

Supplementary Materials

Supplementary Methods: Statistical Analysis (ANOVA)

Figure 3

F0_M (morning)

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	382.7	95.69	0.29756	0.87755
Residuals	35	11255.3	321.58		
Total	39	11638.0			

Shapiro-Wilk normality test

p-value: 0.04451331

WARNING: at 5% of significance, residuals can not be considered normal!

Homogeneity of variances test

p-value: 0.5890488

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	173.750
2	Cdot_0.050	176.125
3	Cdot_0.20	180.500
4	Commercial	176.000
5	Control	171.125

F0_N (Noon)

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	30522	7630.6	2.5841	0.053887
Residuals	35	103353	2953.0		
Total	39	133876			

Shapiro-Wilk normality test

p-value: 0.2045864

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.6851797

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups	Treatments	Means
a	Cdot_0.20	298
ab	Commercial	274.25
ab	Control	239.125
ab	Cdot_0.020	235.75
b	Cdot_0.050	223.75

Fv/Fm_M

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	0.058264	0.0145661	3.249	0.022851
Residuals	35	0.156914	0.0044833		
Total	39	0.215178			

Shapiro-Wilk normality test

p-value: 0.5303843

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.1982953

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups Treatments Means
a Cdot_0.050 0.6775125
a Commercial 0.67675
ab Cdot_0.020 0.650625
ab Cdot_0.20 0.624
b Control 0.5755

Fv/Fm_N

Analysis of Variance Table

DF SS MS Fc Pr>Fc
Treatment 4 0.50683 0.126708 4.3096 0.0061276
Residuals 35 1.02906 0.029402
Total 39 1.53589

Shapiro-Wilk normality test

p-value: 0.2153926

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.8483642

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups Treatments Means
a Control 0.46025
a Cdot_0.050 0.43375
ab Cdot_0.020 0.393125
ab Commercial 0.2435
b Cdot_0.20 0.17275

DP (%)

Analysis of Variance Table

DF SS MS Fc Pr>Fc
Treatment 4 12624 3155.9 6.055 0.00082139
Residuals 35 18242 521.2
Total 39 30866

Shapiro-Wilk normality test

p-value: 0.264537

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.8605329

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups Treatments Means
a Cdot_0.20 71.85224

ab	Commercial	60.92252
bc	Cdot_0.050	36.87601
bc	Cdot_0.020	36.25808
c	Control	23.44241

Figure 4

gs_M

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	0.007506	0.0018764	1.8398	0.14322
Residuals	35	0.035695	0.0010199		
Total	39	0.043201			

Shapiro-Wilk normality test

p-value: 0.08550382

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.5645312

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

Levels	Means
1 Cdot_0.020	0.2065339
2 Cdot_0.050	0.1991848
3 Cdot_0.20	0.1895198
4 Commercial	0.2129653
5 Control	0.1739056

gs_N

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	0.007527	0.00188165	2.5939	0.0532
Residuals	35	0.025390	0.00072542		
Total	39	0.032916			

Shapiro-Wilk normality test

p-value: 0.8021388

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.8790252

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups	Treatments	Means
a	Control	0.1849846
ab	Cdot_0.20	0.179608
ab	Cdot_0.020	0.1640926
ab	Cdot_0.050	0.1537111
b	Commercial	0.1504378

A_M

Analysis of Variance Table

```

-----
              DF      SS      MS      Fc      Pr>Fc
Treatment    4   1.6376 0.40939 0.51312 0.72647
Residuals   35  27.9247 0.79785
Total       39  29.5622
-----

```

Shapiro-Wilk normality test

p-value: 0.2056827

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.7663441

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

```

-----
      Levels      Means
1 Cdot_0.020 8.403096
2 Cdot_0.050 8.437691
3 Cdot_0.20 8.156814
4 Commercial 8.690943
5 Control 8.145012
-----

```

A_N

Analysis of Variance Table

```

-----
              DF      SS      MS      Fc      Pr>Fc
Treatment    4  11.524 2.8809 1.1525 0.34836
Residuals   35  87.491 2.4997
Total       39  99.014
-----

```

Shapiro-Wilk normality test

p-value: 0.7366641

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.1172934

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

```

-----
      Levels      Means
1 Cdot_0.020 5.883296
2 Cdot_0.050 6.508383
3 Cdot_0.20 6.485602
4 Commercial 5.099633
5 Control 5.603667
-----

```

E_M

Analysis of Variance Table

```

-----
              DF      SS      MS      Fc      Pr>Fc
Treatment    4   0.3162 0.079055 0.28539 0.88547
Residuals   35   9.6953 0.277010
Total       39  10.0116
-----

```

Shapiro-Wilk normality test

p-value: 0.7792157

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.2079941

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	4.308508
2	Cdot_0.050	4.193948
3	Cdot_0.20	4.100757
4	Commercial	4.207920
5	Control	4.053468

E_N

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	10.560	2.6399	1.4778	0.2299
Residuals	35	62.523	1.7864		
Total	39	73.083			

Shapiro-Wilk normality test

p-value: 0.2763478

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.9661429

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	8.554985
2	Cdot_0.050	8.613348
3	Cdot_0.20	8.689571
4	Commercial	7.802297
5	Control	9.421430

Ci_M

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	385.17	96.293	2.273	0.080996
Residuals	35	1482.74	42.364		
Total	39	1867.91			

Shapiro-Wilk normality test

p-value: 0.9209133

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.09933348

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups	Treatments	Means
a	Commercial	324.5685
ab	Cdot_0.050	322.2647
ab	Cdot_0.020	321.3999
ab	Control	317.7002
b	Cdot_0.20	316.0406

Ci_N

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
--	----	----	----	----	-------

```
Treatment  4  691.2 172.795 1.7845 0.15403
Residuals  35 3389.2  96.834
Total      39 4080.4
```

Shapiro-Wilk normality test

p-value: 0.8136541

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.5820476

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

 Levels Means
1 Cdot_0.020 293.5383
2 Cdot_0.050 290.0312
3 Cdot_0.20 301.2354
4 Commercial 298.3686
5 Control 299.6440

iWUE_M

Analysis of Variance Table

 DF SS MS Fc Pr>Fc
Treatment 4 102.08 25.519 1.7071 0.17049
Residuals 35 523.22 14.949
Total 39 625.30

Shapiro-Wilk normality test

p-value: 0.3228807

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.7723835

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

 Levels Means
1 Cdot_0.020 40.32426
2 Cdot_0.050 41.45411
3 Cdot_0.20 41.16652
4 Commercial 42.56152
5 Control 44.94695

iWUE_N

Analysis of Variance Table

 DF SS MS Fc Pr>Fc
Treatment 4 186.04 46.509 0.96195 0.44053
Residuals 35 1692.22 48.349
Total 39 1878.26

Shapiro-Wilk normality test

p-value: 0.3993942

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.78891

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

```

-----
      Levels      Means
1 Cdot_0.020 39.26300
2 Cdot_0.050 41.76568
3 Cdot_0.20 35.34103
4 Commercial 37.19048
5 Control 37.71711
-----

```

k_M

Analysis of Variance Table

```

-----
      DF      SS      MS      Fc      Pr>Fc
Treatment  4 0.0014876 0.00037190 0.45144 0.77063
Residuals 35 0.0288335 0.00082381
Total      39 0.0303211
-----

```

Shapiro-Wilk normality test

p-value: 0.1489431

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.7664136

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

```

-----
      Levels      Means
1 Cdot_0.020 0.2797577
2 Cdot_0.050 0.2835567
3 Cdot_0.20 0.2753156
4 Commercial 0.2900600
5 Control 0.2728870
-----

```

k_N

Analysis of Variance Table

```

-----
      DF      SS      MS      Fc      Pr>Fc
Treatment  4 0.015156 0.0037890 0.97028 0.43611
Residuals 35 0.136677 0.0039051
Total      39 0.151833
-----

```

Shapiro-Wilk normality test

p-value: 0.581577

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.1042814

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

```

-----
      Levels      Means
1 Cdot_0.020 0.2150798
2 Cdot_0.050 0.2439063
3 Cdot_0.20 0.2335423
4 Commercial 0.1866137
5 Control 0.2208691
-----

```

Figure 5

F0_M

Analysis of Variance Table

```

-----
          DF      SS      MS      Fc      Pr>Fc
Treatment  4  352.25  88.062  1.6703  0.17889
Residuals 35 1845.25  52.721
Total      39 2197.50
-----

```

Shapiro-Wilk normality test

p-value: 0.3121579

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.5886705

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

```

-----
          Levels      Means
1  Cdot_0.020  152.250
2  Cdot_0.050  144.625
3   Cdot_0.20  146.875
4 Commercial  151.250
5   Control   146.250
-----

```

F0_N

Analysis of Variance Table

```

-----
          DF      SS      MS      Fc      Pr>Fc
Treatment  4  2752.8  688.19  2.9863  0.031986
Residuals 35  8065.6  230.45
Total      39 10818.4
-----

```

Shapiro-Wilk normality test

p-value: 0.1732055

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.1839541

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

```

-----
Groups Treatments Means
a      Control      200.125
ab     Cdot_0.020   191.375
ab     Commercial   190.25
ab     Cdot_0.20    181.25
b      Cdot_0.050   176.375
-----

```

Fv/Fm_M

Analysis of Variance Table

```

-----
          DF      SS      MS      Fc      Pr>Fc
Treatment  4  0.0001563  3.9087e-05  0.14114  0.96572
Residuals 35  0.0096933  2.7695e-04
Total      39  0.0098496
-----

```

Shapiro-Wilk normality test

p-value: 0.4794896

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.1946604

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	0.735125
2	Cdot_0.050	0.736625
3	Cdot_0.20	0.734250
4	Commercial	0.730750
5	Control	0.735250

Fv/Fm N

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatament	4	0.026179	0.0065448	1.5687	0.20429
Residuals	35	0.146025	0.0041722		
Total	39	0.172204			

Shapiro-Wilk normality test

p-value: 0.1634663

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.1998993

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	0.601250
2	Cdot_0.050	0.647625
3	Cdot_0.20	0.632250
4	Commercial	0.588750
5	Control	0.581125

DP (%)

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatament	4	312.8	78.197	0.94241	0.45102
Residuals	35	2904.1	82.975		
Total	39	3216.9			

Shapiro-Wilk normality test

p-value: 0.2680898

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.4837237

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	21.40131
2	Cdot_0.050	14.11574
3	Cdot_0.20	16.07007
4	Commercial	19.92566
5	Control	20.39530

=====

Figure 6

=====

F0_M

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	260.35	65.087	1.6512	0.18342
Residuals	35	1379.63	39.418		
Total	39	1639.98			

Shapiro-Wilk normality test

p-value: 0.5710049

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.2047757

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	128.375
2	Cdot_0.050	133.250
3	Cdot_0.20	136.125
4	Commercial	133.250
5	Control	131.375

F0_N

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	6451.8	1612.94	2.9199	0.034844
Residuals	35	19333.6	552.39		
Total	39	25785.4			

Shapiro-Wilk normality test

p-value: 0.9091635

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.3573561

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups	Treatments	Means
a	Cdot_0.050	226.5
ab	Cdot_0.20	219.125
ab	Cdot_0.020	218.875
b	Commercial	196.375
b	Control	196

Fv/Fm_M

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	0.0005849	0.00014622	0.92316	0.46156
Residuals	35	0.0055439	0.00015840		
Total	39	0.0061288			

Shapiro-Wilk normality test

p-value: 0.3016384

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.6270034

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	0.754000
2	Cdot_0.050	0.761750
3	Cdot_0.20	0.759000
4	Commercial	0.751125
5	Control	0.758750

Fv/Fm_N

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatament	4	0.05559	0.013898	1.312	0.28464
Residuals	35	0.37075	0.010593		
Total	39	0.42635			

Shapiro-Wilk normality test

p-value: 0.3782517

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.5829474

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	0.379625
2	Cdot_0.050	0.409750
3	Cdot_0.20	0.393875
4	Commercial	0.474375
5	Control	0.460500

DP (%)

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatament	4	1092.7	273.17	1.4399	0.24145
Residuals	35	6639.8	189.71		
Total	39	7732.4			

Shapiro-Wilk normality test

p-value: 0.2853159

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.5478745

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	49.52306
2	Cdot_0.050	46.28070
3	Cdot_0.20	47.23029
4	Commercial	36.56716
5	Control	37.96863

Figure 7

CCI

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	82.974	20.7436	7.257	0.00022949
Residuals	35	100.045	2.8584		
Total	39	183.019			

Shapiro-Wilk normality test

p-value: 0.5457402

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.9596198

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups	Treatments	Means
a	Cdot_0.050	31.38333
ab	Cdot_0.20	29.43542
ab	Cdot_0.020	29.37708
b	Commercial	27.7125
b	Control	27.35208

Figure 8

gs_M

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	0.010089	0.0025223	0.79656	0.5387
Residuals	25	0.079162	0.0031665		
Total	29	0.089251			

Shapiro-Wilk normality test

p-value: 0.9367457

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.7638018

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

Levels	Means
1 Cdot_0.020	0.1637026
2 Cdot_0.050	0.1564261
3 Cdot_0.20	0.2038258
4 Commercial	0.1799201
5 Control	0.1971090

gs_N

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	0.021811	0.0054527	2.3183	0.084917
Residuals	25	0.058801	0.0023520		
Total	29	0.080612			

Shapiro-Wilk normality test

p-value: 0.9803

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.2764214

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups Treatments Means

a	Cdot_0.20	0.1362127
ab	Cdot_0.020	0.1205924
ab	Control	0.1045238
ab	Commercial	0.09202741
b	Cdot_0.050	0.05713149

A_M

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatament	4	26.824	6.7060	1.1045	0.37631
Residuals	25	151.782	6.0713		
Total	29	178.605			

Shapiro-Wilk normality test

p-value: 0.6365746

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.3007103

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	8.698784
2	Cdot_0.050	8.788266
3	Cdot_0.20	11.205191
4	Commercial	10.072059
5	Control	9.151112

A_N

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatament	4	102.48	25.621	2.0717	0.11479
Residuals	25	309.18	12.367		
Total	29	411.66			

Shapiro-Wilk normality test

p-value: 0.6127021

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.2913407

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	7.144741
2	Cdot_0.050	3.906627
3	Cdot_0.20	8.768858
4	Commercial	5.834350

5 Control 8.753048

E_M

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	2.7772	0.69429	1.0125	0.41984
Residuals	25	17.1425	0.68570		
Total	29	19.9197			

Shapiro-Wilk normality test

p-value: 0.5440581

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.4081609

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	2.311611
2	Cdot_0.050	2.602134
3	Cdot_0.20	3.196825
4	Commercial	2.855326
5	Control	2.960439

E_N

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	43.753	10.9383	2.1873	0.099621
Residuals	25	125.018	5.0007		
Total	29	168.772			

Shapiro-Wilk normality test

p-value: 0.2173463

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.4938048

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups	Treatments	Means
a	Cdot_0.20	7.434029
ab	Cdot_0.020	7.117624
ab	Control	6.456422
ab	Commercial	6.010252
b	Cdot_0.050	4.003251

Ci_M

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	786.9	196.73	0.71488	0.58964
Residuals	25	6879.9	275.20		
Total	29	7666.9			

Shapiro-Wilk normality test

p-value: 0.3738691

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.09406023

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

 Levels Means
1 Cdot_0.020 313.2950
2 Cdot_0.050 307.7243
3 Cdot_0.20 305.2203
4 Commercial 316.2369
5 Control 318.9039

Ci_N

Analysis of Variance Table

 DF SS MS Fc Pr>Fc
Treatment 4 1162.4 290.60 0.56992 0.68685
Residuals 25 12747.2 509.89
Total 29 13909.6

Shapiro-Wilk normality test

p-value: 0.2018963

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.755731

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

 Levels Means
1 Cdot_0.020 256.4406
2 Cdot_0.050 250.2116
3 Cdot_0.20 246.4368
4 Commercial 251.5124
5 Control 237.8034

iWUE_M

Analysis of Variance Table

 DF SS MS Fc Pr>Fc
Treatment 4 276.51 69.127 0.77658 0.55087
Residuals 25 2225.35 89.014
Total 29 2501.86

Shapiro-Wilk normality test

p-value: 0.3362932

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.2260242

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

 Levels Means
1 Cdot_0.020 55.01301
2 Cdot_0.050 57.37083
3 Cdot_0.20 57.36259
4 Commercial 51.23933

5 Control 50.12516

iWUE_N

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	522.3	130.58	0.61456	0.65613
Residuals	25	5312.0	212.48		
Total	29	5834.3			

Shapiro-Wilk normality test

p-value: 0.3071235

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.5835244

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	57.92045
2	Cdot_0.050	62.21173
3	Cdot_0.20	65.45877
4	Commercial	60.74663
5	Control	70.06406

k_M

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	0.051039	0.0127597	1.3019	0.29632
Residuals	25	0.245013	0.0098005		
Total	29	0.296052			

Shapiro-Wilk normality test

p-value: 0.338616

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.2425474

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	0.2976152
2	Cdot_0.050	0.3061547
3	Cdot_0.20	0.3983130
4	Commercial	0.3765483
5	Control	0.3784793

k_N

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	0.17834	0.044586	1.5169	0.22756
Residuals	25	0.73480	0.029392		
Total	29	0.91315			

Shapiro-Wilk normality test

p-value: 0.3323736

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.


```
-----
Homogeneity of variances test
p-value: 0.3753498
According to the test of bartlett at 5% of significance, residuals can be considered
homocedastic.
-----
```

```
-----
According to the F test, the means can not be considered distinct.
-----
```

```
-----
      Levels      Means
1 Cdot_0.020 0.3157641
2 Cdot_0.050 0.1529597
3 Cdot_0.20 0.3906251
4 Commercial 0.2792400
5 Control 0.2985033
-----
```

Figure 9

NAR

```
-----
Analysis of Variance Table
-----
```

	DF	SS	MS	Fc	Pr>Fc
Treatament	4	0.11833	0.0295832	3.3203	0.020871
Residuals	35	0.31184	0.0089098		
Total	39	0.43018			

```
-----
```

```
Shapiro-Wilk normality test
p-value: 0.9023702
According to Shapiro-Wilk normality test at 5% of significance, residuals can be
considered normal.
-----
```

```
Homogeneity of variances test
p-value: 0.4058372
According to the test of bartlett at 5% of significance, residuals can be considered
homocedastic.
-----
```

```
Tukey's test
-----
```

Groups	Treatments	Means
a	Cdot_0.050	0.6458548
ab	Cdot_0.020	0.6248444
ab	Commercial	0.5551068
ab	Cdot_0.20	0.534834
b	Control	0.5021475

```
-----
```

RGR_S

```
-----
Analysis of Variance Table
-----
```

	DF	SS	MS	Fc	Pr>Fc
Treatament	4	2467.3	616.81	5.743	0.0011598
Residuals	35	3759.1	107.40		
Total	39	6226.3			

```
-----
```

```
Shapiro-Wilk normality test
p-value: 0.6260762
According to Shapiro-Wilk normality test at 5% of significance, residuals can be
considered normal.
-----
```

```
Homogeneity of variances test
p-value: 0.3790997
According to the test of bartlett at 5% of significance, residuals can be considered
homocedastic.
-----
```

```
Tukey's test
-----
```

Groups	Treatments	Means
a	Cdot_0.050	116.221
ab	Cdot_0.020	114.7888
abc	Commercial	105.0022

bc	Cdot_0.20	100.0181
c	Control	96.45276

RGR_R

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	1853.3	463.34	3.8578	0.010643
Residuals	35	4203.6	120.10		
Total	39	6057.0			

Shapiro-Wilk normality test

p-value: 0.3040365

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.4374286

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups	Treatments	Means
a	Cdot_0.050	150.9028
a	Cdot_0.020	149.2275
ab	Commercial	145.0035
ab	Cdot_0.20	137.4451
b	Control	133.2179

Table 1

SL

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	1152.5	288.117	4.8667	0.0031585
Residuals	35	2072.0	59.201		
Total	39	3224.5			

Shapiro-Wilk normality test

p-value: 0.07679964

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.5052267

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups	Treatments	Means
a	Cdot_0.050	66.7375
ab	Cdot_0.020	60.3125
b	Cdot_0.20	54.1625
b	Control	53.25
b	Commercial	52.85

RL

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	117.4	29.349	1.6167	0.1919
Residuals	35	635.4	18.154		
Total	39	752.8			

Shapiro-Wilk normality test

p-value: 0.2898883

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.07372724

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

According to the F test, the means can not be considered distinct.

	Levels	Means
1	Cdot_0.020	24.4500
2	Cdot_0.050	22.0125
3	Cdot_0.20	21.6000
4	Commercial	21.3625
5	Control	19.0750

LA

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	21389	5347.2	3.655	0.013694
Residuals	35	51205	1463.0		
Total	39	72594			

Shapiro-Wilk normality test

p-value: 0.6006749

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.5680418

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups	Treatments	Means
a	Cdot_0.050	337.5263
ab	Cdot_0.020	326.4513
ab	Control	297.3587
ab	Commercial	290.4412
b	Cdot_0.20	275.235

LDM

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	0.18092	0.045230	2.2686	0.081463
Residuals	35	0.69780	0.019937		
Total	39	0.87872			

Shapiro-Wilk normality test

p-value: 0.8287186

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.7182087

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups	Treatments	Means
a	Cdot_0.050	0.943375
ab	Cdot_0.020	0.890875

ab	Commercial	0.824
ab	Cdot_0.20	0.793
b	Control	0.757

SDM

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	0.55491	0.138727	7.4153	0.00019521
Residuals	35	0.65479	0.018708		
Total	39	1.20970			

Shapiro-Wilk normality test

p-value: 0.7011448

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.0600515

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups	Treatments	Means
a	Cdot_0.050	1.060875
a	Cdot_0.020	1.0515
ab	Commercial	0.902
ab	Cdot_0.20	0.873
b	Control	0.747

RDM

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	0.08349	0.0208725	2.782	0.041648
Residuals	35	0.26259	0.0075026		
Total	39	0.34608			

Shapiro-Wilk normality test

p-value: 0.9167457

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.4515067

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups	Treatments	Means
a	Cdot_0.050	0.625125
ab	Commercial	0.577875
ab	Cdot_0.020	0.55
ab	Cdot_0.20	0.51775
b	Control	0.495

TDM

Analysis of Variance Table

	DF	SS	MS	Fc	Pr>Fc
Treatment	4	1.9782	0.49455	8.5086	6.6228e-05
Residuals	35	2.0343	0.05812		
Total	39	4.0125			

Shapiro-Wilk normality test

p-value: 0.7154804

According to Shapiro-Wilk normality test at 5% of significance, residuals can be considered normal.

Homogeneity of variances test

p-value: 0.204624

According to the test of bartlett at 5% of significance, residuals can be considered homocedastic.

Tukey's test

Groups	Treatments	Means
a	Cdot_0.050	2.629375
ab	Cdot_0.020	2.492375
abc	Commercial	2.303875
bc	Cdot_0.20	2.18375
c	Control	1.999
