

**Supplementary Material: Analysis of variance tables for the evaluated traits.**

**One-way ANOVA: Analysis of variance table for foliar area (cm<sup>2</sup>).**

**Control. Day 30 vs. Day 60 vs. Day 90.**

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	36.23	18.115	4.17	0.073
Error	6	26.06	4.344		
Total	8	62.29			

Fonte	GL	SQ (Ajustada)	QM (Ajustada)	Valor F	Valor-P
Fator	2	36,23	18,115	4,17	0,073
Erro	6	26,06	4,344		
Total	8	62,29			

**One-way ANOVA: Analysis of variance table for foliar area (cm<sup>2</sup>).**

**TF. Day 30 vs. Day 60 vs. Day 90.**

**TF: commercial fertilizer.**

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	34.99	17.497	2.45	0.167
Error	6	42.93	7.154		
Total	8	77.92			

Fonte	GL	SQ (Ajustada)	QM (Ajustada)	Valor F	Valor-P
Fator	2	34,99	17,497	2,45	0,167
Erro	6	42,93	7,154		
Total	8	77,92			

One-way ANOVA: Analysis of variance table for foliar area (cm<sup>2</sup>).

1/100GLI. Day 30 vs. Day 60 vs. Day 90.

1/100GLI: 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	202.997	101.499	70.77	0.000
Error	6	8.606	1.434		
Total	8	211.603			

Minitab - ANOVA Foliar area TFvs1\_100Glivs1\_100Gli.mpx

File Edit Data Calc Stat Graph View Help Assistant Predictive Analytics Module Additional Tools

Navigator ANOVA com um fator: 1/10... WORKSHEET 3

**ANOVA com um fator: 1/100GLI\_30. 1/100GLI\_60. 1/100GLI\_90**

**Análise de Variância**

Fonte	GL	SQ (Aj.)	QM (Aj.)	Valor F	Valor-P
Fator	2	202,997	101,499	70,77	0,000
Erro	6	8,606	1,434		
Total	8	211,603			

One-way ANOVA: Analysis of variance table for foliar area (cm<sup>2</sup>).

C vs. TF vs. 1/100GLI. Day 30.

C: negative control.

TF: commercial fertilizer.

1/100GLI: 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	5.519	2.760	0.56	0.600
Error	6	29.711	4.952		
Total	8	35.231			

Minitab - ANOVA Foliar area TFvs1\_100Glivs1\_100Gli.mpx

File Edit Data Calc Stat Graph View Help Assistant Predictive Analytics Module Additional Tools

Navigator ANOVA com um fator: C\_3... WORKSHEET 3

**ANOVA com um fator: C\_30. TF\_30. 1/100GLI\_30**

**Análise de Variância**

Fonte	GL	SQ (Aj.)	QM (Aj.)	Valor F	Valor-P
Fator	2	5,519	2,760	0,56	0,600
Erro	6	29,711	4,952		
Total	8	35,231			

One-way ANOVA: Analysis of variance table for foliar area ( $\text{cm}^2$ ).

C vs. TF vs. 1/100GLI. Day 60.

C: negative control.

TF: commercial fertilizer.

1/100GLI: 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	104.19	52.093	6.77	0.029
Error	6	46.18	7.696		
Total	8	150.36			

Minitab - ANOVA Foliar area TFvs1\_100Glivs1\_100Gli.mpx

File Edit Data Calc Stat Graph View Help Assistant Predictive Analytics Module Additional Tools

Navigator ANOVA com um fator: C\_60. TF\_60. 1/100GLI\_60 WORKSHEET 3

**ANOVA com um fator: C\_60. TF\_60. 1/100GLI\_60**

**Análise de Variância**

Fonte	GL	SQ (Ajustada)	QM (Ajustada)	Valor F	Valor-P
Fator	2	104,19	52,093	6,77	0,029
Erro	6	46,18	7,696		
Total	8	150,36			

One-way ANOVA: Analysis of variance table for foliar area (cm<sup>2</sup>).

C vs. TF vs. 1/100GLI. Day 90.

**C:** negative control.

**TF:** commercial fertilizer.

**1/100GLI:** 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	31.456	15.7281	55.27	0.000
Error	6	1.707	0.2846		
Total	8	33.164			

Minitab - ANOVA Foliar area TFvs1\_100Glivs1\_100Gli.mpx

File Edit Data Calc Stat Graph View Help Assistant Predictive Analytics Module Additional Tools

Navigator

- ANOVA com um fator: C\_30. C\_...
- ANOVA com um fator: TF\_30. TF\_...
- ANOVA com um fator: 1/100GLI...
- ANOVA com um fator: C\_30. TF\_...
- ANOVA com um fator: C\_60. TF\_...
- ANOVA com um fator: C\_90. TF\_...

ANOVA com um fator: C\_90. TF\_90. 1/100GLI\_90

Análise de Variância

Fonte	GL	SQ (Aj.)	QM (Aj.)	Valor F	Valor-P
Fator	2	31,456	15,7281	55,27	0,000
Erro	6	1,707	0,2846		
Total	8	33,164			

One-way ANOVA: Analysis of variance table for trifoliar leave number (N°)

**FFTL:** Fully formed trifoliar leaf.

**C:** negative control.

**Tf:** commercial fertilizer.

**1/1002%Gli:** 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	4.025	2.012	1.85	0.236
Error	6	6.519	1.086		
Total	8	10.543			

Minitab - ANOVA One Way, Tukey and Dunnett TFvs2%Glivs2%.mpx

File Edit Data Calc Stat Graph View Help Assistant Predictive Analytics Module Additional Tools

Navigator

- ANOVA com um fator: C\_FFTL (...)
- ANOVA com um fator: C\_Pods (...)
- ANOVA com um fator: C\_PoFW ...
- ANOVA com um fator: C\_PoDW ...
- ANOVA com um fator: C\_SFH (c...)
- ANOVA com um fator: C\_RFL (c...)
- ANOVA com um fator: C\_PFH (c...

ANOVA com um fator: C\_FFTL (N°). Tf\_FFTL (N°). 1/1002%Gli\_FFTL (N°)

Análise de Variância

Fonte	GL	SQ (Aj.)	QM (Aj.)	Valor F	Valor-P
Fator	2	4,025	2,012	1,85	0,236
Erro	6	6,519	1,086		
Total	8	10,543			

One-way ANOVA: Analysis of variance table for chlorophyll pigment concentration a+b (ug cm<sup>-2</sup>).  
 C vs. TF vs. 1/100GLI. Day 30.

C: negative control.

TF: commercial fertilizer.

1/100GLI: 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	6.983	3.492	0.36	0.711
Error	6	58.057	9.676		
Total	8	65.041			

Fonte	GL	SQ (Ajustada)	QM (Ajustada)	Valor F	Valor-P
Fator	2	6.983	3.492	0,36	0,711
Erro	6	58.057	9.676		
Total	8	65.041			

One-way ANOVA: Analysis of variance table for chlorophyll pigment concentration a+b (ug cm<sup>-2</sup>).  
 C vs. TF vs. 1/100GLI. Day 60.

C: negative control.

TF: commercial fertilizer.

1/100GLI: 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	15.88	7.940	0.75	0.514
Error	6	63.83	10.639		
Total	8	79.71			

Fonte	GL	SQ (Ajustada)	QM (Ajustada)	Valor F	Valor-P
Fator	2	15,88	7,940	0,75	0,514
Erro	6	63,83	10,639		
Total	8	79,71			

One-way ANOVA: Analysis of variance table for chlorophyll pigment concentration a+b (ug cm<sup>-2</sup>).  
 C vs. TF vs. 1/100GLI. Day 90.

C: negative control.

TF: commercial fertilizer.

1/100GLI: 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	177.96	88.98	7.03	0.027
Error	6	75.93	12.66		
Total	8	253.90			

Minitab - ANOVA Chlab cm2 TFvs1\_100Glivs1\_100Gli.mpx

File Edit Data Calc Stat Graph View Help Assistant Predictive Analytics Module Additional Tools

Navigator ANOVA com um fator: C\_90 a+b. TF\_90 a+b. 1/100GLI\_90 a+b WORKSHEET 3

**ANOVA com um fator: C\_90 a+b. TF\_90 a+b. 1/100GLI\_90 a+b**

**Análise de Variância**

Fonte	GL	SQ (Aj.)	QM (Aj.)	Valor F	Valor-P
Fator	2	177,96	88,98	7,03	0,027
Erro	6	75,93	12,66		
Total	8	253,90			

One-way ANOVA: Analysis of variance table for plant fresh mass (g)

PFW: plant fresh mass.

C: negative control.

Tf: commercial fertilizer.

1/1002%Gli: 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	468,5	234,25	9,39	0,014
Error	6	149,7	24,95		
Total	8	618,2			

Minitab - ANOVA One Way, Tukey and Dunnett TFvs2%Glivs2%.mpx

File Edit Data Calc Stat Graph View Help Assistant Predictive Analytics Module Additional Tools

Navigator ANOVA com um fator: C\_PFW (g). Tf\_PFW (g). 1/1002%Gli\_PFW (g) WORKSHEET 6

**ANOVA com um fator: C\_PFW (g). Tf\_PFW (g). 1/1002%Gli\_PFW (g)**

**Análise de Variância**

Fonte	GL	SQ (Aj.)	QM (Aj.)	Valor F	Valor-P
Fator	2	468,5	234,25	9,39	0,014
Erro	6	149,7	24,95		
Total	8	618,2			

### One-way ANOVA: Analysis of variance table for plant dried mass (g)

PDW: plant dried mass.

C: negative control.

Tf: commercial fertilizer.

1/1002%Gli: 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	38.003	19.002	18.23	0.003
Error	6	6.253	1.042		
Total	8	44.256			

Minitab - ANOVA One Way, Tukey and Dunett TFvs2%Glivs2%.mpx

File Edit Data Calc Stat Graph View Help Assistant Predictive Analytics Module Additional Tools

Navigator ANOVA com um fator: C\_P... WORKSHEET 6

**ANOVA com um fator: C\_PDW (g). Tf\_PDW (g). 1/1002%Gli\_PDW (g)**

**Análise de Variância**

Fonte	GL	SQ (Aj.)	QM (Aj.)	Valor F	Valor-P
Fator	2	38,003	19,002	18,23	0,003
Erro	6	6,253	1,042		
Total	8	44,256			

### One-way ANOVA: Analysis of variance table for plant height (cm)

PFH: plant fresh height.

C: negative control.

Tf: commercial fertilizer.

1/1002%Gli: 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	1694.4	847.21	28.26	0.001
Error	6	179.9	29.98		
Total	8	1874.3			

Minitab - ANOVA One Way, Tukey and Dunett TFvs2%Glivs2%.mpx

File Edit Data Calc Stat Graph View Help Assistant Predictive Analytics Module Additional Tools

Navigator ANOVA com um fator: C\_P... WORKSHEET 6

**ANOVA com um fator: C\_PFH (cm). Tf\_PFH (cm). 1/1002%Gli\_PFH (cm)**

**Análise de Variância**

Fonte	GL	SQ (Aj.)	QM (Aj.)	Valor F	Valor-P
Fator	2	1694,4	847,21	28,26	0,001
Erro	6	179,9	29,98		
Total	8	1874,3			

### One-way ANOVA: Analysis of variance table for pod number (n°)

C: negative control.

Tf: commercial fertilizer.

1/1002%Gli: 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	3.062	1.531	0.31	0.745
Error	6	29.704	4.951		
Total	8	32.765			

Fonte	GL	SQ (Ajustado)	QM (Ajustado)	Valor F	Valor-P
Fator	2	3,062	1,531	0,31	0,745
Erro	6	29,704	4,951		
Total	8	32,765			

### One-way ANOVA: Analysis of variance table for pod fresh mass (g)

PoFW: pod fresh mass.

C: negative control.

Tf: commercial fertilizer.

1/1002%Gli: 1% NSBMH

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	0.8579	0.4289	0.30	0.754
Error	6	8.6937	1.4489		
Total	8	9.5515			

Fonte	GL	SQ (Ajustado)	QM (Ajustado)	Valor F	Valor-P
Fator	2	0,8579	0,4289	0,30	0,754
Erro	6	8,6937	1,4489		
Total	8	9,5515			

### One-way ANOVA: Analysis of variance table for pod dried mass (g)

PoDW: pod dried mass.

C: negative control.

Tf: commercial fertilizer.

1/1002%Gli: 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	0.02402	0.01201	0.25	0.785
Error	6	0.28508	0.04751		
Total	8	0.30910			

The screenshot shows the Minitab interface with the following details:

- File menu:** File, Edit, Data, Calc, Stat, Graph, View, Help, Assistant, Predictive Analytics Module, Additional Tools.
- Toolbar:** Standard Minitab toolbar with various icons for file operations, data analysis, and graphing.
- Navigator:** Shows a list of saved projects and analyses, with "ANOVA com um fator: C\_PoDW ..." selected.
- Active Worksheet:** ANOVA com um fator: C\_PoDW (g). Tf\_PoDW (g). 1/1002%Gli\_PoDW (g).
- Output:**
  - Análise de Variância:** ANOVA table.
  - Fonte GL SQ (Ajustada) QM (Ajustada) Valor F Valor-P:**

Fator	2	0,02402	0,01201	0,25	0,785
Erro	6	0,28508	0,04751		
Total	8	0,30910			

### One-way ANOVA: Analysis of variance table for nitrogen concentration (gN g<sup>-1</sup>)

C: negative control.

Tf: commercial fertilizer.

1/100NSBMH: 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	0.000022	0.000011	10.01	0.012
Error	6	0.000007	0.000001		
Total	8	0.000029			

The screenshot shows the Minitab interface with the following details:

- File menu:** File, Edit, Data, Calc, Stat, Graph, View, Help, Assistant, Predictive Analytics Module, Additional Tools.
- Toolbar:** Standard Minitab toolbar with various icons for file operations, data analysis, and graphing.
- Navigator:** Shows a list of saved projects and analyses, with "ANOVA com um fator: C (gN g-...)" selected.
- Active Worksheet:** ANOVA com um fator: C (gN g-1). Tf (gN g-1). 1/100NSBMH (gN g-1).
- Output:**
  - Análise de Variância:** ANOVA table.
  - Fonte GL SQ (Ajustada) QM (Ajustada) Valor F Valor-P:**

Fator	2	0,000022	0,000011	10,01	0,012
Erro	6	0,000007	0,000001		
Total	8	0,000029			

### One-way ANOVA: Analysis of variance table for phosphorus concentration ( $\text{gP}_2\text{O}_5 \text{ g}^{-1}$ )

C: negative control.

Tf: commercial fertilizer.

1/100NSBMH: 1% NSBMH.

Source	DF	Adj (SS)	Adj (MS)	F-value	P-value
Factor	2	0.000000	0.000000	0.17	0.846
Error	6	0.000000	0.000000		
Total	8	0.000000			

The screenshot shows the Minitab software interface with the following details:

- Title Bar:** Minitab - ANOVA One way, Tukey and Dunett Tf vs 1%NSBMH+2%Gli.mpx
- Menu Bar:** File, Edit, Data, Calc, Stat, Graph, View, Help, Assistant, Predictive Analytics Module, Additional Tools
- Toolbar:** Includes icons for file operations, data analysis, and statistical tests.
- Navigator:** Shows the current project structure with "ANOVA com um fator: C (gN g-...)" selected.
- Worksheet:** Title: ANOVA com um fator: C (gP2O5 g-1). Tf (gP2O5 g-1). 1/100NSBMH (gP2O5 g-1)  
Content:  
**Análise de Variância**

Fonte	GL	SQ (Ajustada)	QM (Ajustada)	Valor F	Valor-P
Fator	2	0,000000	0,000000	0,17	0,846
Erro	6	0,000000	0,000000		
Total	8	0,000000			