## Supplementary Table 5 - Physiological characterization of anthocyanin-producing strains grown in bioreactors

A) The specific growth rate (µ) and the yield (Y) of biomass (X) and ethanol (ETOH) on glucose (S)

B) The overall yield (Y) of glycerol (GLYC), pyruvate (PYR), coumaric acid (COUM), phloretic acid (PHLOR) and dihydrokaempferol (DHK) on glucose and ethanol (S) during aerobic bioreactor batch cultivation of IMF41 (Cir NeoChr, 1x *coAtCHS3*), IMF42 (Lin NeoChr, 1x *coAtCHS3*),) and IMF48 (Lin NeoChr, 9x *coAtCHS3*, repaired *coAtANS*).

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **A)** | **a**µMAX | **a**YX/S | | **a**YETOH/S | |
| h-1 | (g g-1) | | (mol mol-1) | |
| **IMF41** (Cir) | 0.23 ± 0.00 | 0.12 ± 0.00 | | 1.44 ± 0.05 | |
| **IMF42** (Lin) | 0.22 ± 0.01 | 0.12 ± 0.00 | | 1.41 ± 0.02 | |
| **IMF48** (Lin, 9x *coAtCHS3, coAtANS*) | 0.20 ± 0.01 | 0.13 ± 0.00 | | 1.29 ± 0.05 | |
|  |  |  | |  | |
| **B)** | YGLYC/S | | YPYR/S | | YX/S | | Ycoum/S | YPHLOR/S | YDHK/S |
| (mol mol-1) | | (mol mol-1) | | (mol mol-1) | | (µmol mol-1) | (µmol mol-1) | (µmol mol-1) |
| **IMF41** (Cir) | 0.056 ± 0.005 | | 0.029 ± 0.001 | | 0.29 ± 0.01 | | 7.30 ± 0.08 | 4.71 ± 0.20 | 0.28 ± 0.01 |
| **IMF42** (Lin) | 0.048 ± 0.002 | | 0.029 ± 0.001 | | 0.30 ± 0.01 | | 6.70 ± 0.12 | 5.02 ± 0.15 | 0.28 ± 0.00 |
| **IMF48** (Lin, 9x *coAtCHS3, coAtANS*) | 0.052 ± 0.003 | | 0.019 ± 0.003 | | 0.27 ± 0.01 | | 20.2 ± 0.59 | 5.89 ± 0.35 | 2.85 ± 0.02 |

a Determined for the glucose phase only