**S3 Table. Accumulation of soluble sugars (A), organic acids (B), sugar alcohols (C), amino acids (D) and fatty acids (E) in leaves of six wheat genotypes under control and drought.**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | **Soissons** | | **Žitarka** | | **Srpanjka** | | **Antonija** | | **Toborzó** | | **Ellvis** | |
|  |  | **Control** | **Drought** | **Control** | **Drought** | **Control** | **Drought** | **Control** | **Drought** | **Control** | **Drought** | **Control** | **Drought** |
| Sucrose | **Ribose** | 23.6  ±3.7  a | 21.8  ±3.6  a | 17.6  ±3.0  a | 20.8  ±2.6  a | 19.7  ±2.2  a | 18.0  ±2.8  a | 18.4  ±3.1  a | 21.7  ±3.6  a | 20.0  ±4.5  a | 23.5  ±3.6  a | 19.8  ±2.1  a | 20.3  ±2.5  a |
| **Glucose** | 733  ±126  def | 1089  ±106  c | 526  ±71  ef | 1852  ±191  a | 658  ±209  def | 1917  ±137  a | 398  ±96  f | 1287  ±69  b | 450  ±100  ef | 1170  ±157  bc | 407  ±86  f | 970  ±110  cd |
| **Fructose** | 662  ±97  bcd | 726  ±73  bc | 418  ±80  efg | 874  ±65  b | 564  ±132  cde | 1584  ±130  a | 269  ±49  g | 538  ±39  cde | 333  ±85  efg | 817  ±66  b | 305  ±93  g | 441  ±67  defg |
| **Galactose** | 15.3  ±3.1  de | 19.0  ±5.7  cde | 8.3  ±2.2  f | 28.3  ±2.1  abc | 9.8  ±3.0  ef | 31.0  ±4.5  ab | 5.3  ±1.4  f | 21.1  ±3  bcd | 7.9  ±3.2  f | 27.5  ±3.1  abc | 6.4  ±1.4  f | 33.9  ±5.6  a |
| **Sucrose** | 6.2  ±1.1  f | 3095  ±439  ab | 46.6  ±18  f | 2965  ±217  ab | 1096  ±369  de | 1129  ±34  de | 1346  ±298  d | 3693  ±285  a | 359  ±76  ef | 2863  ±239  bc | 886  ±94  de | 2150  ±302  c |
| **D1** | 1.1  ±1.0  f | 164  ±20  b | 16.5  ±6.5  e | 108  ±7.4  cd | 217  ±24  a | 89  ±3.4  de | 209  ±22  a | 106  ±12  cd | 88.5  ±12  d | 162  ±18  b | 142  ±14  bc | 149  ±17  bc |
| **D2** | 1.6  ±1.0  e | 74.4  ±14  b | 5.5  ±3.2  e | 36.9  ±3.4  d | 137  ±17  a | 44  ±2.2  cd | 138  ±14  a | 31  ±3.2  d | 50.3  ±6.1  c | 74.5  ±12  b | 88.6  ±6.0  b | 77.3  ±10  b |
| **D3** | 1.9  ±1.8  g | 119  ±34  cd | 25.8  ±8.2  ef | 37.5  ±6.1  e | 322  ±42  a | 91.5  ±5.0  d | 329  ±31  a | 21.5  ±3.2  f | 120  ±14  c | 123  ±24  c | 222  ±16  b | 155  ±23  c |
| **D4** | 0.7  ±0,2  f | 1.4  ±1.0  f | 1.3  ±0.9  f | 0.5  ±0.4  f | 12.8  ±1.4  b | 29.9  ±2.3  a | 10.7  ±1.0  b | 0.8  ±0.5  f | 6.1  ±1.2  d | 1.8  ±0.8  ef | 8.3  ±0.6  c | 4.1  ±0.9  de |
| **D5** | 0.6  ±0.4  f | 59.4  ±6.3  ab | 1.9  ±1.4  f | 47.9  ±3.3  b | 30.1  ±5.3  c | 29.9  ±2.2  cd | 34.1  ±3.2  c | 48.3  ±4.6  b | 10.9  ±1.6  e | 59.9  ±3.2  a | 23.0  ±2.0  d | 49.7  ±4.4  b |
| organic acids | **cis-aconitic acids** | 456  ±60  ab | 424  ±52  ab | 349  ±44  bc | 513  ±38  ab | 249  ±59  b | 232  ±62  b | 334  ±41  bc | 467  ±52  ab | 457  ±144  ab | 420  ±75  ab | 557  ±80  a | 558  ±93  a |
| **Malic acid** | 124  ±28  cd | 222  ±37  ab | 105  ±19  d | 193  ±39  b | 158  ±9.1  bc | 201  ±12  bc | 124  ±22  d | 263  ±27  a | 111  ±29  d | 191  ±11  bc | 92  ±12  d | 85  ±9.2  d |
| **Phosphoric**  **acid** | 99  ±29  abc | 137  ±10  a | 71  ±13  c | 100  ±7.6  b | 54  ±12  cd | 40  ±4.1  d | 68  ±15  c | 104  ±8.9  b | 105  ±30  ab | 111  ±17  ab | 76  ±12  c | 55  ±7.1  d |
| **Galactonic acid** | 22.2  ±3.1  abc | 25.2  ±4.1  a | 17.4  ±4.0  ab | 19.7  ±2.4  ab | 17.2  ±3.1  ab | 15.2  ±2.4  b | 16.9  ±4.0  b | 18.9  ±3.2  ab | 18.8  ±5.2  ab | 22.3  ±3.1  ab | 15.9  ±2.1  b | 15.0  ±1.8  b |
| **Citric acid** | 71  ±21  cd | 65  ±18  cd | 77  ±11  cd | 99  ±28  c | 341  ±48  a | 342  ±27  a | 201  ±42  b | 160  ±32  b | 198  ±134  b | 64  ±13  de | 184  ±19  b | 43  ±5  e |
| **Succinic acid** | 5.2  ±1.4  a | 5.1  ±1.3  a | 4.9  ±0.8  a | 5.3  ±0.5  a | 6.0  ±0.7  a | 4.4  ±0.4  a | 5.9  ±0.9  a | 6.4  ±0.8  a | 6.3  ±1.5  a | 5.1  ±0.6  a | 6.0  ±0.8  a | 5.0  ±0.9  ab |
| **Oxalic acid** | 5.9  ±1.7  c | 22.9  ±2.7  a | 7.2  ±1.1  c | 23.2  ±2.6  a | 7.3  ±2.8  cd | 4.5  ±0.8  d | 10.0  ±2.8  c | 21.6  ±1.9  a | 16.3  ±8.4  b | 21.6  ±2  a | 19.5  ±3.2  ab | 19.2  ±2.8  ab |
| **OA1** | 5.6  ±1.4  ab | 7.2  ±0.6  a | 5.6  ±1.2  ab | 6.7  ±1.5  ab | 7.9  ±1.4  a | 5.8  ±0.9  b | 3.3  ±0.7  cd | 5.8  ±0.8  b | 3.8  ±0.7  c | 7.5  ±1.5  ab | 2.5  ±0.6  d | 4.1  ±0.8  c |
| **OA2** | 2.9  ±1.7  d | 16.0  ±2.4  a | 6.8  ±0.8  c | 19.3  ±2.7  a | 5.9  ±2.6  cd | 0.1  ±0  e | 7.1  ±1.8  cd | 11.2  ±0.8  bc | 14.5  ±2.8  ab | 8.6  ±2.5  c | 15.9  ±1.4  a | 5.3  ±0.8  d |
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| continue | | | | | | | | | | | | | |
|  |  | **Soissons** | | **Žitarka** | | **Srpanjka** | | **Antonija** | | **Toborzó** | | **Ellvis** | |
|  |  | **Control** | **Drought** | **Control** | **Drought** | **Control** | **Drought** | **Control** | **Drought** | **Control** | **Drought** | **Control** | **Drought** |
| sugar alcohols | **SA1** | 8.7  ±2.7  cde | 11.6  ±2.5  bc | 10.7  ±1.8  bc | 11.6  ±1.2  bc | 18.8  ±1,5  a | 17.7  ±1.3  a | 10.0  ±1.2cccd | 11.6  ±1.5  bc | 6.4  ±1.3  e | 12.8  ±2.7  bc | 7.6  ±1.4  de | 13.4  ±1.2  b |
| **SA2** | 10.5  ±2.4  a | 3.3  ±0.8  cd | 3.4  ±0.7  cd | 5.8  ±0.8  b | 3.7  ±1.6  cd | 9.0  ±1.2  a | 0.1  ±0  e | 3.0  ±0.7  cd | 1.9  ±1.2  d | 4.8  ±1.0  bc | 0.1  ±0  e | 4.5  ±1.2  bc |
| **SA3** | 3.2  ±3.3  e | 22.1  ±2.8  bc | 10.6  ±4.5  de | 25.0  ±5.9  b | 26.4  ±3.5  ab | 32.1  ±2.9  a | 17.5  ±4.7  bcd | 25.0  ±1.2  b | 10.7  ±0.9  de | 23.3  ±4.4  bc | 13.5  ±2.8  cde | 19.2  ±1.9  bcd |
| **Myo-inositol** | 2.3  ±0.9  f | 24.2  ±3.0  c | 5.3  ±0.8  f | 28.0  ±3.9  b | 13.7  ±2.1  d | 21.0  ±0.1  c | 12.7  ±2.9  d | 37.0  ±3.6  a | 11.7  ±4.2  d | 25.6  ±3.1  c | 12.4  ±2,6  d | 21.2  ±1.8  c |
| Amino acid | **Glutamic acid** | 0.1  ±0.  f | 3.8  ±0.9  bc | 0.1  ±0.05  f | 6.5  ±1.1  b | 1.2  ±0.3  e | 1.9  ±0.4  de | 2.3  ±0.4  d | 10.2  ±0.9  a | 1.0  ±0.1  e | 3.7  ±0.2  c | 1.6  ±0.3  de | 0.9  ±0.3  e |
| **GABA** | 6.8  ±1.9  d | 36.8  ±8.1  a | 6.4  ±4.8  d | 28.5  ±5.2  ab | 8.1  ±3.8  cd | 21.9  ±4.2  b | 6.7  ±0.5  d | 36.8  ±6.1  a | 9.3  ±3.9  c | 29.9  ±3.0  a | 6.2  ±1.4  d | 13.8  ±2.0  c |
| **L-Threonin** | 0.1  ±0.1  e | 38.7  ±2.4  b | 0.1  ±0.1  e | 45.6  ±2.0  a | 0.1  ±0.1  d | 20.6  ±1.4  d | 0.1  ±0.1  e | 42.2  ±2.8  ab | 0.1  ±0.1  e | 36.6  ±2.9  b | 0.1  ±0.1  e | 27.1  ±1.3  c |
| Lipids | **Stearic acid** | 0.1  ±0.08  e | 25.1  ±1.6  c | 0.1  ±0.07  e | 32.0  ±1.9  b | 0.1  ±0.1  e | 12.2  ±0.5  d | 0.1  ±0.07  e | 38.4  ±1.9  a | 0.1  ±0.09  e | 23.0  ±1.8  c | 0.1  ±0.1  e | 14.4  ±1.0  d |
| **Palmitic acid** | 7.40  ±1.3  f | 31.8  ±2.8  ab | 12.1  ±0.9  e | 36.9  ±3.1  ab | 17.7  ±3.8  de | 23.4  ±2.3  c | 15.6  ±2.3  d | 38.5  ±2.8  a | 20.3  ±3.2  cd | 30.2  ±3.9  b | 16.2  ±1.6  d | 28.3  ±2.7  b |
| **Propanoic acid** | 14.7  ±2.9  ab | 7.9  ±1.4  cd | 8.4  ±1.7  cd | 4.5  ±0.8  e | 12.4  ±2.7  bc | 4.1  ±0.7  e | 10.4  ±0.9  c | 5.1  ±1.2  e | 16.1  ±2.0  ab | 7.7  ±1.4  d | 17.9  ±3.1  a | 4.1  ±1.0  e |