

Supplementary material

Table S1. Parameter estimates, their significance, and adjusted R² for the function representing the leaf, stem, and above-ground plant fresh weight to nitrogen input relationships in Dark Opal, Red Basil, Basilico Rosso, and Mitikas.

Cultivar	Fresh yield (g/plant)	Intercept		Slope		Quadratic coefficient		Adj R ²
		Estimate	<i>p</i> -value	Estimate	<i>p</i> -value	Estimate	<i>p</i> -value	
Dark Opal	Leaves	18.05	0.0001	0.0539	0.0001	-0.000079	0.0001	0.81
	Stem	5.02	0.0001	0.0069	0.34	-0.000013	0.25	-0.01
	Total	23.07	0.0001	0.0607	0.0001	-0.000092	0.0001	0.50
Red Basil	Leaves	21.70	0.0001	0.0329	0.0001	-0.000031	0.006	0.69
	Stem	5.10	0.0001	0.0204	0.003	-0.000030	0.009	0.21
	Total	26.80	0.0001	0.0533	0.0001	-0.000061	0.001	0.59
Basilico Rosso	Leaves	14.43	0.0001	0.0647	0.0001	-0.000098	0.0001	0.86
	Stem	5.05	0.0001	0.0047	0.27	-0.000011	0.10	0.12
	Total	19.48	0.0001	0.0694	0.0001	-0.000109	0.0001	0.74
Mitikas	Leaves	34.41	0.0001	0.1586	0.0001	-0.000227	0.0001	0.76
	Stem	4.66	0.0001	0.0301	0.0001	-0.000047	0.0001	0.63
	Total	39.07	0.0001	0.1886	0.0001	-0.000274	0.0001	0.79

Table S2. Fatty acids composition (%) of the studied basil genotypes in relation to nitrogen level (0–600 ppm) (mean $\pm$ SD, $n = 3$).

	Dark Opal				Red Basil			
	0	200	400	600	0	200	400	600
C12:0	0.052 $\pm$ 0.005	0.068 $\pm$ 0.001	0.096 $\pm$ 0.003	0.114 $\pm$ 0.001	0.194 $\pm$ 0.007	0.125 $\pm$ 0.001	0.145 $\pm$ 0.004	0.144 $\pm$ 0.003
C13:0	1.14 $\pm$ 0.02	3.48 $\pm$ 0.04	2.53 $\pm$ 0.01	2.33 $\pm$ 0.01	1.04 $\pm$ 0.07	2.70 $\pm$ 0.04	2.44 $\pm$ 0.01	2.47 $\pm$ 0.06
C14:0	0.242 $\pm$ 0.007	0.358 $\pm$ 0.008	0.240 $\pm$ 0.005	0.249 $\pm$ 0.003	0.353 $\pm$ 0.001	0.332 $\pm$ 0.001	0.239 $\pm$ 0.004	0.249 $\pm$ 0.006
C15:0	0.130 $\pm$ 0.007	0.297 $\pm$ 0.006	0.347 $\pm$ 0.004	0.370 $\pm$ 0.006	0.244 $\pm$ 0.003	0.280 $\pm$ 0.006	0.370 $\pm$ 0.007	0.344 $\pm$ 0.003
C15:1	0.39 $\pm$ 0.01	0.273 $\pm$ 0.009	0.86 $\pm$ 0.03	0.869 $\pm$ 0.008	0.48 $\pm$ 0.01	0.877 $\pm$ 0.002	0.647 $\pm$ 0.001	0.624 $\pm$ 0.003
C16:0	20.9 $\pm$ 0.2	21.8 $\pm$ 0.2	20.5 $\pm$ 0.7	19.87 $\pm$ 0.07	18.89 $\pm$ 0.05	19.4 $\pm$ 0.1	18.06 $\pm$ 0.01	17.78 $\pm$ 0.08
C16:1	2.15 $\pm$ 0.01	4.17 $\pm$ 0.08	2.76 $\pm$ 0.02	2.7 $\pm$ 0.1	3.58 $\pm$ 0.08	2.46 $\pm$ 0.01	3.28 $\pm$ 0.06	3.44 $\pm$ 0.02
C17:0	1.49 $\pm$ 0.01	1.56 $\pm$ 0.01	1.54 $\pm$ 0.02	1.67 $\pm$ 0.03	3.8 $\pm$ 0.2	1.61 $\pm$ 0.04	2.43 $\pm$ 0.04	2.04 $\pm$ 0.15
C18:0	7.5 $\pm$ 0.1	4.09 $\pm$ 0.05	4.1 $\pm$ 0.2	3.8 $\pm$ 0.3	3.26 $\pm$ 0.02	3.73 $\pm$ 0.01	3.38 $\pm$ 0.07	3.16 $\pm$ 0.04
C18:1n9c	4.3 $\pm$ 0.1	3.02 $\pm$ 0.09	3.48 $\pm$ 0.07	3.46 $\pm$ 0.04	3.37 $\pm$ 0.02	3.30 $\pm$ 0.06	3.09 $\pm$ 0.01	3.72 $\pm$ 0.01
C18:2n6c	14.6 $\pm$ 0.4	15.2 $\pm$ 0.2	13.4 $\pm$ 0.4	14.4 $\pm$ 0.4	14.17 $\pm$ 0.07	14.06 $\pm$ 0.07	14.29 $\pm$ 0.06	15.13 $\pm$ 0.01
C18:3n3	44.6 $\pm$ 0.3	41.8 $\pm$ 0.1	48.9 $\pm$ 0.2	49.08 $\pm$ 0.04	48.6 $\pm$ 0.4	50.03 $\pm$ 0.06	50.08 $\pm$ 0.07	49.3 $\pm$ 0.1
C20:2	0.56 $\pm$ 0.04	0.82 $\pm$ 0.05	0.55 $\pm$ 0.01	0.53 $\pm$ 0.01	0.606 $\pm$ 0.004	0.445 $\pm$ 0.003	0.52 $\pm$ 0.05	0.55 $\pm$ 0.03
C23:0	0.63 $\pm$ 0.05	2.37 $\pm$ 0.01	0.39 $\pm$ 0.04	0.373 $\pm$ 0.009	0.759 $\pm$ 0.008	0.373 $\pm$ 0.008	0.63 $\pm$ 0.02	0.537 $\pm$ 0.008
C24:0	1.27 $\pm$ 0.03	0.729 $\pm$ 0.001	0.37 $\pm$ 0.01	0.315 $\pm$ 0.001	0.639 $\pm$ 0.007	0.344 $\pm$ 0.001	0.41 $\pm$ 0.02	0.524 $\pm$ 0.001
SFA	32.1 $\pm$ 0.1	34.1 $\pm$ 0.2	29.7 $\pm$ 0.6	28.8 $\pm$ 0.4	28.5 $\pm$ 0.2	28.5 $\pm$ 0.1	27.69 $\pm$ 0.02	26.7 $\pm$ 0.1
MUFA	8.2 $\pm$ 0.1	8.2 $\pm$ 0.2	7.5 $\pm$ 0.1	7.3 $\pm$ 0.1	8.12 $\pm$ 0.1	7.0 $\pm$ 0.1	7.43 $\pm$ 0.04	8.31 $\pm$ 0.02
PUFA	59.7 $\pm$ 0.2	57.8 $\pm$ 0.4	62.8 $\pm$ 0.6	64.0 $\pm$ 0.5	63.3 $\pm$ 0.4	64.5 $\pm$ 0.1	64.9 $\pm$ 0.1	65.0 $\pm$ 0.1

Table S2
Cont.

	Basilico Rosso				Mitikas			
	0	200	400	600	0	200	400	600
C12:0	0.174±0.001	0.159±0.006	0.198±0.006	0.162±0.004	0.195±0.003	0.160±0.006	0.161±0.002	0.179±0.001
C13:0	0.539±0.006	2.35±0.01	2.94±0.01	3.26±0.09	2.27±0.07	2.76±0.01	2.77±0.05	3.03±0.01
C14:0	0.669±0.007	0.37±0.01	0.344±0.002	0.365±0.004	0.500±0.008	0.260±0.008	0.29±0.02	0.337±0.006
C15:0	0.248±0.008	0.251±0.001	0.240±0.009	0.39±0.01	0.789±0.009	0.370±0.008	0.356±0.002	0.315±0.002
C15:1	0.465±0.001	0.835±0.001	0.541±0.009	1.07±0.03	0.62±0.03	0.95±0.01	1.05±0.01	0.87±0.05
C16:0	21.5±0.5	18.43±0.01	20.5±0.8	20.3±0.6	27.36±0.01	19.12±0.06	19.8±0.2	21.2±0.6
C16:1	3.939±0.009	2.67±0.04	3.52±0.01	3.8±0.1	10.5±0.1	7.14±0.01	7.05±0.07	6.66±0.23
C17:0	1.04±0.01	1.44±0.02	0.742±0.001	0.648±0.007	0.506±0.004	0.363±0.001	0.340±0.005	0.343±0.001
C18:0	5.14±0.01	3.86±0.02	3.84±0.02	3.76±0.06	6.16±0.03	2.70±0.08	2.97±0.01	3.045±0.003
C18:1n9c	4.18±0.08	3.64±0.02	4.15±0.01	3.15±0.02	4.0±0.2	2.18±0.07	2.58±0.07	2.63±0.05
C18:2n6c	15.5±0.2	13.3±0.1	15.2±0.1	13.17±0.05	13.4±0.3	14.0±0.6	14.45±0.04	13.7±0.2
C18:3n3	45.4±0.4	51.0±0.2	45.5±0.7	47.3±0.5	31.3±0.1	48.5±0.5	46.5±0.1	45.7±0.6
C20:2	0.311±0.004	0.85±0.03	1.00±0.01	1.27±0.05	0.68±0.04	0.434±0.002	0.466±0.002	0.630±0.008
C23:0	0.737±0.007	0.37±0.02	1.00±0.02	0.97±0.01	0.710±0.007	0.500±0.006	0.62±0.03	0.62±0.03
C24:0	0.259±0.004	0.450±0.005	0.299±0.004	0.39±0.03	1.00±0.01	0.529±0.008	0.61±0.04	0.67±0.01
SFA	30.0±0.5	27.2±0.1	29.8±0.8	29.9±0.6	38.5±0.1	26.2±0.1	27.3±0.2	29.1±0.6
MUFA	8.8±0.1	7.6±0.1	8.5±0.1	8.4±0.1	16.2±0.3	10.8±0.1	11.3±0.1	10.8±0.2
PUFA	61.2±0.6	65.2±0.1	61.7±0.8	61.8±0.6	45.3±0.3	63.0±0.1	61.4±0.1	60.1±0.8