**DATA** MISTO;

INPUT BLOCO PROG RESP;

CARDS;

1 1 95

1 2 90

1 3 95

1 4 100

1 5 100

1 6 120

1 7 125

1 8 120

1 9 115

1 10 120

2 1 90

2 2 90

2 3 100

2 4 110

2 5 95

2 6 110

2 7 120

2 8 115

2 9 115

2 10 120

3 1 120

3 2 110

3 3 100

3 4 130

3 5 125

3 6 140

3 7 150

3 8 135

3 9 125

3 10 128

4 1 90

4 2 85

4 3 90

4 4 95

4 5 90

4 6 100

4 7 110

4 8 100

4 9 90

4 10 95

;

\*ANÁLISE INTRABLOCO;

**PROC GLM**; CLASS BLOCO PROG;

MODEL RESP = BLOCO PROG;

MEANS PROG/T LINES;

**RUN**;

\*MODELO MISTO COM PROGENIE ALEATÓRIO;

**PROC MIXED**;CLASS BLOCO PROG;

MODEL RESP = BLOCO;

RANDOM PROG/SOLUTION;

**RUN**;

\*ANÁLISE INTRABLOCO; Dependent Variable: RESP

Sum of

Source DF Squares Mean Square F Value Pr> F

Model 12 9306.20000 775.51667 21.20 <.0001

Error 27 987.57500 36.57685

Corrected Total 39 10293.77500

R-Square CoeffVar Root MSE RESP Mean

0.904061 5.557436 6.047880 108.8250

Source DF Type III SS Mean Square F Value Pr> F

BLOCO 3 5166.675000 1722.225000 47.09 <.0001

PROG 9 4139.525000 459.947222 12.57 <.0001

t Tests (LSD) for RESP: Alpha 0.05

Error Degrees of Freedom 27

Error Mean Square 36.57685

Critical Value of t 2.05183

Least Significant Difference 8.7746

Means with the same letter are not significantly different.

t Grouping Mean N PROG

A 126.250 4 7

A

B A 117.500 4 6

B A

B A 117.500 4 8

B

B 115.750 4 10

B

B C 111.250 4 9

B C

B C 108.750 4 4

C

D C 102.500 4 5

D

D 98.750 4 1

D

D 96.250 4 3

D

D 93.750 4 2

**AMPLITUDE DA ANÁLISE INTRABLOCO: 126,25 -93,75 = 32,5**

The Mixed Procedure

Model Information

Data Set WORK.MISTO

Dependent Variable RESP

Covariance Structure Variance Components

Estimation Method REML

Residual Variance Method Profile

Fixed Effects SE Method Model-Based

Degrees of Freedom Method Containment

Class Level Information

Class Levels Values

BLOCO 4 1 2 3 4

PROG 10 1 2 3 4 5 6 7 8 9 10

Dimensions

Covariance Parameters 2

Columns in X 5

Columns in Z 10

Subjects 1

Max ObsPer Subject 40

Number of Observations

Number of Observations Read 40

Number of Observations Used 40

Number of Observations Not Used 0

Iteration History

Iteration Evaluations -2 Res Log Like Criterion

0 1 289.88987012

1 1 263.73814109 0.00000000

Convergence criteria met.

The Mixed Procedure

Covariance Parameter

Estimates

CovParm Estimate

PROG 105.84

Residual 36.5769

Fit Statistics

-2 Res Log Likelihood 263.7

AIC (smaller is better) 267.7

AICC (smaller is better) 268.1

BIC (smaller is better) 268.3

Solution for Random Effects

Effect PROG Estimate StdErPred DF t Value Pr> |t|

PROG 1 -9.2738 4.2614 27 -2.18 0.0385

PROG 2 -13.8762 4.2614 27 -3.26 0.0030

PROG 3 -11.5750 4.2614 27 -2.72 0.0114

PROG 4 -0.06904 4.2614 27 -0.02 0.9872

PROG 5 -5.8220 4.2614 27 -1.37 0.1831

PROG 6 7.9851 4.2614 27 1.87 0.0718

PROG 7 16.0393 4.2614 27 3.76 0.0008

PROG 8 7.9851 4.2614 27 1.87 0.0718

PROG 9 2.2322 4.2614 27 0.52 0.6047

PROG 10 6.3743 4.2614 27 1.50 0.1463

**AMPLITUDE DA ANÁLISE MODELO MISTO: 16,04 -(-13.88) = 29,9**

**ESTREITAMENTO = ( 32,5 -29,9)= 8%**

Type 3 Tests of Fixed Effects

Num Den

Effect DF DF F Value Pr> F

BLOCO 3 27 47.09 <.0001

VALOR GENOTÍPICO= (DEP=ESTIMATE) + MÉDIA GERAL

|  |  |  |
| --- | --- | --- |
| PROG | DEP | MG+DEP |
| PROG1 | -9,2738 | 99,5262 |
| PROG2 | -13,8762 | 94,9238 |
| PROG3 | -11,5750 | 97,2250 |
| PROG4 | -0,0690 | 108,7310 |
| PROG5 | -5,8220 | 102,9780 |
| PROG6 | 7,9851 | 116,7851 |
| PROG7 | 16,0393 | 124,8393 |
| PROG8 | 7,9851 | 116,7851 |
| PROG9 | 2,2322 | 111,0322 |
| PROG10 | 6,3743 | 115,1743 |

ADAPTADO PARA fixar progenie (propagação vegetativa) “ ICfor SOLUTION “

Confiança de 95,alpha 0.05

Error Degrees of Freedom 27

Critical Value of t 2.05183

STD Error PRED 4.2614

IC: (estimate -2.05183\*4.2614;estimate + 2.05183\*4.2614)