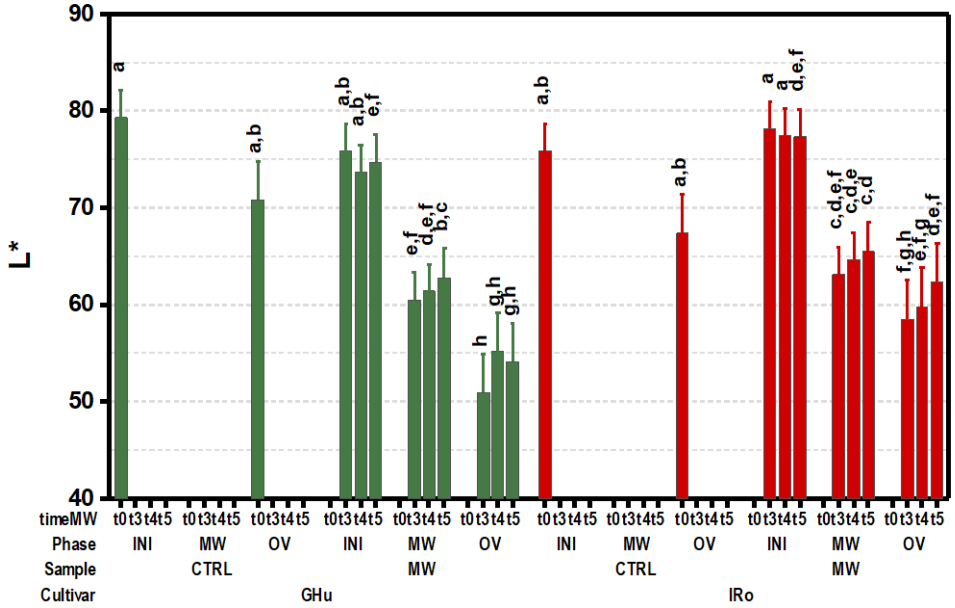
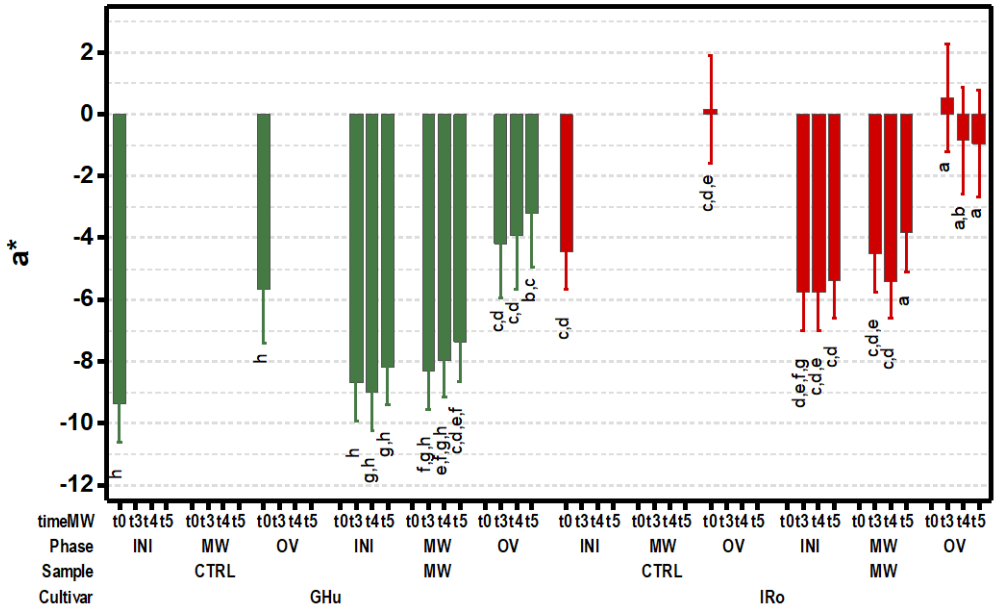
Figure S1. The apple slices before **(a)** and after **(b)** MW treatment. **(c)** Drying apple slices in oven at 40 °C.


L*
90
80
70
60
50
40
timeMW t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5
Phase INI MW OV INI MW OV INI MW OV INI MW OV
Sample CTRL MW CTRL MW
Cultivar GHu IRo


a*
2
0
-2
-4
-6
-8
-10
-12
timeMW t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5 t0 t3 t4 t5
Phase INI MW OV INI MW OV INI MW OV INI MW OV
Sample CTRL MW CTRL MW
Cultivar GHu IRo

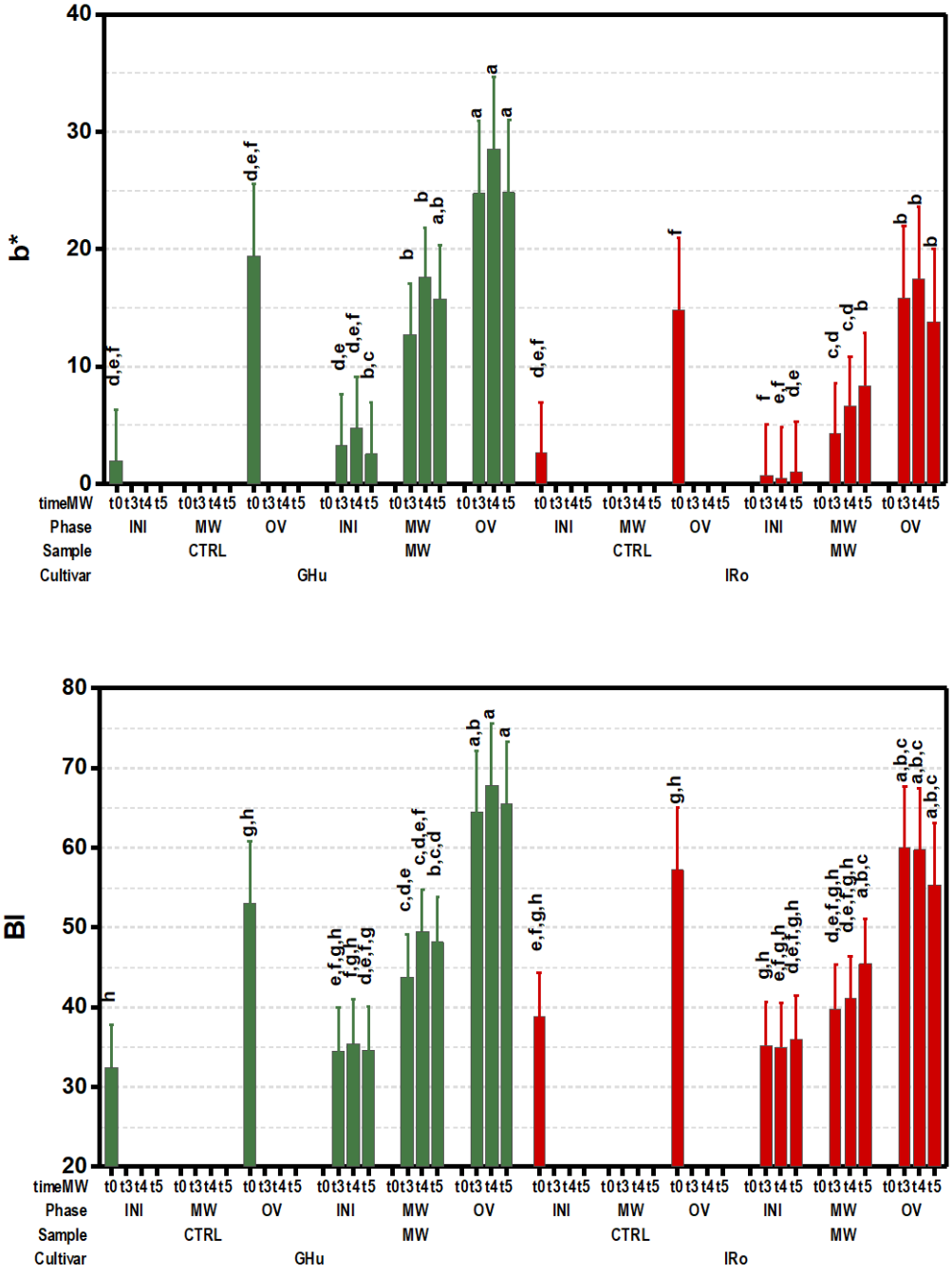


Figure S2. Graphical comparison of chromatic parameters, L*, a*, b* and BI calculated for factor Cultivar*Sample*Phase*timeMW levels. Data is displayed as mean with confidence intervals derived from four-way ANOVA (P = 0.05). Different letters describe statistically significant different means, as results from *post-hoc* Dunn-Sidak test (P = 0.05).

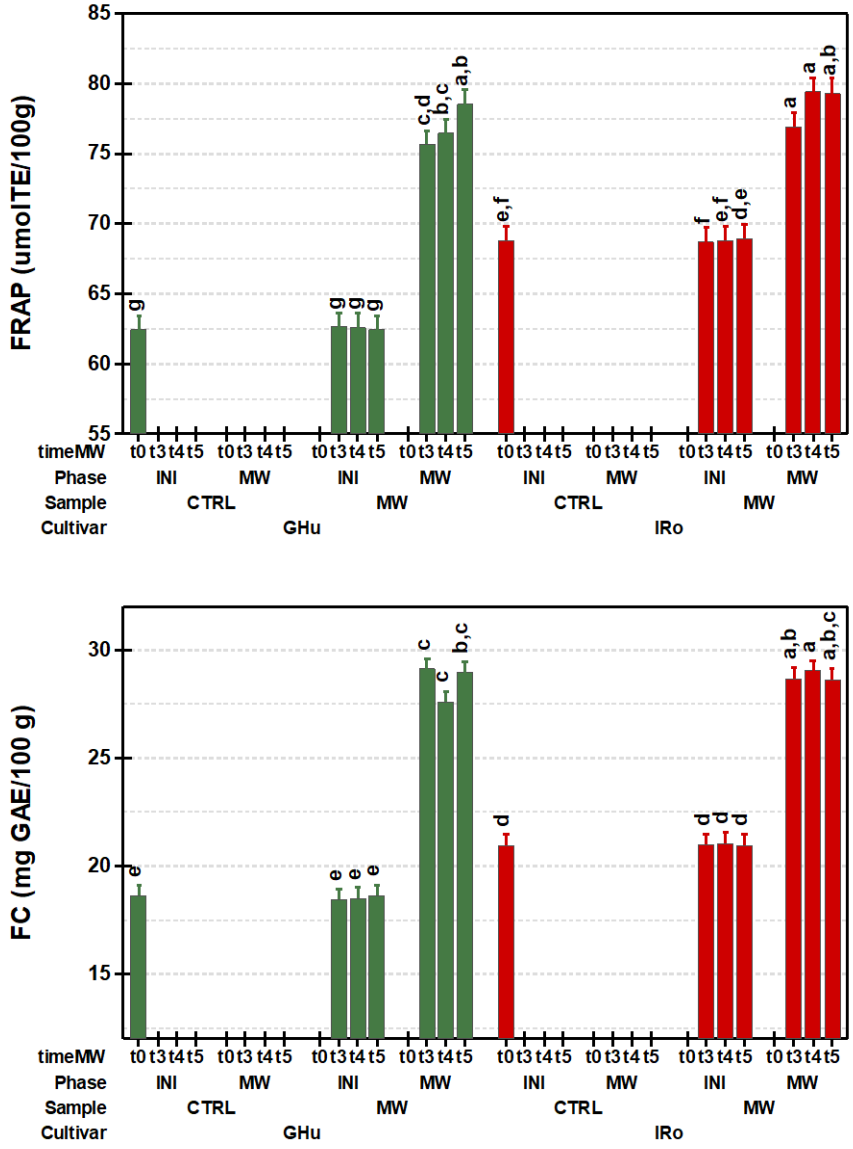
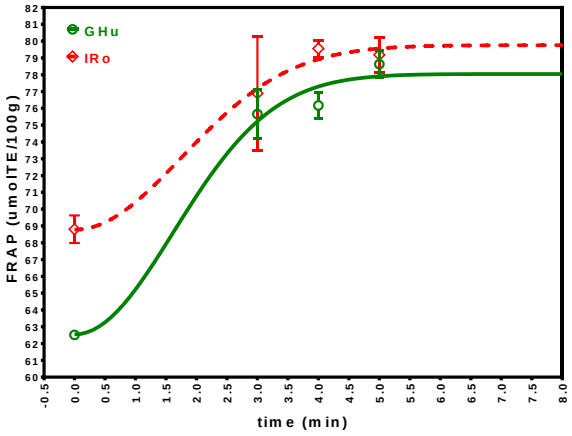
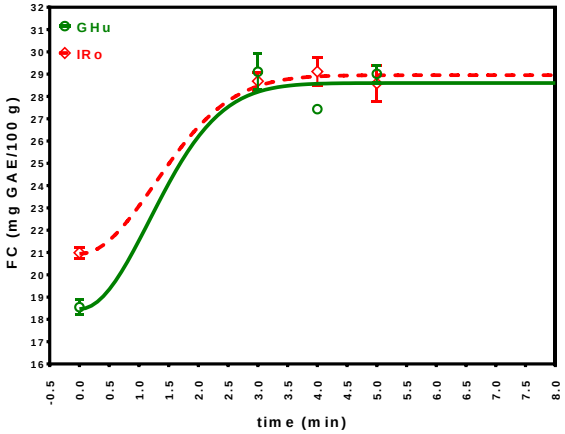


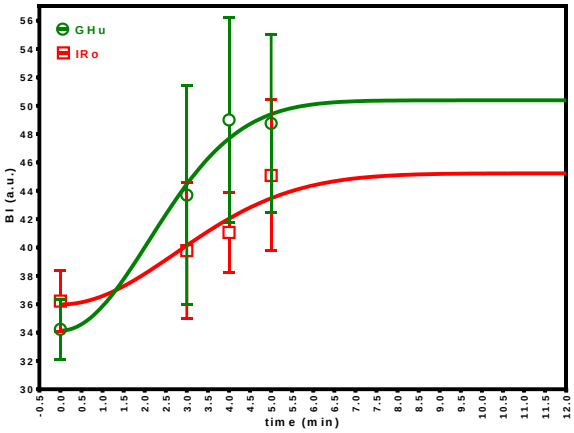
Figure S3. Graphical comparison of bioactive compounds parameters, FRAP and FC, calculated for factor Cultivar*Sample*Phase*timeMW levels. Data is displayed as mean with confidence intervals derived from four-way ANOVA (P = 0.05). Different letters describe statistically significant different means, as results from *post-hoc* Dunn-Sidak test (P = 0.05).



a



b



c

Figure S4. Graphical comparisons of the results of the non-linear regression of the FRAP (a), FC (b) and BI (c) time series for Cultivar factor levels.