defg | 0.53 cde | 0.63 e | 46.5 cde | 46.5 fg | 4.85 | 81.3 | -3.73 bc |
| 360 | AR | 14 ef | 3.88 c | 0.046 de | 0.74 defg | 0.53 bc | 0.65 cd | 49.9 bc | 49.9 ef | 7.61 | 78.7 | -3.1 ab |
| Ctrl | AS | 39.5 a | 6.33 a | 0.065 cde | 1.01 cdefg | 0.52 defg | 0.68 a | 46 def | 46.0 h | 9.02 | 74.8 | -3.47 bc |
| 90 | AS | 35.3 a | 4.78 bc | 0.042 de | 0.66 fg | 0.49 gh | 0.63 e | 42.9 fg | 43.0 h | 6.44 | 71.2 | -4.23 bc |
| 180 | AS | 35.9 a | 4.67 bc | 0.045 de | 0.63 g | 0.4 fgh | 0.63 e | 39.9 fg | 39.9 h | 5.36 | 69.3 | -3.58 bc |
| 360 | AS | 35.1 a | 4.32 bc | 0.034 e | 0.56 g | 0.47 efgh | 0.64 de | 43.5 efg | 43.5 h | 7.95 | 69.3 | -8.83 e |
| Ctrl | AH | 28.9 b | 5.14 abc | 0.076 bcd | 1.15 cdef | 0.5 h | 0.56 f | 41.8 g | 41.8 fg | 4.61 | 85.8 | -6.1 de |
| 90 | AH | 30.3 b | 5.7 ab | 0.053 de | 1.04 cdefg | 0.53 defgh | 0.58 f | 44.9 defg | 44.9 de | 3.13 | 88.5 | -5.76 de |
| 180 | AH | 30.3 b | 5.3 abc | 0.051 de | 0.95 cdefg | 0.53 cdef | 0.58 f | 46 cdef | 46.0 cd | 3.40 | 86.8 | -12.46 e |
| 360 | AH | 29.5 b | 4.64 bc | 0.033 e | 0.56 g | 0.49 h | 0.55 f | 42.3 g | 42.3 de | 6.29 | 85.7 | -12.6 e |
| P | < 0.0000 *** | 0.061 ⁽⁺⁾ | 0.032 ** | 0.0003 *** | <0.0000 *** | <0.0000 *** | <0.0000 *** | <0.0001 *** | 0.1928 ^{ns} | 0.8730 ^{ns} | < 0.0000 *** | |

Table S2: Effects of halophyte genotype (HG) and the four (Ctrl, 90, 180, 360 mM NaCl) water salinity levels (WS) on the physiological traits at twenty-seven days from the salt stress initiation (27 DAS). Significance codes: ^{ns}, ⁽⁺⁾, *, **, and *** mean, respectively, not significant and significant at $p \leq 0.1$, $p \leq 0.05$, $p \leq 0.01$ and $p \leq 0.001$. Different letters indicate significant differences at $P \leq 0.05$ (n=4).

| Halophyte Genotype | | SPAD | A ($\mu\text{mol m}^{-2} \text{s}^{-1}$) | GS ($\text{mol m}^{-2} \text{s}^{-1}$) | E ($\text{mol m}^{-2} \text{s}^{-1}$) | ΦPSII | Fv'/Fm' | ETR ($\mu\text{mol m}^{-2} \text{s}^{-1}$) | qP | iWUE ($\mu\text{mol CO}_2 \text{ mol}^{-1} \text{H}_2\text{O}$) | RWC (%) | LWP (-Mpa) |
|--------------------|----|----------------------|---|---|--|-------------------|----------------------|---|--------------|--|------------|---------------|
| AH | | 35.1 a | 5.67 a | 0.054 a | 1.38 a | 0.53 c | 0.58 c | 47.41 c | 0.92 a | 4.62 b | 82.67 a | -16.94 c |
| AG | | 16.9 b | 5.53 a | 0.043 b | 1.01 b | 0.62 a | 0.67 a | 55.75 a | 0.94 a | 6.00 a | 78.09 ab | -6.98 b |
| AR | | 14.9 c | 4.43 b | 0.042 b | 1.15 ab | 0.59 b | 0.66 b | 50.95 b | 0.83 b | 4.01 b | 79.76 ab | -4.22 a |
| AS | | 33.8 a | 4.46 b | 0.039 b | 0.74 c | 0.47 d | 0.64 b | 45.36 a | 0.81 c | 5.96 a | 76.37 b | -4.75 a |
| P | | < 0.0001*** | 0.0001*** | <0.0001*** | 0.0011 ** | < 0.0001 *** | 0.0001 *** | < 0.0001 *** | < 0.0001 *** | 0.0001 *** | 0.0194 * | < 0.0001*** |
| Water Salinity | | | | | | | | | | | | |
| Ctrl | | 25.2 | 5.56 a | 0.0603 a | 1.32 a | 0.55 ab | 0.65 | 49.16 ab | 0.87 c | 4.33 b | 82.56 a | -4.34 a |
| 90 | | 25.7 | 5.23 a | 0.054 a | 1.32 a | 0.57 a | 0.65 | 50.74 a | 0.89 ab | 4.80 b | 80.54 ab | -7.64 b |
| 180 | | 25.2 | 5.02 ab | 0.034 b | 0.98 b | 0.57 a | 0.62 | 48.79 b | 0.88 bc | 5.32 ab | 78.44 ab | -9.59 b |
| 360 | | 24.6 | 4.29 b | 0.029 b | 0.69 c | 0.54 b | 0.64 | 50.81 a | 0.91 a | 6.14 a | 75.32 b | -11.31 b |
| P | | 0.9700 ^{ns} | 0.039 * | <0.0001*** | < 0.0001*** | 0.042 * | 0.3014 ^{ns} | 0.0488 * | < 0.0001*** | 0.0024 ** | 0.005 ** | 0.0005 *** |
| HG x WS | | | | | | | | | | | | |
| Ctrl | AG | 16.38 c | 6.04 a | 0.07 ab | 1.46 ab | 0.635 abc | 0.69 a | 55.3 abc | 0.918 abcd | 4.36 bc | 82.1 ab | -3.68 ab |
| 90 | AG | 16.7 bc | 5.38 abcde | 0.03 de | 1.02 cde | 0.628 abcd | 0.67 abc | 54.7 abcd | 0.937 ab | 5.43 abc | 80.95 ab | -5.76 efg |
| 180 | AG | 17.27 bc | 5.65 abcd | 0.04 cde | 0.89 def | 0.64 ab | 0.69 a | 56.2 ab | 0.931 abc | 6.37 abc | 77.61 ab | -7.75 ghi |
| 360 | AG | 17.27 bc | 5.07 bcdef | 0.03 de | 0.68 fg | 0.653 a | 0.68 ab | 56.9 a | 0.964 a | 7.83 a | 71.76 b | -10.73 hij |
| Ctrl | AR | 15.01 bc | 4.71 efg | 0.05 bcd | 1.33 abc | 0.597 abcde | 0.67 abc | 52.5 abcde | 0.892 bcde | 3.56 c | 85.32 ab | -3.23 a |
| 90 | AR | 15.46 b | 4.96 cdef | 0.06 abc | 1.55 ab | 0.555 ef | 0.64 abcd | 48.7 def | 0.865 de | 3.29 c | 79.56 ab | -4.29 bcd |
| 180 | AR | 14.55 b | 3.97 fg | 0.03 de | 0.91 def | 0.553 ef | 0.64 abcd | 48.5 def | 0.868 cde | 4.36 bc | 81.63 ab | -4.12 bc |
| 360 | AR | 14.59 b | 4.09 fg | 0.03 de | 0.86 ef | 0.62 abcde | 0.68 ab | 54.1 abcde | 0.915 abcd | 4.82 abc | 72.51 b | -5.22 ef |
| Ctrl | AS | 33.98 a | 4.37 efg | 0.04 cde | 0.76 fg | 0.468 g | 0.62 bcd | 41 h | 0.755 g | 6.03 abc | 85.14 ab | -3.85 acb |
| 90 | AS | 34.23 a | 5.91 abcd | 0.06 abc | 0.88 def | 0.558 def | 0.66 abcd | 49.2 cde | 0.84 ef | 7.08 ab | 74.23 ab | -4.36 cd |
| 180 | AS | 33.33 a | 4.73 defg | 0.04 cde | 0.88 ef | 0.474 g | 0.61 cd | 41.7 gh | 0.78 fg | 5.38 abc | 72.35 b | -4.86 de |
| 360 | AS | 33.74 a | 2.82 g | 0.02 e | 0.49 g | 0.565 cde | 0.65 abcd | 49.6 cde | 0.864 de | 5.39 abc | 73.76 ab | -5.92 ef |
| Ctrl | AH | 35.34 a | 5.8 abc | 0.08 a | 1.74 a | 0.551 ef | 0.61 cd | 47.9 efg | 0.904 abcde | 3.37 c | 77.73 ab | -6.60 fgh |
| 90 | AH | 36.51 a | 5.98 ab | 0.07 ab | 1.82 a | 0.576 bcde | 0.62 bcd | 50.3 bcde | 0.935 ab | 3.4 c | 87.47 a | -16.16 ijk |
| 180 | AH | 35.59 a | 5.73 abcd | 0.04 cde | 1.22 bcd | 0.558 def | 0.6 de | 48.8 def | 0.93 abc | 5.15 abc | 82.23 ab | -21.64 jk |
| 360 | AH | 32.96 a | 5.17 bcdef | 0.03 de | 0.79 fg | 0.488 fg | 0.54 e | 42.6 fgh | 0.898 bcde | 6.57 abc | 83.24 ab | -23.35 k |
| P | | < 0.0001 *** | 0.0021 ** | <0.0001 *** | < 0.0001 *** | <0.0001 *** | 0.0003 *** | < 0.0001 *** | 0.0001 *** | 0.0222 * | 0.0142 * | < 0.0001 *** |

Table S3: Effects of halophyte genotype (HG) and the four (Ctrl, 90, 180, 360 mM NaCl) water salinity levels (WS) on physiological traits, biomass and element content at twenty-seven days from the salt stress initiation (27 DAS). Significance codes: ^{ns}, ⁽⁺⁾, ^{*}, ^{**}, and ^{***} mean, respectively, not significant and significant at $p \leq 0.1$, $p \leq 0.05$, $p \leq 0.01$ and $p \leq 0.001$. Different letters indicate significant differences at $P \leq 0.05$ (n=4).

| Halophyte Genotype | FW (g plant ⁻¹) | DW (g plant ⁻¹) | PH (cm) | SLA (cm ² g ⁻¹) | EL (%) | Ca (mg kg ⁻¹ DW) | K (mg kg ⁻¹ DW) | Na (mg kg ⁻¹ DW) | P (mg kg ⁻¹ DW) | Mg (mg kg ⁻¹ DW) | δ13C (‰) | C (%) | N (%) | |
|--------------------|-----------------------------|-----------------------------|----------------------|--|-------------|-----------------------------|----------------------------|-----------------------------|----------------------------|-----------------------------|-----------|----------------------|---------------------|---------|
| AH | 17.6 b | 3.074 c | 63.0 c | 189.4 c | 77.0 a | 96.4 a | 328.1 a | 670.3 a | 29.58 b | 71.7 a | -18.47 a | 31.4 b | 2.34 b | |
| AG | 24.2 a | 4.78 b | 105.4 a | 310.2 a | 49.1 b | 73.0 b | 226.6 c | 573.7 b | 40.33 a | 47.6 c | -32.27 c | 35.0 a | 2.16 b | |
| AR | 12.2 c | 1.87 d | 77.8 b | 319.2 a | 55.4 b | 101.8 a | 255.7 b | 662.4 a | 28.99 b | 48.3 c | -33.31 d | 33 b | 2.89 a | |
| AS | 26.5 a | 5.55 a | 102.0 a | 264.7 b | 77.0 a | 80.5 b | 225.2 c | 506.1 c | 29.58 b | 58.9 b | -30.93 b | 35.3 a | 2.14 b | |
| P | <0.0001 *** | <0.0001 *** | <0.0001 *** | <0.0001 *** | <0.0001 *** | <0.0001*** | <0.000 *** | <0.0001 *** | <0.0001 *** | <0.0001 *** | 0.000 *** | <0.0001 *** | <0.0001 *** | |
| Water Salinity | | | | | | | | | | | | | | |
| Ctrl | 15.7 b | 3.10 b | 90.2 | 300.1 a | 39.3 d | 112.1 a | 268.3 ab | 349.1 c | 29.69 b | 66.8 a | -29.38 b | 36.5 a | 2.17 | |
| 90 | 24.0 a | 4.18 a | 89.7 | 277.7 ab | 52.1 c | 86.9 b | 272.5 a | 658.8 b | 36.37 a | 59.5 ab | -29.37 b | 33.1 b | 2.49 | |
| 180 | 21.5 a | 3.83 ab | 86.2 | 267.0 b | 59.8 c | 75.4 b | 252.6 bc | 720.4 a | 33.44 ab | 51.1 bc | -28.34 a | 32.8 b | 2.39 | |
| 360 | 19.4 ab | 3.87 a | 81.9 | 236.6 c | 70.7 a | 77.4 b | 242.2 c | 684.2 ab | 38.40 a | 49.2 c | -27.91 a | 32.4 b | 2.47 | |
| P | 0.0092 ** | 0.0026 ** | 0.193 ^{ns} | <0.0001 *** | <0.0001 *** | <0.0001*** | 0.0004*** | 0<0.0001*** | 0.0011 ** | 0.0011 ** | 0.000*** | <0.0001 *** | 0.227 ^{ns} | |
| HG x WS | | | | | | | | | | | | | | |
| Ctrl | AG | 20.4 cd | 4.09 | 104.6 | 368.2 a | 29.6 h | 92.1 | 234.7 | 316.88 f | 36.32 abcd | 65.1 | -33.08 def | 37.1 | 1.98 b |
| 90 | AG | 29.3 a | 5.46 | 109.8 | 317.6 abcd | 43.8 fgh | 71.7 | 239.2 | 614.91 cd | 38.74 abcd | 49.1 | -32.99 def | 35.4 | 2.04 b |
| 180 | AG | 25.5 ab | 4.72 | 102 | 316.5 abcd | 54.7 def | 68.9 | 224.0 | 722.76 abc | 42.52 abc | 39.2 | -32.53 cdef | 32.9 | 2.47 ab |
| 360 | AG | 21.8 bc | 4.85 | 105.3 | 238.3 efg | 68.3 bcd | 59.4 | 208.3 | 640.33 bcd | 43.8 ab | 37.0 | -30.48 bc | 34.7 | 2.16 b |
| Ctrl | AR | 9.2 g | 1.29 | 96.6 | 322.8 abc | 42.0 fgh | 123.2 | 286.6 | 377.2 f | 25.04 d | 53.0 | -33.97 ef | 36.1 | 2.32 b |
| 90 | AR | 17.1 de | 2.07 | 78.3 | 339.1 ab | 49.8 efg | 106.3 | 276.5 | 769.5 ab | 37.62 abcd | 56.4 | -34.53 f | 31.5 | 3.72 a |
| 180 | AR | 10 g | 1.22 | 69.5 | 325.5 abc | 65.6 cde | 89.4 | 233.0 | 732 abc | 27.3 cd | 47.6 | -33.04 def | 33.1 | 2.59 ab |
| 360 | AR | 12.7 fg | 1.76 | 66.75 | 289.3 bcde | 64.1 de | 88.3 | 226.7 | 771.1 ab | 25.99 d | 36.3 | -31.69 bcde | 31.4 | 2.92 ab |
| Ctrl | AS | 20.1 cd | 4.52 | 96.2 | 306.4 abcde | 54.6 def | 106.4 | 217.5 | 295.1 f | 28.64 bcd | 65.2 | -31.93 bcde | 38.2 | 1.77 b |
| 90 | AS | 29.8 a | 5.94 | 105 | 253.5 cdef | 84.4 ab | 73.8 | 228.0 | 533.1 de | 44.63 a | 60.1 | -30.95 bcd | 35 | 2.22 b |
| 180 | AS | 29.4 a | 5.77 | 106.5 | 253.4 cdef | 82.0 abc | 68.2 | 227.5 | 663.0 abcd | 38.11 abcd | 50.3 | -29.89 b | 34.1 | 2.35 b |
| 360 | AS | 26.7 a | 5.95 | 100.3 | 245.5 defg | 87.0 a | 73.8 | 228.0 | 533.1 de | 44.63 a | 60.1 | -30.95 bcd | 34 | 2.2 b |
| Ctrl | AH | 13.3 fg | 2.49 | 63.3 | 203.0 fg | 30.9 h | 126.6 | 334.5 | 407.1 ef | 28.78 bcd | 83.8 | -18.52 a | 34.5 | 2.61 ab |
| 90 | AH | 19.9 cde | 3.30 | 65.8 | 200.7 fg | 30.3 h | 95.8 | 346.2 | 717.9 abc | 24.5 d | 72.6 | -19 a | 30.4 | 2 b |
| 180 | AH | 21 cd | 3.62 | 66.9 | 180.4 g | 37.0 gh | 74.9 | 325.9 | 764.0 abc | 25.83 d | 67.1 | -17.89 a | 31.1 | 2.14 b |
| 360 | AH | 16.4 ef | 2.90 | 55.3 | 173.5 g | 63.3 de | 88.3 | 305.7 | 792.4 a | 39.2 abcd | 63.4 | -18.52 a | 29.6 | 2.59 ab |
| P | <0.0001 *** | 0.6884 ^{ns} | 0.1171 ^{ns} | 0.0165 * | 0.0001 *** | 0.5289 ^{ns} | 0.0547 ^{ns} | 0.0328 * | 0.0037 ** | 0.2063 ^{ns} | 0.0133 * | 0.6337 ^{ns} | 0.0139 * | |

Table S4: Effects of halophyte genotype (HG) and the two corner (Ctrl and 360 mM NaCl) water salinity levels (WS) on physiological traits, biomass and element content at twenty days from the salt stress initiation (27 DAS). Significance codes: ^{ns}, ⁽⁺⁾, *, **, and *** mean, respectively, not significant and significant at $p \leq 0.1$, $p \leq 0.05$, $p \leq 0.01$ and $p \leq 0.001$. Different letters indicate significant differences at $P \leq 0.05$ (n=4).

| Halophyte Genotype | | FW (g plant ⁻¹) | DW (g plant ⁻¹) | PH (cm) | SLA (cm ² g ⁻¹) | EL (%) | Ca (mg kg ⁻¹ DW) | K (mg kg ⁻¹ DW) | Na (mg kg ⁻¹ DW) | P (mg kg ⁻¹ DW) | Mg (mg kg ⁻¹ DW) | δ13C (‰) | C (‰) | N (‰) |
|--------------------|----|--------------------------------|--------------------------------|------------|---|----------------------|--------------------------------|-------------------------------|--------------------------------|-------------------------------|--------------------------------|-------------|----------------------|----------------------|
| AH | | 14.38 b | 2.69 b | 59.3 c | 188 b | 47.1 b | 107.4 a | 320 a | 600 a | 34.0 ab | 73.6 a | -18.5 a | 32 b | 2.60 a |
| AG | | 21.1 a | 4.47 a | 104.9 a | 303 a | 49.0 b | 75.8 b | 221 c | 479 b | 40.1 a | 51.0 bc | -31. bc | 35.9 a | 2.07 ab |
| AR | | 10.9 c | 1.52 c | 81.7 b | 306 a | 53 b | 105.7 a | 257 b | 574 a | 25.5 b | 44.7 c | -32.8 c | 33.7 ab | 2.62 a |
| AS | | 23.4 a | 5.24 a | 98.2 a | 276 b | 70.8 a | 90.1 b | 223 c | 414 b | 36.6 a | 62.6 ab | -31.4 b | 36.1 a | 1.99 b |
| P | | <0.0001*** | <0.0001*** | <0.0001*** | <0.0001** | <0.0001** | <0.0001*** | <0.0001*** | <0.0001*** | 0.0014 ** | <0.0001*** | <0.0001*** | 0.0009 *** | 0.0058 ** |
| Water Salinity | | | | | | | | | | | | | | |
| Ctrl | | 19.4 a | 3.10 b | 90.2 a | 312 a | 70.7 a | 112.1 a | 268.4 a | 379 b | 29.7 b | 66.8 a | -29.4 b | 36.5 a | 2.17 b |
| 360 | | 15.7 b | 3.87 a | 81.9 b | 237 b | 39.3 b | 77.4 b | 242.4 b | 714 a | 38.4 a | 49.2 b | -27.9 a | 32.4 b | 2.47 a |
| P | | 0.0002*** | 0.0025 ** | 0.0613 (+) | <0.0001** | <0.0001** | <0.0001*** | 0.0012 ** | <0.0001*** | 0.0009 *** | <0.0001*** | 0.0002 *** | <0.0001*** | 0.0440 * |
| HG x WS | | | | | | | | | | | | | | |
| Ctrl | AG | 20.36 c | 4.09 | 104.6 a | 368 a | 29.6 | 92.1 | 235 c | 317 e | 36.3 | 65.1 | -33.1 cd | 37.1 | 1.98 |
| 360 | AG | 21.75 b | 4.85 | 105.2 a | 238 cd | 68.3 | 59.4 | 208 c | 640 bc | 43.8 | 37 | -30.5 b | 34.7 | 2.16 |
| Ctrl | AR | 9.15 f | 1.29 | 96.6 a | 323 ab | 42 | 123.2 | 287 b | 377 e | 25 | 53 | -34 d | 36.1 | 2.32 |
| 360 | AR | 12.67 e | 1.76 | 66.8 b | 289 bc | 64.1 | 88.3 | 227 c | 771 ab | 26 | 36.3 | -31.7 bc | 31.4 | 2.92 |
| Ctrl | AS | 20.05 c | 4.52 | 96.2 a | 306 b | 54.6 | 106.4 | 217 c | 295 e | 28.6 | 65.2 | -31.9 bcd | 38.2 | 1.77 |
| 360 | AS | 26.69 a | 5.95 | 100.2 a | 245 cd | 87 | 73.8 | 228 c | 533 cd | 44.6 | 60.1 | -30.9 bc | 34 | 2.2 |
| Ctrl | AH | 13.26 de | 2.49 | 63.3 b | 203 de | 30.9 | 126.6 | 335 a | 407 de | 28.8 | 83.8 | -18.5 a | 34.5 | 2.61 |
| 360 | AH | 16.38 d | 2.9 | 55.2 b | 174 e | 63.3 | 88.3 | 306 ab | 792 a | 39.2 | 63.4 | -18.5 a | 29.6 | 2.59 |
| P | | 0.0001 *** | 0.386 ^{ns} | 0.039 * | 0.0006 *** | 0.1184 ^{ns} | 0.9437 ^{ns} | 0.0166 * | 0.0498 * | 0.1392 ^{ns} | 0.1411 ^{ns} | 0.030 * | 0.4927 ^{ns} | 0.4222 ^{ns} |

Table S5: Effects of halophyte genotype (HG) and the two corner (Ctrl and 360 mM NaCl) water salinity levels (WS) on the physiological traits at seven days from the salt stress initiation (7 DAS). Significance codes: ^{ns}, ⁽⁺⁾, *, **, and *** mean, respectively, not significant and significant at $p \leq 0.1$, $p \leq 0.05$, $p \leq 0.01$ and $p \leq 0.001$. Different letters indicate significant differences at $P \leq 0.05$ (n=4).

| Halophyte Genotype | | SPAD | A ($\mu\text{mol m}^{-2} \text{s}^{-1}$) | GS ($\text{mol m}^{-2} \text{s}^{-1}$) | E ($\text{mol m}^{-2} \text{s}^{-1}$) | ΦPSII | Fv'/Fm' | ETR ($\mu\text{mol m}^{-2} \text{s}^{-1}$) | qP | iWUE ($\mu\text{mol CO}_2 \text{mol}^{-1} \text{H}_2\text{O}$) | RWC (%) | LWP (-Mpa) |
|--------------------|----|----------------------|---|---|--|----------------------|-------------|---|----------------------|---|----------------------|---------------|
| AH | | 29.2 b | 4.89 ab | 0.053 b | 0.855 b | 0.484 c | 0.556 b | 42.1 c | 0.870 B | 6.81 a | 85.8 a | -9.35 c |
| AG | | 16.2 c | 5.44 a | 0.092 a | 1.397 a | 0.624 a | 0.688 a | 54.5 a | 0.927 A | 4.78 b | 72.6 b | -3.62 b |
| AR | | 14.2 c | 4.31 b | 0.070 ab | 1.079 b | 0.557 b | 0.648 a | 48.6 b | 0.859 B | 4.38 b | 82.3 a | -2.66 a |
| AS | | 37.3 a | 5.33 a | 0.050 b | 0.781 b | 0.509 c | 0.661 a | 44.7 c | 0.769 C | 7.12 a | 72 b | -6.15 b |
| P | | <0.0001 *** | 0.0074 ** | 0.0001 *** | <0.0001 *** | <0.0001 *** | <0.0001 *** | <0.0001 *** | <0.0001 *** | 0.0005 *** | 0.0001 *** | <0.0001 *** |
| Water Salinity | | | | | | | | | | | | |
| Ctrl | | 25 | 5.64 a | 0.093 a | 1.414 a | 0.545 | 0.643 a | 47.6 | 0.848 | 4.35 b | 80.1 a | -3.73 a |
| 360 | | 23.4 | 4.68 b | 0.040 b | 0.643 b | 0.541 | 0.626 b | 47.4 | 0.846 | 7.88 a | 76.2 b | -7.16 b |
| P | | 0.5590 ^{ns} | <0.0001 *** | <0.0001 *** | <0.0001 *** | 0.7117 ^{ns} | 0.0103 * | 0.7415 ^{ns} | 0.1116 ^{ns} | <0.0001 *** | 0.0183 * | <0.0001 *** |
| WS x HG | | | | | | | | | | | | |
| Ctrl | AG | 17.3 c | 6.35 a | 0.137 a | 2.08 a | 0.64 | 0.68 a | 55.4 | 0.93 | 3.13 | 73.9 | -3.15 a |
| 360 | AG | 15 cd | 4.54 b | 0.046 cd | 0.71 cd | 0.61 | 0.66 b | 53.6 | 0.92 | 6.44 | 71.3 | -4.09 a |
| Ctrl | AR | 14.3 d | 4.74 b | 0.092 b | 1.42 b | 0.54 | 0.64 b | 47.3 | 0.84 | 3.4 | 85.9 | -2.22 a |
| 360 | AR | 14 d | 3.88 b | 0.046 cd | 0.74 cd | 0.57 | 0.65 b | 49.9 | 0.88 | 5.36 | 78.7 | -3.1 a |
| Ctrl | AS | 39.5 a | 6.33 a | 0.065 bcd | 1.01 bcd | 0.52 | 0.68 a | 46 | 0.77 | 6.29 | 74.8 | -3.47 a |
| 360 | AS | 35.1 a | 4.32 b | 0.034 d | 0.56 d | 0.49 | 0.64 b | 43.5 | 0.77 | 7.95 | 69.3 | -8.83 bc |
| Ctrl | AH | 28.9 b | 5.14 ab | 0.076 bc | 1.15 bc | 0.48 | 0.56 c | 41.8 | 0.85 | 4.61 | 85.8 | -6.1 ab |
| 360 | AH | 29.5 b | 4.64 b | 0.033 d | 0.56 d | 0.49 | 0.55 c | 42.3 | 0.89 | 9.02 | 85.7 | -12.6 c |
| P | | 0.0002 *** | 0.0766 ⁽⁺⁾ | 0.0077 ** | 0.0018 ** | 0.1328 ^{ns} | 0.0010 ** | 0.1725 ^{ns} | 0.3113 ^{ns} | 0.1743 ^{ns} | 0.3750 ^{ns} | 0.0003 *** |

Table S6: Effects of halophyte genotype (HG) and the two corner (Ctrl and 360 mM NaCl) water salinity levels (WS) on the physiological traits at twenty-seven days from the salt stress initiation (27 DAS). Significance codes: ^{ns}, ⁽⁺⁾, *, **, and *** mean, respectively, not significant and significant at $p \leq 0.1$, $p \leq 0.05$, $p \leq 0.01$ and $p \leq 0.001$. Different letters indicate significant differences at $P \leq 0.05$ (n=4).

| Halophyte Genotype | | SPAD | A ($\mu\text{mol m}^{-2} \text{s}^{-1}$) | GS ($\text{mol m}^{-2} \text{s}^{-1}$) | E ($\text{mol m}^{-2} \text{s}^{-1}$) | ΦPSII | Fv'/Fm' | ETR ($\mu\text{mol m}^{-2} \text{s}^{-1}$) | qP | iWUE ($\mu\text{mol CO}_2 \text{ mol}^{-1} \text{H}_2\text{O}$) | RWC (%) | LWP (-Mpa) |
|--------------------|----|----------------------|---|---|--|------------------------|----------------------|---|-------------|--|----------------------|---------------|
| AH | | 24.63 a | 5.48 a | 0.058 a | 1.25 a | 0.520 b | 0.58 c | 45.3 b | 0.901 b | 4.97 ab | 80.5 a | -14.98 c |
| AG | | 10.94 b | 5.56 a | 0.052 ab | 1.07 a | 0.644 a | 0.67 a | 56.1 a | 0.941 a | 6.10 a | 76.9 | -7.20 b |
| AR | | 6.05c | 4.4 b | 0.040 bc | 1.1 a | 0.609 a | 0.66 a | 53.3 a | 0.904 b | 4.19 b | 78.9 | -4.23 a |
| AS | | 24.38 a | 3.59 b | 0.028 c | 0.61 b | 0.516 b | 0.64 b | 45.3 b | 0.809 c | 5.71 ab | 79.4 | -4.88 ab |
| P | | <0.0001 *** | 0.003*** | <0.0001 *** | 0.0188 * | <0.0001 *** | <0.0001 *** | <0.0001*** | <0.0001*** | 0.049 * | 0.0001 *** | <0.0001*** |
| Water Salinity | | | | | | | | | | | | |
| Ctrl | | 25.2 | 5.23 a | 0.060 a | 1.32 a | 0.563 | 0.65 | 49.2 a | 0.867 b | 6.15 a | 82.6 | -4.34 a |
| 360 | | 24.6 | 4.29 b | 0.029 b | 0.69 b | 0.581 | 0.64 | 50.8 a | 0.910 a | 4.33 b | 75.3 | -11.31 b |
| P | | 0.9399 ^{ns} | 0.0002 *** | <0.0001 *** | 0.0002*** | 0.06809 ⁽⁺⁾ | 0.2847 ^{ns} | 0.06812 ⁽⁺⁾ | <0.0001 *** | 0.001** | 0.5113 ^{ns} | <0.0001*** |
| HG x WS | | | | | | | | | | | | |
| Ctrl | AG | 16.4 b | 6.04 a | 0.071 ab | 1.46 a | 0.64 a | 0.69 a | 55.3 ab | 0.92 ab | 4.36 b | 82.1 abc | -3.68 a |
| 360 | AG | 17.3 b | 5.07 ab | 0.032 cd | 0.68 bc | 0.65 a | 0.68 a | 56.9 a | 0.96 a | 7.83 a | 71.8 c | -10.73 b |
| Ctrl | AR | 15 b | 4.71 bc | 0.051 bc | 1.33 a | 0.6 abc | 0.67 ab | 52.5 abc | 0.89 bc | 3.56 b | 85.3 a | -3.23 a |
| 360 | AR | 14.6 b | 4.09 bc | 0.031 cd | 0.86 b | 0.62 ab | 0.68 a | 54.1 ab | 0.92 abc | 4.82 ab | 72.5 bc | -5.22 a |
| Ctrl | AS | 34 a | 4.37 bc | 0.037 cd | 0.76 b | 0.47 e | 0.62 bc | 41 e | 0.76 d | 6.03 ab | 85.1 a | -3.85 a |
| 360 | AS | 33.7 a | 2.82 c | 0.019 d | 0.49 c | 0.57 bc | 0.65 abc | 49.6 bc | 0.86 c | 5.39 ab | 73.8 bc | -5.92 ab |
| Ctrl | AH | 35.3 a | 5.8 a | 0.082 a | 1.74 a | 0.55 cd | 0.61 c | 47.9 cd | 0.9 bc | 3.37 b | 77.7 abc | -6.6 ab |
| 360 | AH | 33 a | 5.17 ab | 0.033 cd | 0.79 b | 0.49 de | 0.54 d | 42.6 de | 0.9 bc | 6.57 ab | 83.2 ab | -23.35 c |
| P | | 0.0008 *** | 0.0131 * | 0.0133 * | 0.0004 *** | <0.0001 *** | 0.0032 ** | 0.0001 *** | 0.0004 *** | 0.0222 * | 0.0022 ** | <0.0001 *** |

Table S7. Eigen analysis of the PCA correlation matrix

| | Eigenvalue | Percentage of variance | Cumulative percentage of variance |
|-----|------------|------------------------|-----------------------------------|
| PC1 | 7.01 | 29.22 | 29.22 |
| PC2 | 6.30 | 26.24 | 55.47 |
| PC3 | 4.00 | 16.65 | 72.11 |

Table S8. Correlation coefficients between quantitative and categorical variables, and the first three PCs. The PCs were computed using 32 input data.

| <i>Quantitative variables</i> | PC1 | PC2 | PC3 |
|-------------------------------|----------|----------|----------|
| A | 0.41 * | ns | ns |
| C | ns | 0.7 ** | -0.54 ** |
| Ca | 0.85 ** | 0.36 * | ns |
| DW | -0.65 ** | ns | -0.49 ** |
| δC | 0.63 ** | -0.66 ** | ns |
| E | 0.71 ** | 0.55 ** | ns |
| EL | -0.68 ** | -0.59 ** | ns |
| ETR | -0.45 ** | 0.58 ** | 0.61 ** |
| Fv'/Fm' | -0.52 ** | 0.73 ** | ns |
| FW | -0.67 ** | ns | -0.44 * |
| GS | 0.67 ** | 0.5 ** | ns |
| K | 0.89 ** | ns | ns |
| LWP | ns | 0.79 ** | ns |
| Mg | 0.71 ** | ns | -0.44 * |
| N | ns | ns | 0.64 ** |
| Na | ns | -0.71 ** | 0.59 ** |
| P | -0.53 ** | -0.44 * | ns |
| PH | -0.61 ** | 0.5 ** | -0.37 * |
| qP | ns | ns | 0.81 ** |
| RWC | 0.45 ** | ns | -0.4 * |
| SLA | ns | 0.81 ** | ns |
| SPAD | ns | -0.63 ** | -0.54 ** |
| WUE | -0.52 ** | -0.43 * | ns |
| $\Phi PSII$ | -0.44 * | 0.58 ** | 0.61 ** |
| <i>Categorical variables</i> | PC1 | PC2 | PC3 |
| HG | 0.62 ** | 0.48 ** | 0.65 ** |
| WS | 0.31 ** | 0.41 ** | 0.19 ** |

HG = Halophyte genotypes; WS = Water salinity; Significance codes: ns, * and ** mean non-significant and significant at $p \leq 0.05$ and $p \leq 0.01$, respectively.