

S8 Table. Data on non-structural carbohydrate concentrations and $\delta^{13}\text{C}$ in leaf samples. The following variables are listed:

Dome = experimental unit of the Ecotron experiment

Species = species identity (for abbreviations of species names see S1 Table)

FG = species assignment to functional groups (GR = grasses, SH = small herbs, TH = tall herbs, LE = legumes)

SR = sown species richness

NSC = non-structural carbohydrate

$\delta^{13}\text{C}$ background (‰) = $\delta^{13}\text{C}$ background values (taken from shoot samples)

C ($\mu\text{g C mg}_{\text{dw}}^{-1}$) = carbon concentration based on plant dry weight

$\delta^{13}\text{C}$ uncorr (‰) = measured $\delta^{13}\text{C}$ of samples taken after the labelling period

$\delta^{13}\text{C}$ corr (‰) = $\delta^{13}\text{C}$ of labelled samples corrected with a dome-specific factor to account for differences among the experimental units in average air $\delta^{13}\text{C}$ -CO₂ values during the depletion and enrichment phase

^{13}C atom% excess = ^{13}C atom% excess based on corrected $\delta^{13}\text{C}$ values

^{13}C abundance ($\text{ng } ^{13}\text{C mg}_{\text{dw}}^{-1}$) = ^{13}C abundance based on corrected $\delta^{13}\text{C}$ values

Calculations are described in detail in Material and Methods. NA = no data available

| Dome | Species | SR | FG | NSC | $\delta^{13}\text{C}$ background (‰) | C ($\mu\text{g C mg}_{\text{dw}}^{-1}$) | $\delta^{13}\text{C}$ uncorr (‰) | $\delta^{13}\text{C}$ corr (‰) | ^{13}C atom% excess | ^{13}C abundance ($\text{ng } ^{13}\text{C mg}_{\text{dw}}^{-1}$) |
|------|---------|----|----|----------|--------------------------------------|---|----------------------------------|--------------------------------|------------------------------|--|
| D01 | AchMil | 16 | TH | Glucose | -31.635 | 6.48 | -2.276 | -3.398 | 0.0309 | 2.00 |
| D01 | AchMil | 16 | TH | Fructose | -31.635 | 8.22 | -0.919 | -2.041 | 0.0324 | 2.66 |
| D01 | AchMil | 16 | TH | Sucrose | -31.635 | 8.30 | -1.113 | -2.234 | 0.0322 | 2.67 |
| D01 | AchMil | 16 | TH | RFO | -31.635 | 20.48 | -3.397 | -4.518 | 0.0297 | 6.07 |
| D01 | AchMil | 16 | TH | Starch | -31.635 | 10.49 | -7.088 | -8.210 | 0.0256 | 2.69 |
| D01 | FesPra | 16 | GR | Glucose | -28.302 | 5.46 | 0.410 | -0.712 | 0.0302 | 1.65 |
| D01 | FesPra | 16 | GR | Fructose | -28.302 | 4.52 | 2.601 | 1.479 | 0.0326 | 1.47 |
| D01 | FesPra | 16 | GR | Sucrose | -28.302 | 18.62 | 2.398 | 1.276 | 0.0324 | 6.03 |
| D01 | FesPra | 16 | GR | RFO | -28.302 | 81.72 | -3.320 | -4.442 | 0.0261 | 21.33 |
| D01 | FesPra | 16 | GR | Starch | -28.302 | 9.87 | -1.928 | -3.050 | 0.0276 | 2.73 |
| D01 | LatPra | 16 | LE | Glucose | -28.341 | 7.78 | 0.576 | -0.546 | 0.0304 | 2.37 |
| D01 | LatPra | 16 | LE | Fructose | -28.341 | 5.37 | 3.932 | 2.810 | 0.0341 | 1.83 |
| D01 | LatPra | 16 | LE | Sucrose | -28.341 | 11.29 | 1.375 | 0.253 | 0.0313 | 3.53 |
| D01 | LatPra | 16 | LE | RFO | -28.341 | 15.12 | -4.198 | -5.320 | 0.0252 | 3.81 |
| D01 | LatPra | 16 | LE | Starch | -28.341 | 11.36 | -3.982 | -5.104 | 0.0254 | 2.89 |
| D01 | TriFla | 16 | GR | Glucose | -29.332 | 4.24 | -4.476 | -5.598 | 0.0260 | 1.10 |
| D01 | TriFla | 16 | GR | Fructose | -29.332 | 3.35 | -0.382 | -1.504 | 0.0304 | 1.02 |
| D01 | TriFla | 16 | GR | Sucrose | -29.332 | 42.87 | 0.134 | -0.988 | 0.0310 | 13.29 |
| D01 | TriFla | 16 | GR | RFO | -29.332 | 7.41 | 3.249 | 2.127 | 0.0344 | 2.55 |
| D01 | TriFla | 16 | GR | Starch | -29.332 | 9.61 | -2.549 | -3.671 | 0.0281 | 2.70 |
| D02 | ArrEla | 4 | GR | Glucose | -29.447 | 5.66 | -10.375 | -10.369 | 0.0209 | 1.18 |

S8 Table continued

| Dome | Species | SR | FG | NSC | $\delta^{13}\text{C}$ background (‰) | C ($\mu\text{g C mg}_{\text{dw}}^{-1}$) | $\delta^{13}\text{C}$ uncorr (‰) | $\delta^{13}\text{C}$ corr (‰) | ^{13}C atom% excess | ^{13}C abundance (ng $^{13}\text{C mg}_{\text{dw}}^{-1}$) |
|------|---------|----|----|----------|--------------------------------------|---|----------------------------------|--------------------------------|------------------------------|---|
| D02 | ArrEla | 4 | GR | Fructose | -29.447 | 3.36 | -3.911 | -3.905 | 0.0279 | 0.94 |
| D02 | ArrEla | 4 | GR | Sucrose | -29.447 | 49.49 | -3.688 | -3.682 | 0.0282 | 13.95 |
| D02 | ArrEla | 4 | GR | RFO | -29.447 | 16.07 | -6.089 | -6.083 | 0.0256 | 4.11 |
| D02 | ArrEla | 4 | GR | Starch | -29.447 | 6.66 | -7.639 | -7.633 | 0.0239 | 1.59 |
| D02 | PlaLan | 4 | SH | Glucose | -30.136 | 20.94 | -16.533 | -16.527 | 0.0149 | 3.12 |
| D02 | PlaLan | 4 | SH | Fructose | -30.136 | 4.09 | -8.582 | -8.576 | 0.0236 | 0.97 |
| D02 | PlaLan | 4 | SH | Sucrose | -30.136 | 7.32 | -6.894 | -6.888 | 0.0254 | 1.86 |
| D02 | PlaLan | 4 | SH | RFO | -30.136 | 21.68 | -5.840 | -5.834 | 0.0266 | 5.76 |
| D02 | PlaLan | 4 | SH | Starch | -30.136 | 10.99 | -11.156 | -11.150 | 0.0208 | 2.28 |
| D03 | GerPra | 16 | TH | Glucose | -28.989 | 6.83 | -5.698 | -5.630 | 0.0256 | 1.74 |
| D03 | GerPra | 16 | TH | Fructose | -28.989 | 4.07 | -5.079 | -5.011 | 0.0262 | 1.07 |
| D03 | GerPra | 16 | TH | Sucrose | -28.989 | 13.68 | -1.891 | -1.824 | 0.0297 | 4.07 |
| D03 | GerPra | 16 | TH | RFO | -28.989 | 9.77 | -9.234 | -9.166 | 0.0217 | 2.12 |
| D03 | GerPra | 16 | TH | Starch | -28.989 | 11.13 | -8.193 | -8.126 | 0.0228 | 2.54 |
| D03 | HelPub | 16 | GR | Glucose | -29.420 | 6.78 | -12.548 | -12.480 | 0.0185 | 1.26 |
| D03 | HelPub | 16 | GR | Fructose | -29.420 | 4.81 | -6.039 | -5.971 | 0.0256 | 1.23 |
| D03 | HelPub | 16 | GR | Sucrose | -29.420 | 27.93 | -4.103 | -4.036 | 0.0278 | 7.75 |
| D03 | HelPub | 16 | GR | RFO | -29.420 | 41.91 | -7.927 | -7.860 | 0.0236 | 9.88 |
| D03 | HelPub | 16 | GR | Starch | -29.420 | 3.60 | -7.478 | -7.411 | 0.0241 | 0.87 |
| D03 | PlaLan | 16 | SH | Glucose | -30.962 | 15.59 | -13.802 | -13.735 | 0.0188 | 2.94 |
| D03 | PlaLan | 16 | SH | Fructose | -30.962 | 6.60 | -7.235 | -7.168 | 0.0260 | 1.72 |
| D03 | PlaLan | 16 | SH | Sucrose | -30.962 | 11.44 | -7.927 | -7.860 | 0.0253 | 2.89 |
| D03 | PlaLan | 16 | SH | RFO | -30.962 | 29.75 | -7.731 | -7.664 | 0.0255 | 7.58 |
| D03 | PlaLan | 16 | SH | Starch | -30.962 | 10.67 | -15.458 | -15.391 | 0.0170 | 1.82 |
| D03 | TarOff | 16 | SH | Glucose | -30.817 | 6.69 | -16.271 | -16.203 | 0.0160 | 1.07 |
| D03 | TarOff | 16 | SH | Fructose | -30.817 | 9.75 | -20.171 | -20.103 | 0.0117 | 1.14 |
| D03 | TarOff | 16 | SH | Sucrose | -30.817 | 20.64 | -4.706 | -4.639 | 0.0286 | 5.91 |
| D03 | TarOff | 16 | SH | RFO | -30.817 | 16.19 | -19.349 | -19.282 | 0.0126 | 2.04 |
| D03 | TarOff | 16 | SH | Starch | -30.817 | 8.61 | -13.749 | -13.682 | 0.0187 | 1.61 |
| D04 | FesPra | 4 | GR | Glucose | -27.125 | 4.81 | -3.640 | -2.913 | 0.0265 | 1.27 |
| D04 | FesPra | 4 | GR | Fructose | -27.125 | 4.27 | -2.821 | -2.094 | 0.0274 | 1.17 |
| D04 | FesPra | 4 | GR | Sucrose | -27.125 | 24.94 | -0.586 | 0.141 | 0.0298 | 7.44 |
| D04 | FesPra | 4 | GR | RFO | -27.125 | 124.51 | -2.297 | -1.570 | 0.0280 | 34.80 |
| D04 | FesPra | 4 | GR | Starch | -27.125 | 7.52 | -4.068 | -3.341 | 0.0260 | 1.96 |

S8 Table continued

| Dome | Species | SR | FG | NSC | $\delta^{13}\text{C}$ background (‰) | C ($\mu\text{g C mg}_{\text{dw}}^{-1}$) | $\delta^{13}\text{C}$ uncorr (‰) | $\delta^{13}\text{C}$ corr (‰) | ^{13}C atom% excess | ^{13}C abundance (ng $^{13}\text{C mg}_{\text{dw}}^{-1}$) |
|------|---------|----|----|----------|--------------------------------------|---|----------------------------------|--------------------------------|------------------------------|---|
| D04 | PlaLan | 4 | SH | Glucose | -29.309 | 25.41 | -8.651 | -7.924 | 0.0234 | 5.94 |
| D04 | PlaLan | 4 | SH | Fructose | -29.309 | 6.57 | -2.651 | -1.924 | 0.0300 | 1.97 |
| D04 | PlaLan | 4 | SH | Sucrose | -29.309 | 11.78 | -1.311 | -0.584 | 0.0314 | 3.70 |
| D04 | PlaLan | 4 | SH | RFO | -29.309 | 17.09 | -0.924 | -0.197 | 0.0318 | 5.44 |
| D04 | PlaLan | 4 | SH | Starch | -29.309 | 10.69 | -8.116 | -7.389 | 0.0240 | 2.56 |
| D05 | RanRep | 4 | SH | Glucose | -28.435 | 26.48 | 0.356 | -0.505 | 0.0305 | 8.09 |
| D05 | RanRep | 4 | SH | Fructose | -28.435 | 8.80 | -2.472 | -3.332 | 0.0275 | 2.42 |
| D05 | RanRep | 4 | SH | Sucrose | -28.435 | 26.73 | 0.583 | -0.278 | 0.0308 | 8.23 |
| D05 | RanRep | 4 | SH | RFO | -28.435 | 13.03 | 2.747 | 1.887 | 0.0332 | 4.32 |
| D05 | RanRep | 4 | SH | Starch | -28.435 | 11.03 | -5.732 | -6.592 | 0.0239 | 2.63 |
| D06 | GerPra | 16 | TH | Glucose | -28.285 | 7.97 | -4.596 | -5.464 | 0.0250 | 1.99 |
| D06 | GerPra | 16 | TH | Fructose | -28.285 | 3.77 | -8.192 | -9.060 | 0.0210 | 0.79 |
| D06 | GerPra | 16 | TH | Sucrose | -28.285 | 23.95 | -1.217 | -2.086 | 0.0287 | 6.86 |
| D06 | GerPra | 16 | TH | RFO | -28.285 | 6.59 | -3.616 | -4.485 | 0.0260 | 1.72 |
| D06 | GerPra | 16 | TH | Starch | -28.285 | 10.27 | -7.246 | -8.115 | 0.0221 | 2.27 |
| D06 | PlaMed | 16 | SH | Glucose | -29.368 | 12.50 | -0.366 | -1.234 | 0.0308 | 3.85 |
| D06 | PlaMed | 16 | SH | Fructose | -29.368 | 6.45 | 1.208 | 0.339 | 0.0325 | 2.10 |
| D06 | PlaMed | 16 | SH | Sucrose | -29.368 | 4.05 | -0.405 | -1.273 | 0.0307 | 1.25 |
| D06 | PlaMed | 16 | SH | RFO | -29.368 | 8.84 | 0.125 | -0.744 | 0.0313 | 2.77 |
| D06 | PlaMed | 16 | SH | Starch | -29.368 | 11.20 | -4.945 | -5.814 | 0.0258 | 2.89 |
| D07 | AloPra | 16 | GR | Glucose | -28.673 | 3.44 | -12.112 | -12.045 | 0.0182 | 0.63 |
| D07 | AloPra | 16 | GR | Fructose | -28.673 | 2.35 | -10.852 | -10.784 | 0.0196 | 0.46 |
| D07 | AloPra | 16 | GR | Sucrose | -28.673 | 25.31 | -2.657 | -2.589 | 0.0285 | 7.22 |
| D07 | AloPra | 16 | GR | RFO | -28.673 | 71.16 | -14.727 | -14.659 | 0.0153 | 10.91 |
| D07 | AloPra | 16 | GR | Starch | -28.673 | 3.17 | -12.835 | -12.768 | 0.0174 | 0.55 |
| D07 | LatPra | 16 | LE | Glucose | -28.992 | 10.41 | -3.795 | -3.727 | 0.0276 | 2.88 |
| D07 | LatPra | 16 | LE | Fructose | -28.992 | 10.72 | -5.087 | -5.019 | 0.0262 | 2.81 |
| D07 | LatPra | 16 | LE | Sucrose | -28.992 | 13.85 | -1.749 | -1.681 | 0.0299 | 4.14 |
| D07 | LatPra | 16 | LE | RFO | -28.992 | 11.37 | -3.918 | -3.850 | 0.0275 | 3.13 |
| D07 | LatPra | 16 | LE | Starch | -28.992 | 11.48 | -10.103 | -10.036 | 0.0207 | 2.38 |
| D07 | PimMaj | 16 | TH | Glucose | -29.011 | 7.84 | -10.833 | -10.766 | 0.0200 | 1.57 |
| D07 | PimMaj | 16 | TH | Fructose | -29.011 | 5.42 | -7.232 | -7.165 | 0.0239 | 1.29 |
| D07 | PimMaj | 16 | TH | Sucrose | -29.011 | 17.60 | -3.450 | -3.382 | 0.0280 | 4.93 |
| D07 | PimMaj | 16 | TH | RFO | -29.011 | 21.87 | -3.792 | -3.725 | 0.0277 | 6.05 |

S8 Table continued

| Dome | Species | SR | FG | NSC | $\delta^{13}\text{C}$ background (‰) | C ($\mu\text{g C mg}_{\text{dw}}^{-1}$) | $\delta^{13}\text{C}$ uncorr (‰) | $\delta^{13}\text{C}$ corr (‰) | ^{13}C atom% excess | ^{13}C abundance (ng $^{13}\text{C mg}_{\text{dw}}^{-1}$) |
|------|---------|----|----|----------|--------------------------------------|---|----------------------------------|--------------------------------|------------------------------|---|
| D07 | PimMaj | 16 | TH | Starch | -29.011 | 11.07 | -9.193 | -9.126 | 0.0218 | 2.41 |
| D07 | PlaMed | 16 | SH | Glucose | -29.755 | 6.91 | -10.904 | -10.837 | 0.0207 | 1.43 |
| D07 | PlaMed | 16 | SH | Fructose | -29.755 | 1.50 | -5.738 | -5.671 | 0.0263 | 0.40 |
| D07 | PlaMed | 16 | SH | Sucrose | -29.755 | 4.10 | -2.679 | -2.612 | 0.0297 | 1.22 |
| D07 | PlaMed | 16 | SH | RFO | -29.755 | 5.35 | -7.400 | -7.333 | 0.0245 | 1.31 |
| D07 | PlaMed | 16 | SH | Starch | -29.755 | 10.15 | -8.517 | -8.450 | 0.0233 | 2.37 |
| D08 | AntOdo | 4 | GR | Glucose | -28.628 | 15.64 | -3.561 | -3.514 | 0.0275 | 4.30 |
| D08 | AntOdo | 4 | GR | Fructose | -28.628 | 2.85 | -8.237 | -8.190 | 0.0224 | 0.64 |
| D08 | AntOdo | 4 | GR | Sucrose | -28.628 | 43.44 | -3.790 | -3.744 | 0.0272 | 11.82 |
| D08 | AntOdo | 4 | GR | RFO | -28.628 | 114.74 | -9.328 | -9.281 | 0.0212 | 24.28 |
| D08 | AntOdo | 4 | GR | Starch | -28.628 | 7.84 | -13.355 | -13.309 | 0.0168 | 1.31 |
| D08 | PruVul | 4 | SH | Glucose | -29.899 | 9.04 | -6.981 | -6.935 | 0.0251 | 2.27 |
| D08 | PruVul | 4 | SH | Fructose | -29.899 | NA | NA | NA | NA | NA |
| D08 | PruVul | 4 | SH | Sucrose | -29.899 | 13.78 | -3.157 | -3.110 | 0.0293 | 4.04 |
| D08 | PruVul | 4 | SH | RFO | -29.899 | 29.91 | -3.775 | -3.729 | 0.0286 | 8.56 |
| D08 | PruVul | 4 | SH | Starch | -29.899 | 10.95 | -12.902 | -12.856 | 0.0186 | 2.04 |
| D09 | BelPer | 16 | SH | Glucose | -30.689 | 13.21 | -15.129 | -14.221 | 0.0180 | 2.38 |
| D09 | BelPer | 16 | SH | Fructose | -30.689 | 10.80 | -13.040 | -12.132 | 0.0203 | 2.19 |
| D09 | BelPer | 16 | SH | Sucrose | -30.689 | 13.01 | -8.288 | -7.381 | 0.0255 | 3.32 |
| D09 | BelPer | 16 | SH | RFO | -30.689 | 52.31 | -12.705 | -11.798 | 0.0207 | 10.81 |
| D09 | BelPer | 16 | SH | Starch | -30.689 | 16.53 | -9.482 | -8.575 | 0.0242 | 4.00 |
| D09 | CreBie | 16 | TH | Glucose | -29.634 | 13.67 | -10.089 | -9.181 | 0.0224 | 3.06 |
| D09 | CreBie | 16 | TH | Fructose | -29.634 | 21.81 | -11.070 | -10.163 | 0.0213 | 4.64 |
| D09 | CreBie | 16 | TH | Sucrose | -29.634 | 24.59 | -5.245 | -4.338 | 0.0277 | 6.80 |
| D09 | CreBie | 16 | TH | RFO | -29.634 | 17.75 | -7.429 | -6.521 | 0.0253 | 4.49 |
| D09 | CreBie | 16 | TH | Starch | -29.634 | 10.73 | -12.121 | -11.214 | 0.0202 | 2.16 |
| D09 | VerCha | 16 | SH | Glucose | -29.346 | 29.08 | -18.935 | -18.028 | 0.0124 | 3.60 |
| D09 | VerCha | 16 | SH | Fructose | -29.346 | 3.04 | -14.316 | -13.408 | 0.0174 | 0.53 |
| D09 | VerCha | 16 | SH | Sucrose | -29.346 | 5.30 | -18.249 | -17.342 | 0.0131 | 0.70 |
| D09 | VerCha | 16 | SH | RFO | -29.346 | 22.32 | -19.443 | -18.536 | 0.0118 | 2.64 |
| D09 | VerCha | 16 | SH | Starch | -29.346 | 9.47 | -13.821 | -12.914 | 0.0180 | 1.70 |
| D10 | PlaMed | 4 | SH | Glucose | -29.111 | 9.71 | -7.313 | -7.349 | 0.0238 | 2.31 |
| D10 | PlaMed | 4 | SH | Fructose | -29.111 | 3.88 | -2.222 | -2.258 | 0.0294 | 1.14 |
| D10 | PlaMed | 4 | SH | Sucrose | -29.111 | 4.19 | -3.680 | -3.716 | 0.0278 | 1.16 |

S8 Table continued

| Dome | Species | SR | FG | NSC | $\delta^{13}\text{C}$ background (‰) | C ($\mu\text{g C mg}_{\text{dw}}^{-1}$) | $\delta^{13}\text{C}$ uncorr (‰) | $\delta^{13}\text{C}$ corr (‰) | ^{13}C atom% excess | ^{13}C abundance (ng $^{13}\text{C mg}_{\text{dw}}^{-1}$) |
|------|---------|----|----|----------|--------------------------------------|---|----------------------------------|--------------------------------|------------------------------|---|
| D10 | PlaMed | 4 | SH | RFO | -29.111 | 5.00 | -3.295 | -3.331 | 0.0282 | 1.41 |
| D10 | PlaMed | 4 | SH | Starch | -29.111 | 10.05 | -6.368 | -6.404 | 0.0248 | 2.50 |
| D10 | VicCra | 4 | LE | Glucose | -28.847 | 7.98 | -4.152 | -4.188 | 0.0270 | 2.15 |
| D10 | VicCra | 4 | LE | Fructose | -28.847 | 7.58 | -2.314 | -2.350 | 0.0290 | 2.20 |
| D10 | VicCra | 4 | LE | Sucrose | -28.847 | 23.15 | -1.860 | -1.896 | 0.0295 | 6.82 |
| D10 | VicCra | 4 | LE | RFO | -28.847 | 11.99 | -1.360 | -1.396 | 0.0300 | 3.60 |
| D10 | VicCra | 4 | LE | Starch | -28.847 | 12.15 | -9.179 | -9.215 | 0.0215 | 2.61 |
| D11 | AjuRep | 16 | SH | Glucose | -28.407 | 32.70 | -21.250 | -20.918 | 0.0082 | 2.68 |
| D11 | AjuRep | 16 | SH | Fructose | -28.407 | 2.60 | -9.786 | -9.453 | 0.0207 | 0.54 |
| D11 | AjuRep | 16 | SH | Sucrose | -28.407 | 14.66 | -4.572 | -4.240 | 0.0264 | 3.87 |
| D11 | AjuRep | 16 | SH | RFO | -28.407 | 89.78 | -9.603 | -9.270 | 0.0209 | 18.79 |
| D11 | AjuRep | 16 | SH | Starch | -28.407 | 9.59 | -11.380 | -11.047 | 0.0190 | 1.82 |
| D11 | ArrEla | 16 | GR | Glucose | -30.044 | 10.26 | -12.066 | -11.733 | 0.0200 | 2.06 |
| D11 | ArrEla | 16 | GR | Fructose | -30.044 | 2.69 | -5.620 | -5.287 | 0.0271 | 0.73 |
| D11 | ArrEla | 16 | GR | Sucrose | -30.044 | 51.65 | -3.770 | -3.438 | 0.0291 | 15.03 |
| D11 | ArrEla | 16 | GR | RFO | -30.044 | 19.31 | -4.376 | -4.043 | 0.0284 | 5.49 |
| D11 | ArrEla | 16 | GR | Starch | -30.044 | 6.74 | -6.126 | -5.793 | 0.0265 | 1.79 |
| D11 | FesPra | 16 | GR | Glucose | -28.796 | 5.61 | -11.883 | -11.550 | 0.0189 | 1.06 |
| D11 | FesPra | 16 | GR | Fructose | -28.796 | 3.21 | -8.933 | -8.600 | 0.0221 | 0.71 |
| D11 | FesPra | 16 | GR | Sucrose | -28.796 | 26.37 | -5.561 | -5.229 | 0.0258 | 6.80 |
| D11 | FesPra | 16 | GR | RFO | -28.796 | 39.59 | -13.765 | -13.433 | 0.0168 | 6.65 |
| D11 | FesPra | 16 | GR | Starch | -28.796 | 7.88 | -7.552 | -7.219 | 0.0236 | 1.86 |
| D11 | GleHed | 16 | SH | Glucose | -30.504 | 31.69 | -19.275 | -18.943 | 0.0126 | 4.01 |
| D11 | GleHed | 16 | SH | Fructose | -30.504 | 4.04 | -8.942 | -8.609 | 0.0240 | 0.97 |
| D11 | GleHed | 16 | SH | Sucrose | -30.504 | 3.84 | -12.948 | -12.616 | 0.0196 | 0.75 |
| D11 | GleHed | 16 | SH | RFO | -30.504 | 34.48 | -10.461 | -10.128 | 0.0223 | 7.69 |
| D11 | GleHed | 16 | SH | Starch | -30.504 | 13.31 | -18.891 | -18.558 | 0.0131 | 1.74 |
| D11 | HelPub | 16 | GR | Glucose | -29.404 | 11.50 | -15.421 | -15.088 | 0.0157 | 1.80 |
| D11 | HelPub | 16 | GR | Fructose | -29.404 | 1.85 | -7.853 | -7.520 | 0.0239 | 0.44 |
| D11 | HelPub | 16 | GR | Sucrose | -29.404 | 33.76 | -3.508 | -3.175 | 0.0287 | 9.69 |
| D11 | HelPub | 16 | GR | RFO | -29.404 | 46.71 | -7.874 | -7.541 | 0.0239 | 11.17 |
| D11 | HelPub | 16 | GR | Starch | -29.404 | 3.75 | -6.307 | -5.974 | 0.0256 | 0.96 |
| D11 | MedVar | 16 | LE | Glucose | -31.208 | 9.08 | -9.786 | -9.453 | 0.0238 | 2.16 |
| D11 | MedVar | 16 | LE | Fructose | -31.208 | 5.40 | -5.880 | -5.547 | 0.0281 | 1.52 |

S8 Table continued

| Dome | Species | SR | FG | NSC | $\delta^{13}\text{C}$ background (‰) | C ($\mu\text{g C mg}_{\text{dw}}^{-1}$) | $\delta^{13}\text{C}$ uncorr (‰) | $\delta^{13}\text{C}$ corr (‰) | ^{13}C atom% excess | ^{13}C abundance (ng $^{13}\text{C mg}_{\text{dw}}^{-1}$) |
|------|---------|----|----|----------|--------------------------------------|---|----------------------------------|--------------------------------|------------------------------|---|
| D11 | MedVar | 16 | LE | Sucrose | -31.208 | 21.85 | -4.685 | -4.353 | 0.0294 | 6.42 |
| D11 | MedVar | 16 | LE | RFO | -31.208 | 16.24 | -4.274 | -3.942 | 0.0298 | 4.84 |
| D11 | MedVar | 16 | LE | Starch | -31.208 | 12.00 | -11.689 | -11.356 | 0.0217 | 2.61 |
| D11 | VicCra | 16 | LE | Glucose | -29.872 | 16.40 | -6.316 | -5.983 | 0.0261 | 4.29 |
| D11 | VicCra | 16 | LE | Fructose | -29.872 | 14.76 | -2.462 | -2.130 | 0.0303 | 4.48 |
| D11 | VicCra | 16 | LE | Sucrose | -29.872 | 18.06 | -1.596 | -1.263 | 0.0313 | 5.65 |
| D11 | VicCra | 16 | LE | RFO | -29.872 | 4.84 | -2.485 | -2.153 | 0.0303 | 1.47 |
| D11 | VicCra | 16 | LE | Starch | -29.872 | 12.81 | -8.693 | -8.361 | 0.0235 | 3.01 |
| D12 | MedVar | 4 | LE | Glucose | -30.002 | 8.84 | -6.125 | -5.397 | 0.0269 | 2.38 |
| D12 | MedVar | 4 | LE | Fructose | -30.002 | 7.38 | -4.002 | -3.274 | 0.0292 | 2.16 |
| D12 | MedVar | 4 | LE | Sucrose | -30.002 | 32.40 | -1.872 | -1.144 | 0.0316 | 10.23 |
| D12 | MedVar | 4 | LE | RFO | -30.002 | 19.84 | -2.259 | -1.531 | 0.0311 | 6.18 |
| D12 | MedVar | 4 | LE | Starch | -30.002 | 12.19 | -9.621 | -8.893 | 0.0231 | 2.82 |
| D12 | TriFla | 4 | GR | Glucose | -29.840 | 5.72 | -6.335 | -5.606 | 0.0265 | 1.52 |
| D12 | TriFla | 4 | GR | Fructose | -29.840 | 3.52 | -4.338 | -3.609 | 0.0287 | 1.01 |
| D12 | TriFla | 4 | GR | Sucrose | -29.840 | 62.54 | -3.135 | -2.407 | 0.0300 | 18.77 |
| D12 | TriFla | 4 | GR | RFO | -29.840 | 7.83 | -3.147 | -2.419 | 0.0300 | 2.35 |
| D12 | TriFla | 4 | GR | Starch | -29.840 | 9.66 | -5.424 | -4.696 | 0.0275 | 2.66 |