

ANEXO

DETERMINACION DE LAS POSIBILIDADES DE  
FABRICACION DE ALIMENTOS BALANCEADOS A  
PARTIR DE LA VID, OLIVO Y NOGAL

CONSEJO FEDERAL DE INVERSIONES  
SECRETARIO GENERAL  
CNEL. (R) CARLOS BENITO PAJARIÑO

EXpte. No 128/80

CATALOGADO

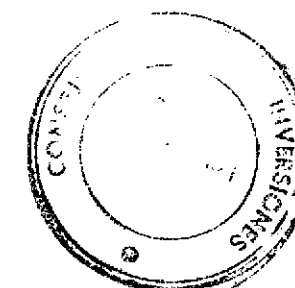
26045

2

INSTRUCCIONES PARA LA  
OPERACION DEL PROGRAMA

①  
H.12241  
9.11  
IV

```
0001      PROGRAM
0002      INITIALZ
0205      MOVE%XDATA,@RACION1@<
0206      MOVE%XOLDNAME,@RACION1@<
0207      MOVE%XPBNAME,@RACION2@<
0208      MVADR%XMINERR,L4<
0209      REVISE%PROBFILE@<
0210      MVADR%XDONFS,L3<
0211      SETUP%MAX@<
0212      MVADR%XMAJERR,L2<
0213      MOVE%XOBJ,@ORUJOS@<
0214      TITLE%RACION BOVINOS COM MAXIMO ORUJO@<
0215      MOVE%XRHS,@BOV.BEC@<
0216      EXEC%L5<
0217      MOVE%XRHS,@BOV.TERM@<
0218      EXEC%L5<
0219      MOVE%XRHS,@BOV.LECH@<
0220      EXEC%L5<
0221      XSSCALE%1.
0222      TITLE%BOVINOS RACIONES RECRIA@<
0223      MOVE%XRHS,@BOV.BEC@<
0224      MOVE%XOBJ,@COSTO@<
0225      PRIMAL
0226      SOLUTION
0227      SAVE%NAME@,@RA2@<
0228      TITLE%BOVINOS RACIONES LECHERAS@<
0229      MOVE%XRHS,@BOV.LECH@<
0230      EXEC%L5<
0231      TITLE%BOVINOS RACIONES TERMINACION@<
0232      MOVE%XRHS,@BOV.TERM@<
0233      EXEC%L5<
0234      RANGE
0235      TITLE%RACIONES TERMINACION CERDOS@<
0236      MOVE%XRHS,@C.TERM@<
0237      EXEC%L1<
0238      TITLE%RACIONES LACTANCIA CERDOS@<
0239      MOVE%XRHS,@C.LACTA@<
0240      EXEC%L1<
0241      TITLE%RACIONES GESTACION CERDOS@<
0242      MOVE%XRHS,@C.GESTA@<
0243      EXEC %L1<
0244      TITLE %RACIONES RECRIA CERDOS@<
0245      MOVE %XRHS,@C.RECRIA@<
0246      EXEC%L1<
0247      TITLE%RACIONES INICACION CERDOS@<
0248      MOVE%XRHS,@C.INICIA@<
0249      EXEC %L1<
0250      MOVE%XDATA,@AVES@<
0251      MOVE%XPBNAME,@RACION3@<
0252      MOVE%XOLDNAME,@RACION2@<
0253      REVISE%PROBFILE@<
0254      SETUP
0255      MOVE%XOBJ,@COSTO@<
0256      TITLE%RACION AVES PARRILLERO 1@<
```



```
0257      MOVE%XRHS,@PA1@<
0258      PRIMAL
0259      SAVE%@NAME@,@RA3@<
0260      SOLUTION
0261      MOVE%XRHS,@PA2@<
0262      TITLE%@RACION AVES PARRILLERO 2@<
0263      EXEC%L6<
0264      TITLE%@RACION AVES PONEDORAS@<
0265      MOVE%XRHS,@PON@<
0266      EXEC%L6<
0267      L2      PICTURE
0268      L4      EXIT
0269      L1      RESTORE%@NAME@,@RA2@<
0270      PRIMAL
0271      L3      CONTINUE
0272      SOLUTION
0273      STEP
0274      L5      PRIMAL
0275      SOLUTION%@MASKS@,@EM.BOVIN@,@ @,@RLIMIT@,@COSTO@,@CD@<
0276      STEP
0277      L6      RESTORE%@NAME@,@RA3@<
0278      PRIMAL
0279      GOTO%L3<
0280      PEND
```

CUADRO QUE ESQUEMATIZA LA MATRIZ  
DE OFERTA Y DEMANDA

(CADA LETRA QUE FIGURA EN EL CUADRO REPRESENTA UN RANGO DE CONCENTRACIONES DE LOS DIFERENTES NUTRIENTES, PARA CADA INGREDIENTE; DICHOS RANGOS ESTÁN EXPLICITADOS EN LA HOJA SUB-SIGUIENTE)

3

[illegible]

444797



## SUMMARY OF MATRIX

SYMBOL	RANGE	COUNT	%INCL.RHS
Z	LESS THAN	.000001	
Y	.000001 THRU	.000009	
X	.000010	.000099	
W	.000100	.000999	
V	.001000	.009999	3
U	.010000	.099999	14
T	.100000	.999999	38
I	1.000000	1.000000	25
A	1.000001	10.000000	209
B	10.000001	100.000000	112
C	100.000001	1,000.000000	37
D	1,000.000001	10,000.000000	72
E	10,000.000001	100,000.000000	2
F	100,000.000001	1,000,000.000000	5
G	GREATER THAN 1,000,000.000000		2

MINIMUM R .500000E-02 MAXIMUM R .800000E+07

## RACIONES DE COSTO MINIMO

. BOVINOS RECRIA

. BOVINOS TERMINACION

. BOVINOS LECHERAS



PRIMAL OBJ N COSTO RHS N BOV.BEC

TIME N 0.00 MINS. PRICING N 5

SCALE N  
NUMBER OF NEGATIVE DJOS N 12 CYCLING 10

	ITER NUMBER	VECTOR OUT	VECTOR IN	REDUCED COST	NUMBER NONOPT	FUNCTION VALUE	NUMBER INEBAS	SUM INEBAS
M	1	1	45	2.11873-	12	636.4119	1	.0010
M	2	19	51	.95367-	2	637.0905	0	

FEASIBLE SOLUTION

XDOFEAS DEMAND SET

PRIMAL OBJ N COSTO RHS N BOV.BEC

TIME N 0.00 MINS. PRICING N 5

	ITER NUMBER	VECTOR OUT	VECTOR IN	REDUCED COST	NUMBER NONOPT	FUNCTION VALUE	NUMBER INEBAS	SUM INEBAS
M	3	10	42	.32324-	9	495.7272	0	
	4	6	49	.25841-		175.6535	0	
	5	11	56	3.03002		171.7984	0	
M	6	56	10	1.01089-	6	161.0729	0	
	7	7	47	.14543-		161.0729	0	
M	8	45	48	.01703-	2	150.2410	0	
	9	47	53	.05374-		147.5071	0	

INVERT - TIME N 0.01 - ITERATION.....9

BASIS STRUCTURAL.....5 ELEM.....69 NUCLEUS.....4

OLD INVERSE -L- BUF...6 REC...1 VEC.....40 ELEM...271

NEW INVERSE -L- BUF...3 REC...1 VEC.....4 ELEM...21

- TRANSFORMED.....3 PIVOTING BY SIZE.....3

-U- BUF...0 REC...1 VEC.....0 ELEM.....0 - U-VEC. OBS.....0

-U- BUF...3 REC...1 VEC.....31 ELEM.....78 - TIME TAKEN..0.000

PRIMAL OBJ N COSTO RHS N BOV.BEC

TIME N 0.01 MINS. PRICING N 5

SCALE N 1.00000  
NUMBER OF NEGATIVE DJOS N 0 CYCLING 10  
OPTIMAL SOLUTION

XDOOPT DEMAND SET

SOLUTION %OPTIMAL&lt;

TIME 0.01 MINS. ITERATION NUMBER 9

ROW SELECTION LIST MASKS EM.BOVIN

ROW SELECTION LIST MASKS CU

ROW SELECTION LIST LIMIT COSTO

...NAME... ...ACTIVITY... DEEINED AS

FUNCTIONAL 147.47928 COSTO

RESTRAINTS BOV.BEC

BOUNDS.... UREAS

## SECTION 1 - ROWS

NUMBER	ROW	AT	ACTIVITY	SLACK	ACTIVITY	LOWER LIMIT	UPPER LIMIT	DUAL ACTIVITY
1	EM.BOVIN	LL	2100.00000		2100.00000		NONE	.14485-
3	COSTO	BS	147.47928	147.47928-		NONE		1.00000
4	DRUJOS	BS	.60437	.60437-		NONE		
5	EM.AVES	BS	2143.11767	2143.11767-		NONE		
6	KG	UL	1.00000		NONE	1.00000	217.69956	
7	PROTEINA	LL	.10000		.10000		NONE	380.06350-
8	VIT.A	BS	1534.17766	665.82234-		NONE		
9	VIT.E	BS	8.79355	8.79355-		NONE		
10	CA	BS	3.23785	.83785-	2.40000		NONE	
11	FO	LL	2.20000		2.20000		NONE	10.12643-
12	CLNA	BS	.	5.00000		NONE		
13	MG	BS	.00463	.99537		NONE		
14	S	BS	.	1.00000		NONE		
15	CO	BS	.	.07000		NONE		
24	CU	BS	2.58468	1.41532		NONE		

## SECTION 2 - COLUMNS

NUMBER	COLUMNS	AT	...ACTIVITY...	...INPUT COST...	...LOWER LIMIT...	...UPPER LIMIT...	...REDUCED COST...
42	MAIZ	BS	.39471	318.00000	.	NONE	.
43	SORGO	LL	.	305.00000	.	NONE	146.04302
44	T.SOJA	LL	.	770.00000	.	NONE	316.93593
45	T.GIRASO	LL	.	700.00000	.	NONE	316.41017
46	T.MANI	LL	.	710.00000	.	NONE	285.62702
47	AFRECHO	LL	.	500.00000	.	NONE	219.37517
48	O.UVA	BS	.32803	305.00000	.	NONE	.
49	O.ACEITU	BS	.27637	38.00000	.	NONE	.
50	HENO	LL	.	320.00000	.	NONE	172.90912
51	VITAM.1	BS	.00014	4935.00000	.	NONE	.
52	VITAM.2	LL	.	3872.00000	.	NONE	3059.15965
53	C.HUESO	BS	.00078	1200.00000	.	NONE	.
54	SAL	LL	.	100.00000	.	NONE	317.69956
55	VITAM.3	LL	.	4885.00000	.	NONE	4885.00000
56	UREA	LL	.	1360.00000	.	.00800	1494.08559

PRIMAL OBJ N COSTO RHS N BOV.TERM

TIME N 0.01 MINS. PRICING N 5

SCALE N  
NUMBER OF NEGATIVE DJAS N

2

CYCLING

10

ITER	VECTOR	VECTOR	REDUCED	NUMBER	FUNCTION	NUMBER	SUM
NUMBER	OUT	IN	COST	NONOPT	VALUE	INFEAS	INFEAS
M 10	49	11	7.87192-	2	291.3558	0	.

FEASIBLE SOLUTION

XDOFEAS DEMAND SET

PRIMAL OBJ N COSTO RHS N BOV.TERM

TIME N 0.01 MINS. PRICING N 5

SCALE N 1.00000

ITER	VECTOR	VECTOR	REDUCED	NUMBER	FUNCTION	NUMBER	SUM
NUMBER	OUT	IN	COST	NONOPT	VALUE	INFEAS	INFEAS
M 11	10	49	.18170-	5	220.1602	0	.

INVERT - TIME N 0.01 - ITERATION....11

BASIS STRUCTURAL.....5 ELEM.....69 NUCLEUS.....4 - TRANSFORMED.....3 PIVOTING BY SIZE.....3  
OLD INVERSE -L- BUF...3 REC...1 VEC.....6 ELEM.....29 -U- BUF...3 REC...1 VEC.....33 ELEM.....87 - U-VEC. OBS.....2  
NEW INVERSE -L- BUF...3 REC...1 VEC.....4 ELEM.....21 -U- BUF...3 REC...1 VEC.....31 ELEM.....78 - TIME TAKEN..0.000

PRIMAL OBJ N COSTO RHS N BOV.TERM

TIME N 0.01 MINS. PRICING N 5

SCALE N 1.00000

NUMBER OF NEGATIVE DJAS N  
OPTIMAL SOLUTION

0

CYCLING

10

XDOOPT DEMAND SET

SOLUTION %OPTIMAL&lt;

TIME N 0.01 MINS. ITERATION NUMBER N 11

ROW SELECTION LIST MASKS EM.BOVIN

ROW SELECTION LIST MASKS CU

ROW SELECTION LIST LIMIT COSTO

...NAME... ...ACTIVITY... DEFINED AS

FUNCTIONAL 220.16015 / GDSTO  
RESTRAINTS BOV.TERM  
BOUNDS.... UREAS

## SECTION 1 - ROWS

NUMBER	ROW	AT	...ACTIVITY...	SLACK ACTIVITY	...LOWER LIMIT...	...UPPER LIMIT...	DUAL ACTIVITY
1	EM. BOVIN	LL	2599.00000	0	2599.00000	NONE	15953-
3	COSTO	BS	220.16015	220.16015-	NONE	NONE	1.00000
4	ORUJOS	BS	.35216	.35216-	NONE	NONE	0
5	EM. AVES	BS	2654.53700	2654.53700-	0	NONE	0
6	KG	UL	1.00000	0	NONE	1.00000	236.32636
7	PROTEINA	LL	.09400	0	.09400	NONE	325.82344-
8	VIT. A	BS	1810.71007	389.28993-	NONE	NONE	0
9	VIT. E	BS	14.32420	14.32420-	NONE	NONE	0
10	CA	LL	2.20000	0	2.20000	NONE	4.78775-
11	FO	BS	2.46474	.36474-	2.10000	NONE	0
12	CLNA	BS	0	5.00000-	NONE	NONE	0
13	MG	BS	.00947	.00947-	NONE	NONE	0
14	S	BS	0	0	NONE	NONE	0
15	CO	BS	0	0	NONE	NONE	0
24	CU	BS	4.14332	4.14332-	NONE	NONE	0

0613302

## SECTION 2 - COLUMNS

NUMBER	COLUMNS	AT	...ACTIVITY...	..INPUT COST..	..LOWER LIMIT.	..UPPER LIMIT.	..REDUGED COST.
42	MAIZ	BS	.64610/	318.00000	.	NONE	.
43	SORGO	LL	.	305.00000	.	NONE	172.33505
44	T.SOJA	LL	.	770.00000	.	NONE	374.56574
45	T.GIRASO	LL	.	700.00000	.	NONE	405.43714
46	T.MANI	LL	.	710.00000	.	NONE	340.12415
47	AFRECHO	LL	.	500.00000	.	NONE	325.01460
48	O.UVA	BS	.16083/	30.00000	.	NONE	.
49	O.ACEITU	BS	.19132/	38.00000	.	NONE	.
50	HENO	LL	.	320.00000	.	NONE	123.75989
51	VITAM.1	BS	.00014/	4935.00000	.	NONE	.
52	VITAM.2	LL	.	3872.00000	.	NONE	3074.06109
53	C.HUESO	BS	.00161/	1200.00000	.	NONE	.
54	SAL	LL	.	100.00000	.	NONE	336.32636
55	VITAM.3	LL	.	4885.00000	.	NONE	4885.00000
56	UREA	LL	.	1360.00000	.	.00800	1524.64520

0613303



PRIMAL OBJ N COSTO RHS N BOV.LECH

TIME N 0.02 MINS. PRICING N 5

SCALE N

NUMBER OF NEGATIVE DJDS N

7

CYCLING

10

ITER	VECTOR	VECTOR	REDUCED	NUMBER	FUNCTION	NUMBER	SUM
NUMBER	OUT	IN	COST	NONOPT	VALUE	INFEAS	INFEAS
M 12	49	44	18.9652-	7	338.5595	0	.

FEASIBLE SOLUTION

XDOFEAS DEMAND SET

PRIMAL OBJ N COSTO RHS N BOV.LECH

TIME N 0.02 MINS. PRICING N 5

SCALE N 1.00000

ITER	VECTOR	VECTOR	REDUCED	NUMBER	FUNCTION	NUMBER	SUM
NUMBER	OUT	IN	COST	NONOPT	VALUE	INFEAS	INFEAS
M 13	44	46	.02594-	1	334.0995	0	.

INVERT - TIME N 0.02 - ITERATION....13

BASIS STRUCTURAL.....5 ELEM.....89 NUCLEUS.....4 -- TRANSFORMED.....3 PIVOTING BY SIZE.....3  
OLD INVERSE -L- BUF...3 REC...1 VEC.....5 ELEM.....24 -U- BUF...3 REC...1 VEC.....33 ELEM...136 - U-VEC. OBS.....2  
NEW INVERSE -L- BUF...3 REC...1 VEC.....4 ELEM.....21 -U- BUF...3 REC...1 VEC.....31 ELEM...98 - TIME TAKEN..0.000

PRIMAL OBJ N COSTO RHS N BOV.LECH

TIME N 0.02 MINS. PRICING N 5

SCALE N 1.00000

NUMBER OF NEGATIVE DJDS N

0

CYCLING

10

OPTIMAL SOLUTION

XDOOPT DEMAND SET

SOLUTION %OPTIMAL<

TIME N 0.02 MINS. ITERATION NUMBER N 13

ROW SELECTION LIST MASKS EM BOVIN

ROW SELECTION LIST MASKS CU

ROW SELECTION LIST LIMIT COSTO GO

NAME ACTIVITY DEFINED AS

FUNCTIONAL 334.09947 COSTO

RESTRAINTS BOV.LECH

BOUNDS UREAS



## SECTION 1 - ROWS

NUMBER	ROW	AT	ACTIVITY	SLACK	ACTIVITY	LOWER LIMIT	UPPER LIMIT	EQUAL ACTIVITY
1	EM. BOVIN	LL	2706.00000			2706.00000	NONE	1777.5-
3	COSTO	BS	334.09947	334.09947-	NONE	NONE	NONE	1.00000
4	ORUJOS	BS	.21884	.21884-	NONE	NONE	NONE	
5	EM. AVES	BS	2699.81817	2699.81817-		NONE	NONE	
6	KG	UL	1.00000		NONE	1.00000	377.74491	
7	PROTEINA	LL	.16000		.16000	NONE	1240.58169-	
8	VIT. A	BS	1858.68194	1341.31806	NONE	NONE		
9	VIT. E	BS	13.62944	13.62944-	NONE	NONE		
10	CA	LL	6.00000		6.00000	NONE	5.25915-	
11	FO	BS	4.96657	.96657-	4.00000	NONE		
12	CLNA	BS	.41975	4.58025	NONE	NONE		
13	MG	BS	.33625	1.66375	NONE	NONE		
14	S	BS	.	2.00000	NONE	NONE		
15	CO	BS	.	.10000	NONE	NONE		
24	CU	BS	3.86257	6.13743	NONE	NONE		

## SECTION 2 - COLUMNS

NUMBER	.COLUMNS	AT	...ACTIVITY...	..INPUT COST..	..LOWER LIMIT.	..UPPER LIMIT.	.REDUCED COST.
42	MAIZ	BS	.59880	318.00000	.	NONE	.
43	SORGO	LL	.	305.00000	.	NONE	168.08152
44	T.SOJA	LL	.	770.00000	.	NONE	27.13415
45	T.GIRASO	LL	.	700.00000	.	NONE	117.94456
46	T.MANI	BS	.16790	710.00000	.	NONE	.
47	AFRECHO	LL	.	500.00000	.	NONE	289.67591
48	D.UVA	BS	.21884	30.00000	.	NONE	.
49	D.ACEITU	LL	.	38.00000	.	NONE	36.63885
50	HENO	LL	.	320.00000	.	NONE	85.18994
51	VITAM.1	BS	.00015	4935.00000	.	NONE	.
52	VITAM.2	LL	.	3872.00000	.	NONE	3187.19593
53	C.HUESO	BS	.01430	1200.00000	.	NONE	.
54	SAL	LL	.	100.00000	.	NONE	477.74491
55	VITAM.3	LL	.	4885.00000	.	NONE	4885.00000
56	UREA	LL	.	1360.00000	.	.00800	1464.81694



## RACIONES DE MAXIMO ORUJO

- . BOVINOS RECRIA
- . BOVINOS TERMINACION
- . BOVINOS LECHERAS

PRIMAL OBJ N ORUJOS RHS N BOV.BEC

TIME N 0.02 MINS. PRICING N 5

SCALE N  
NUMBER OF NEGATIVE DJOS N 11 CYCLING 10

ITER	VECTOR	VECTOR	REDUCED	NUMBER	FUNCTION	NUMBER	SUM
NUMBER	OUT	IN	COST	NONOPT	VALUE	INFEAS	INFEAS
M 14	11	6	2.98330-	11	.3494	0	.

FEASIBLE SOLUTION

XDOFEAS DEMAND SET

PRIMAL OBJ N ORUJOS RHS N BOV.BEC

TIME N 0.02 MINS. PRICING N 5

SCALE N 1.00000-

ITER	VECTOR	VECTOR	REDUCED	NUMBER	FUNCTION	NUMBER	SUM
NUMBER	OUT	IN	COST	NONOPT	VALUE	INFEAS	INFEAS
M 15	46	10	1.60373-	8	.4608	0	.
16	53	7	10.6693-		.5185	0	.
M 17	6	49	.65180-	2	.5884	0	.
M 18	48	44	.94545-	5	.6271	0	.
19	7	53	.14634-		.6334	0	.

INVERT - TIME N 0.02 - ITERATION....19

BASIS STRUCTURAL.....5 ELEM.....92 NUCLEUS.....4 - TRANSFORMED.....3 PIVOTING BY SIZE.....3  
OLD INVERSE -L- BUF...3 REC...1 VEC.....10 ELEM.....45 -U- BUF...3 REC...1 VEC.....37 ELEM...149 - U-VEC. OBS.....6  
NEW INVERSE -L- BUF...3 REC...1 VEC.....4 ELEM.....21 -U- BUF...3 REC...1 VEC.....31 ELEM...101 - TIME TAKEN...0.000

PRIMAL OBJ N ORUJOS RHS N BOV.BEC

TIME N 0.02 MINS. PRICING N 5

SCALE N 1.00000-

NUMBER OF NEGATIVE DJOS N 0 CYCLING 10  
OPTIMAL SOLUTION

XDOOPT DEMAND SET

SOLUTION %OPTIMAL&lt;

TIME 0.02 MINS. ITERATION NUMBER 19

ROW	SELECTION LIST MASKS EM.BOVIN
ROW	SELECTION LIST MASKS CU
ROW	SELECTION LIST LIMIT COSTO CO

...NAME...

...ACTIVITY...

DEFINED AS

FUNCTIONAL  
RESTRAINTS  
BOUNDS....

.63339

ORUJOS  
BOV.BEC  
UREAS

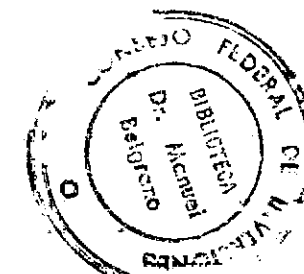
## SECTION 1 - ROWS

NUMBER	...ROW..	AT	...ACTIVITY...	SLACK ACTIVITY	..LOWER LIMIT..	..UPPER LIMIT..	..DUAL ACTIVITY..
1	EM.BOVIN	LL	2100.00000	2100.00000	NONE	.00053	
3	COSTO	BS	159.22011	159.22011-	NONE		
4	DRUJOS	BS	.63339	.63339-	NONE	1.00000	
5	EM.AVES	BS	2105.30019	2105.30019-	NONE		
6	KG	UL	1.00000		1.00000	1.81676-	
7	PROTEINA	LL	.10000	.10000	NONE	.36220	
8	VIT.A	BS	1460.88593	739.11407	NONE		
9	VIT.E	BS	7.44997	7.44997-	NONE		
10	CA	BS	2.79195	.39195-	2.40000		
11	FO	LL	2.20000		2.20000	.01298	
12	CLNA	BS	.31859	4.68141	NONE		
13	MG	BS	.11910	.88090	NONE		
14	S	BS	.	1.00000	NONE		
15	CD	BS	.	.07000	NONE		
24	CU	BS	3.51631	.48369	NONE		



## SECTION 2 - COLUMNS

NUMBER	.COLUMNS	AT	...ACTIVITY...	..INPUT COST..	..LOWER LIMIT.	..UPPER LIMIT.	.REDUCED COST.
42	MAIZ	BS	.32808	.	.	NONE	.
43	SORGO	LL	.	.	.	NONE	.63415-
44	T.SOJA	BS	.03704	.	.	NONE	.
45	T.GIRASO	LL	.	.	.	NONE	.28338-
46	T.MANI	LL	.	.	.	NONE	.08818-
47	AFRECHO	LL	.	.	.	NONE	.42161-
48	O.UVA	LL	.	1.00000	.	NONE	.08847-
49	O.ACEITU	BS	.63339	1.00000	.	NONE	.
50	HENO	LL	.	.	.	NONE	.67937-
51	VITAM.1	BS	.00014	.	.	NONE	.
52	VITAM.2	LL	.	.	.	NONE	1.45341-
53	C.HUESO	BS	.00135	.	.	NONE	.
54	SAL	LL	.	.	.	NONE	1.81676-
A 55	VITAM.3	LL	.	.	.	NONE	.
56	UREA	LL	.	.	.	.00800	1.73707-



PRIMAL OBJ N ORUJOS RHS N BOV.TERM

TIME N 0.03 MINS. PRICING N 5

SCALE N  
NUMBER OF NEGATIVE DJAS N 5 CYCLING 10

ITER	VECTOR	VECTOR	REDUCED	NUMBER	FUNCTION	NUMBER	SUM
NUMBER	OUT	IN	COST	NONOPT	VALUE	INFEAS	INFEAS
M 20	49	11	7.84789-	5	.0000	0	.

FEASIBLE SOLUTION

XDOFEAS DEMAND SET

PRIMAL OBJ N ORUJOS RHS N BOV.TERM

TIME N 0.03 MINS. PRICING N 5

SCALE N 1.00000-

ITER	VECTOR	VECTOR	REDUCED	NUMBER	FUNCTION	NUMBER	SUM
NUMBER	OUT	IN	COST	NONOPT	VALUE	INFEAS	INFEAS
M 21	10	49	1.00000-	2	.3650	0	.

INVERT - TIME N 0.03 - ITERATION....21

BASIS STRUCTURAL.....5 ELEM....92 NUCLEUS.....4

OLD INVERSE -L- BUF...3 REC...1 VEC.....6 ELEM....29

NEW INVERSE -L- BUF...3 REC...1 VEC.....4 ELEM....21

- TRANSFORMED.....3 PIVOTING BY SIZE.....3

-U- BUF...3 REC...1 VEC....33 ELEM...110 - U-VEC. OBS.....2

-U- BUF...3 REC...1 VEC....31 ELEM...101 - TIME TAKEN..0.000

PRIMAL OBJ N ORUJOS RHS N BOV.TERM

TIME N 0.03 MINS. PRICING N 5

SCALE N 1.00000-

NUMBER OF NEGATIVE DJAS N 0 CYCLING 10  
OPTIMAL SOLUTION

XDOOPT DEMAND SET

SOLUTION %OPTIMAL&lt;

TIME N 0.03 MINS. ITERATION NUMBER N 21

ROW SELECTION LIST MASKS EM.BOVIN

ROW SELECTION LIST MASKS CU

ROW SELECTION LIST LIMIT COSTO

CD

...NAME...

...ACTIVITY...

DEFINED AS

FUNCTIONAL  
RESTRAINTS  
BOUNDS....

.36503

ORUJO

BOV. TERM

UREAS

## SECTION 1 - ROWS

NUMBER	ROW	AT	ACTIVITY	SLACK	ACTIVITY	LOWER LIMIT	UPPER LIMIT	DUAL ACTIVITY
1	EM. BOVIN	LL	2599.00000	.	.	2599.00000	NONE	.00055
3	COSTO	BS	227.02183	227.02183-	.	NONE	NONE	.
4	ORUJOS	BS	.36503	.36503-	.	NONE	NONE	1.00000
5	EM. AVES	BS	2635.94607	2635.94607-	.	NONE	NONE	.
6	KG	UL	1.00000	.	.	NONE	1.00000	1.85623-
7	PROTEINA	LL	.09400	.	.	.09400	NONE	.48337
8	VIT. A	BS	1775.27179	424.72821	.	NONE	NONE	.
9	VIT. E	BS	13.67589	13.67589-	.	NONE	NONE	.
10	CA	LL	2.20000	.	.	2.20000	NONE	.00619
11	FO	BS	2.56900	.46900-	.	2.10000	NONE	.
12	CLNA	BS	.15754	4.84246	.	NONE	NONE	.
13	MG	BS	.07045	.07045-	.	NONE	NONE	.
14	S	BS	.	.	.	NONE	NONE	.
15	CO	BS	.	.	.	NONE	NONE	.
24	CU	BS	4.60856	4.60856-	.	NONE	NONE	.

## SECTION 2 - COLUMNS

NUMBER	COLUMNS	AT	...ACTIVITY...	..INPUT COST..	...LOWER LIMIT.	..UPPER LIMIT.	..REDUCED COST.
42	MAIZ	BS	.61388	.	.	NONE	.
43	SORGO	LL	.	.	.	NONE	.
44	T.SOJA	BS	.01832	.	.	NONE	.66178-
45	T.GIRASO	LL	.	.	.	NONE	.
46	T.MANI	LL	.	.	.	NONE	.33376-
47	AFRECHO	LL	.	.	.	NONE	.08506-
48	O.UVA	LL	.	1.00000	.	NONE	.54523-
49	O.ACEITU	BS	.36503	1.00000	.	NONE	.08006-
50	HENO	LL	.	.	.	NONE	.
51	VITAM.1	BS	.00014	.	.	NONE	.60349-
52	VITAM.2	LL	.	.	.	NONE	.
53	C.HUESO	BS	.00263	.	.	NONE	1.48499-
54	SAL	LL	.	.	.	NONE	.
55	VITAM.3	LL	.	.	.	NONE	1.85623-
56	UREA	LL	.	.	.	NONE	.
						.00800	1.74989-

061331b



PRIMAL

OBJ N ORUJOS

RHS N BOV.LECH

TIME N 0.03 MINS.

PRICING N 5

SCALE N 11.00000-

NUMBER OF NEGATIVE DJOS N

0

CYCLING 10

OPTIMAL SOLUTION

XDDOPT DEMAND SET

SOLUTION %OPTIMAL&lt;

TIME N 0.03 MINS. ITERATION NUMBER N 21

ROW	SELECTION LIST MASKS EM.BOVIN
ROW	SELECTION LIST MASKS CU
ROW	SELECTION LIST LIMIT COSTO CO

...NAME...	...ACTIVITY...	DEFINED AS
FUNCTIONAL	.25065	ORUJOS
RESTRAINTS		BOV.LECH
BOUNDS....		UREAS

## SECTION 1 - ROWS

NUMBER	ROW	AT	...ACTIVITY...	SLACK ACTIVITY	...LOWER LIMIT...	...UPPER LIMIT...	...DUAL ACTIVITY...
1	EM. BOVIN	LL	2706.00000		2706.00000	NONE	.00055
3	COSTO	BS	348.46007	348.46007-	NONE	NONE	
4	ORUJOS	BS	.25065	.25065-	NONE	NONE	1.00000
5	EM. AVES	BS	2646.13257	2646.13257-		NONE	
6	KG	UL	1.00000		NONE	1.00000	1.85623-
7	PROTEINA	LL	.16000		.16000	NONE	.48337
8	VIT. A	BS	1797.14992	1402.85003	NONE	NONE	
9	VIT. E	BS	12.69265	12.69265-	NONE	NONE	
10	CA	LL	6.00000		6.00000	NONE	.00619
11	FD	BS	5.14884	1.14884-	4.00000	NONE	
12	CLNA	BS	1.64090	3.35910	NONE	NONE	
13	MG	BS	.66409	1.33591	NONE	NONE	
14	S	BS	.	2.00000	NONE	NONE	
15	CO	BS	.	.10000	NONE	NONE	
24	CU	BS	10.44187	.44187-	NONE	NONE	



## SECTION 2 - COLUMNS

NUMBER	COLUMNS	AT	...ACTIVITY...	..INPUT COST..	..LOWER LIMIT.	..UPPER LIMIT.	..REDUCED COST.
42	MAIZ	BS	.54286	.	.	NONE	.
43	SORGO	LL	.	.	.	NONE	.66178-
44	T.SOJA	BS	.19080	.	.	NONE	.
45	T.GIRASO	LL	.	.	.	NONE	.33376-
46	T.MANI	LL	.	.	.	NONE	.08506-
47	AFRECHO	LL	.	.	.	NONE	.54523-
48	O.UVA	LL	.	1.00000	.	NONE	.08006-
49	O.ACEITU	BS	.25065	1.00000	.	NONE	.
50	HENO	LL	.	.	.	NONE	.60349-
51	VITAM.1	BS	.00015	.	.	NONE	.
52	VITAM.2	LL	.	.	.	NONE	1.48499-
53	C.HUESO	BS	.01554	.	.	NONE	.
54	SAL	LL	.	.	.	NONE	1.85623-
A 55	VITAM.3	LL	.	.	.	NONE	.
56	UREA	LL	.	.	.	.00800	1.74989-

## RACIONES DE COSTO MINIMO

- . CERDOS RECRIA
- . CERDOS TERMINACION
- . CERDOS GESTACION
- . CERDOS LACTACION

PRIMAL OBJ N COSTO RHS N C.RECRIA

TIME N 0.01 MINS. PRICING N 3  
SCALE N .

	ITER NUMBER	VECTOR OUT	VECTOR IN	REDUCED COST	NUMBER NONOPT	FUNCTION VALUE	NUMBER INFEAS	SUM INFEAS
M	13	37	22	6.41801-	10	475.0852	0	.

FEASIBLE SOLUTION

XDOFEAS DEMAND SET

PRIMAL OBJ N COSTO RHS N C.RECRIA

TIME N 0.01 MINS. PRICING N 3  
SCALE N 1.00000

	ITER NUMBER	VECTOR OUT	VECTOR IN	REDUCED COST	NUMBER NONOPT	FUNCTION VALUE	NUMBER INFEAS	SUM INFEAS
M	14	17	35	.84716-	9	469.8324	0	.
M	15	35	36	.01261-	1	469.7442	0	.

INVERT - TIME N 0.01 - ITERATION....15

BASIS STRUCTURAL.....7 ELEM.....94 NUCLEUS.....7 - TRANSFORMED.....4 PIVOTING BY SIZE.....2  
OLD INVERSE -L- BUF...3 REC...1 VEC.....11 ELEM....30 -U- BUF...3 REC...1 VEC.....32 ELEM...159 - U-VEC. OBS.....6  
NEW INVERSE -L- BUF...3 REC...1 VEC.....6 ELEM....15 -U- BUF...3 REC...1 VEC.....26 ELEM...106 - TIME TAKEN...0.000

PRIMAL OBJ N COSTO RHS N C.RECRIA

TIME N 0.01 MINS. PRICING N 3  
SCALE N 1.00000NUMBER OF NEGATIVE DJ@S N 0 CYCLING 10  
OPTIMAL SOLUTION

XDOOPT DEMAND SET



SOLUTION %OPTIMAL<

TIME N 0.01 MINS. ITERATION NUMBER N 15

...NAME...	...ACTIVITY...	DEFINED AS
FUNCTIONAL RESTRAINTS	469.74416	COSTO C.RECRIA



## SECTION 1 - ROWS

NUMBER	...ROW..	AT	...ACTIVITY...	SLACK ACTIVITY	..LOWER LIMIT.	..UPPER LIMIT.	.DUAL ACTIVITY
1	EM.BOVIN	BS	2972.37586	2972.37586-	.	NONE	.
2	EM.CERDO	LL	3013.00000	.	3013.00000	NONE	.14808-
3	COSTO	BS	469.74416	469.74416-	NONE	NONE	1.00000
4	ORUJOS	BS	.00533	.00533-	NONE	NONE	.
5	EM.AVES	BS	9.83825	9.83825-	.	NONE	.
6	KG	UL	1.00000	.	NONE	1.00000	235.40132
7	PROTEINA	BS	.18627	.02627-	.16000	NONE	.
8	VIT.A	BS	38100.20960	34800.20960-	3300.00000	NONE	.
9	VIT.E	BS	21.32779	10.32779-	11.00000	NONE	.
10	CA	LL	6.00000	.	6.00000	NONE	4.78467-
11	FO	BS	6.65392	1.65392-	5.00000	NONE	.
12	CLNA	BS	11.89810	8.39810-	3.50000	NONE	.
13	MG	BS	.51657	.51657-	.	NONE	.
14	S	BS	.95649	.95649-	.	NONE	.
15	CO	BS	.09342	.09342-	.	NONE	.
16	LISINA	LL	7.40000	.	7.40000	NONE	12.75960-
17	METIONIN	LL	5.00000	.	5.00000	NONE	20.90692-
18	TRIPTOFA	BS	2.12454	1.02454-	1.10000	NONE	.
19	VIT.D	BS	9477.48848	9147.48848-	330.00000	NONE	.
20	VIT.B2	BS	3.43418	1.23418-	2.20000	NONE	.
21	PANTOTEN	BS	12.01517	1.01517-	11.00000	NONE	.
22	COLINA	BS	1253.33331	373.33331-	880.00000	NONE	.
23	FE	BS	117.91804	37.91804-	80.00000	NONE	.
24	CU	BS	12.88770	6.88770-	6.00000	NONE	.
25	MN	BS	38.14248	28.14248-	10.00000	NONE	.
26	ZN	LL	50.00000	.	50.00000	NONE	.54425-
27	SE	LL	.10000	.	.10000	NONE	41.07401-
28	I	BS	.45519	.23519-	.22000	NONE	.

## SECTION 2 - COLUMNS

NUMBER	.COLUMNS	AT	...ACTIVITY...	..INPUT COST..	..LOWER LIMIT.	..UPPER LIMIT.	.REDUCED COST.
29	MAIZ	BS	.68251	318.00000	.	NONE	.
30	SORGO	LL	.	305.00000	.	NONE	38.01179
31	T.SOJA	BS	.06582	770.00000	.	NONE	.
32	T.GIRASO	BS	.22307	700.00000	.	NONE	.
33	T.MANI	LL	.	710.00000	.	NONE	209.38815
34	AFRECHO	LL	.	500.00000	.	NONE	190.43983
35	O.UVA	LL	.	30.00000	.	NONE	14.57494
36	O.ACEITU	BS	.00683	38.00000	.	NONE	.
37	HENO	LL	.	320.00000	.	NONE	143.70638
38	VITAM.1	BS	.00455	4935.00000	.	NONE	.
39	VITAM.2	BS	.00093	3872.00000	.	NONE	.
40	C.HUESO	BS	.01628	1200.00000	.	NONE	.
41	SAL	LL	.	100.00000	.	NONE	335.40132



PRIMAL OBJ N COSTO RHS N C.TERMI

TIME N 0.00 MINS. PRICING N 5

SCALE N .

NUMBER OF NEGATIVE DJ@S N 13 CYCLING 10

	ITER NUMBER	VECTOR OUT	VECTOR IN	REDUCED COST	NUMBER NONOPT	FUNCTION VALUE	NUMBER INFEAS	SUM INFEAS
M	1	10	32	11.7311-	13	1050.0000	8	.1690
	2	26	38	5.72473-		1075.9737	2	.0694
M	3	6	37	.68792-	4	644.1006	1	.0207
	4	23	40	.13332-		710.9345	2	.0198
M	5	27	39	.77107-	7	713.4678	1	.0148
	6	37	29	.24313-		684.1855	1	.0112
M	7	2	23	.34275-	2	462.9168	0	.

FEASIBLE SOLUTION

XDOFEAS DEMAND SET

PRIMAL OBJ N COSTO RHS N C.TERMI

TIME N 0.00 MINS. PRICING N 5

SCALE N 1.00000

	ITER NUMBER	VECTOR OUT	VECTOR IN	REDUCED COST	NUMBER NONOPT	FUNCTION VALUE	NUMBER INFEAS	SUM INFEAS
M	8	16	36	1.16191-	9	454.4492	0	.
M	9	17	31	.42513-	1	410.0669	0	.

INVERT - TIME N 0.00 - ITERATION.....9

BASIS STRUCTURAL.....7 ELEM.....94 NUCLEUS.....7 - TRANSFORMED.....4 PIVOTING BY SIZE.....2  
OLD INVERSE -L- BUF....6 REC....1 VEC.....34 ELEM...236 -U- BUF...0 REC...1 VEC.....0 ELEM.....0 - U-VEC. OBS.....0  
NEW INVERSE -L- BUF....3 REC....1 VEC.....6 ELEM....15 -U- BUF...3 REC...1 VEC.....26 ELEM...106 - TIME TAKEN...0.001

PRIMAL OBJ N COSTO RHS N C.TERMI

TIME N 0.00 MINS. PRICING N 5

SCALE N 1.00000

NUMBER OF NEGATIVE DJ@S N 0 CYCLING 10

OPTIMAL SOLUTION

XDOOPT DEMAND SET

SOLUTION %OPTIMAL&lt;

TIME 0.00 MINS. ITERATION NUMBER 9

...NAME...	...ACTIVITY...	DEFINED AS
FUNCTIONAL RESTRAINTS	410.06687	COSTO C-TERMI

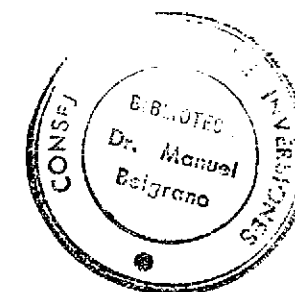


## SECTION 1 - ROWS

NUMBER	...ROW..	AT	...ACTIVITY...	SLACK ACTIVITY	..LOWER LIMIT.	..UPPER LIMIT.	.DUAL ACTIVITY
1	EM.BOVIN	BS	2999.48650	2999.48650-	.	NONE	.
2	EM.CERDO	LL	3013.00000	.	3013.00000	NONE	.14808-
3	COSTO	BS	410.06687	410.06687-	NONE	NONE	1.00000
4	ORUJOS	BS	.04983	.04983-	NONE	NONE	.
5	EM.AVES	BS	92.00140	92.00140-	.	NONE	.
6	KG	UL	1.00000	.	NONE	1.00000	235.40132
7	PROTEINA	BS	.14731	.00731-	.14000	NONE	.
8	VIT.A	BS	37597.67086	34297.67086-	3300.00000	NONE	.
9	VIT.E	BS	21.06545	10.06545-	11.00000	NONE	.
10	CA	LL	6.00000	.	6.00000	NONE	4.78467-
11	FO	BS	5.71210	.71210-	5.00000	NONE	.
12	CLNA	BS	4.14673	.64673-	3.50000	NONE	.
13	MG	BS	.47315	.47315-	.	NONE	.
14	S	BS	.90449	.90449-	.	NONE	.
15	CO	BS	.08980	.08980-	.	NONE	.
16	LISINA	LL	6.00000	.	6.00000	NONE	12.75960-
17	METIONIN	LL	3.00000	.	3.00000	NONE	20.90692-
18	TRIPTOFA	BS	1.60581	.90581-	.70000	NONE	.
19	VIT.D	BS	9328.71078	9163.71078-	165.00000	NONE	.
20	VIT.B2	BS	3.08017	1.28017-	1.80000	NONE	.
21	PANTOTEN	BS	11.19827	.19827-	11.00000	NONE	.
22	COLINA	BS	922.67481	152.67481-	770.00000	NONE	.
23	FE	BS	122.76719	42.76719-	80.00000	NONE	.
24	CU	BS	13.94004	7.94004-	6.00000	NONE	.
25	MN	BS	35.45028	25.45028-	10.00000	NONE	.
26	ZN	LL	50.00000	.	50.00000	NONE	.54425-
27	SE	LL	.10000	.	.10000	NONE	41.07401-
28	I	BS	.44847	.22847-	.22000	NONE	.

## SECTION 2 - COLUMNS

NUMBER	.COLUMNS	AT	...ACTIVITY...	..INPUT COST..	..LOWER LIMIT.	..UPPER LIMIT.	.REDUCED COST.
29	MAIZ	BS	.74696	318.00000	.	NONE	.
30	SORGO	LL	.	305.00000	.	NONE	38.01179
31	T.SOJA	BS	.10195	770.00000	.	NONE	.
32	T.GIRASO	BS	.06437	700.00000	.	NONE	.
33	T.MANI	LL	.	710.00000	.	NONE	209.38815
34	AFRECHO	LL	.	500.00000	.	NONE	190.43983
35	O.UVA	LL	.	30.00000	.	NONE	14.57494
36	O.ACEITU	BS	.06389	38.00000	.	NONE	.
37	HENO	LL	.	320.00000	.	NONE	143.70638
38	VITAM.1	BS	.00448	4935.00000	.	NONE	.
39	VITAM.2	BS	.00090	3872.00000	.	NONE	.
40	C.HUESO	BS	.01745	1200.00000	.	NONE	.
41	SAL	LL	.	100.00000	.	NONE	335.40132



1  
2  
3 MPSX/370 R1.6 RACIONES GESTACION CERDOS

PAGE 1 81/118 34

4 PRIMAL OBJ N COSTO RHS N C.GESTA

5  
6  
7 TIME N 0.01 MINS. PRICING N 3

8 SCALE N .

9 NUMBER OF NEGATIVE DJAS N 13 CYCLING 10

10  
11 ITER VECTOR VECTOR REDUCED NUMBER FUNCTION NUMBER SUM  
12 NUMBER OUT IN COST NONOPT VALUE INFEAS INFEAS  
13 M 10 22 16 .73255- 13 404.1239 0 .  
14 FEASIBLE SOLUTION

15  
16 XDDFEAS DEMAND SET

17  
18 PRIMAL OBJ N COSTO RHS N C.GESTA

19  
20 TIME N 0.01 MINS. PRICING N 3

21 SCALE N 1.00000

22  
23 ITER VECTOR VECTOR REDUCED NUMBER FUNCTION NUMBER SUM  
24 NUMBER OUT IN COST NONOPT VALUE INFEAS INFEAS  
25 M 11 36 37 .02348- 3 400.3897 0 .  
26 12 16 17 .17133- 399.3478 0 .  
27 OPTIMAL SOLUTION

28  
29 XDDOPT DEMAND SET  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69

0927670



SOLUTION %OPTIMAL<

TIME 0.01 MINS. ITERATION NUMBER 12

...NAME...	...ACTIVITY...	DEFINED AS
FUNCTIONAL RESTRAINTS	399.34780	COSTO C.GESTA



## SECTION 1 - ROWS

NUMBER	...ROW..	AT	...ACTIVITY...	SLACK ACTIVITY	..LOWER LIMIT.	..UPPER LIMIT.	..DUAL ACTIVITY
1	EM.BOVIN	BS	3019.82890	3019.82890-	.	NONE	.
2	EM.CERDO	LL	2977.00000	.	2977.00000	NONE	.14197-
3	COSTO	BS	399.34780	399.34780-	NONE	NONE	1.00000
4	ORUJOS	BS	.	.	NONE	NONE	.
5	EM.AVES	BS	.	.	.	NONE	.
6	KG	UL	1.00000	.	NONE	1.00000	227.89755
7	PROTEINA	BS	.12717	.00717-	.12000	NONE	.
8	VIT.A	BS	36416.55466	30916.55466-	5500.00000	NONE	.
9	VIT.E	BS	24.95759	13.95759-	11.00000	NONE	.
10	CA	LL	7.50000	.	7.50000	NONE	4.75966-
11	FO	BS	5.94459	.94459-	5.00000	NONE	.
12	CLNA	BS	4.93157	1.43157-	3.50000	NONE	.
13	MG	BS	.47253	.47253-	.	NONE	.
14	S	BS	.84805	.84805-	.	NONE	.
15	CO	BS	.06173	.06173-	.	NONE	.
16	LISINA	LL	4.20000	.	4.20000	NONE	2.97712-
17	METIONIN	BS	2.99004	.19004-	2.80000	NONE	.
18	TRIPTOFA	BS	1.54047	.74047-	.80000	NONE	.
19	VIT.D	BS	8867.32350	8834.32350-	33.00000	NONE	.
20	VIT.B2	BS	3.56336	1.36336-	2.20000	NONE	.
21	PANTOTEN	BS	11.52517	.52517-	11.00000	NONE	.
22	COLINA	LL	880.00000	.	880.00000	NONE	.16842-
23	FE	BS	133.61311	53.61311-	80.00000	NONE	.
24	CU	BS	11.39664	5.39664-	6.00000	NONE	.
25	MN	BS	34.88933	24.88933-	10.00000	NONE	.
26	ZN	LL	50.00000	.	50.00000	NONE	.08182-
27	SE	LL	.10000	.	.10000	NONE	40.99898-
28	I	BS	.43102	.21102-	.22000	NONE	.



## SECTION 2 - COLUMNS

NUMBER	.COLUMNS	AT	...ACTIVITY...	..INPUT COST..	..LOWER LIMIT.	..UPPER LIMIT.	.REDUCED COST.
29	MAIZ	BS	.79513	318.00000	.	NONE	.
30	SORGO	LL	.	305.00000	.	NONE	112.23679
31	T.SOJA	BS	.01355	770.00000	.	NONE	.
32	T.GIRASO	BS	.09260	700.00000	.	NONE	.
33	T.MANI	LL	.	710.00000	.	NONE	196.72130
34	AFRECHO	LL	.	500.00000	.	NONE	176.57832
35	O.UVA	LL	.	30.00000	.	NONE	16.38487
36	O.ACEITU	LL	.	38.00000	.	NONE	3.15500
37	HENO	BS	.07383	320.00000	.	NONE	.
38	VITAM.1	BS	.00431	4935.00000	.	NONE	.
39	VITAM.2	BS	.00062	3872.00000	.	NONE	.
40	C.HUESO	BS	.01996	1200.00000	.	NONE	.
41	SAL	LL	.	100.00000	.	NONE	327.89755

1  
2  
3 MPSX/370 R1.6

RACIONES LACTANCIA CERDOS

PAGE

1

81/118

4 PRIMAL

OBJ N COSTO

RHS N C.LACTA

5  
6  
7 TIME N 0.01 MINS.

PRICING N 4

8 SCALE N 1.00000

9 NUMBER OF NEGATIVE DJOS N

0

CYCLING

10

10 OPTIMAL SOLUTION

11 XDOOPT DEMAND SET  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69

0927666



SOLUTION %OPTIMAL<

TIME 0.01 MINS. ITERATION NUMBER 9

...NAME...	...ACTIVITY...	DEFINED AS
FUNCTIONAL	429.78803	COSTO
RESTRAINTS		C.LACTA





## SECTION 1 - ROWS

NUMBER	...ROW..	AT	...ACTIVITY...	SLACK ACTIVITY	..LOWER LIMIT.	..UPPER LIMIT.	.DUAL ACTIVITY
1	EM.BOVIN	BS	2991.69821	2991.69821-	.	NONE	.
2	EM.CERDO	LL	3013.00000	.	3013.00000	NONE	.14808-
3	COSTO	BS	429.78803	429.78803-	NONE	NONE	1.00000
4	ORUJOS	BS	.02906	.02906-	NONE	NONE	.
5	EM.AVES	BS	53.64440	53.64440-	.	NONE	.
6	KG	UL	1.00000	.	NONE	1.00000	235.40132
7	PROTEINA	BS	.15404	.01404-	.14000	NONE	.
8	VIT.A	BS	37657.03624	34357.03624-	3300.00000	NONE	.
9	VIT.E	BS	21.48511	10.48511-	11.00000	NONE	.
10	CA	LL	7.50000	.	7.50000	NONE	4.78467-
11	FO	BS	6.69245	1.69245-	5.00000	NONE	.
12	CLNA	BS	6.68828	3.18828-	3.50000	NONE	.
13	MG	BS	.46962	.46962-	.	NONE	.
14	S	BS	.93887	.93887-	.	NONE	.
15	CO	BS	.09269	.09269-	.	NONE	.
16	LISINA	LL	6.00000	.	6.00000	NONE	12.75960-
17	METIONIN	LL	3.60000	.	3.60000	NONE	20.90692-
18	TRIPTOFA	BS	1.70330	.40330-	1.30000	NONE	.
19	VIT.D	BS	9349.04338	9019.04338-	330.00000	NONE	.
20	VIT.B2	BS	3.17244	.97244-	2.20000	NONE	.
21	PANTOTEN	BS	11.34701	.34701-	11.00000	NONE	.
22	COLINA	BS	997.87815	117.87815-	880.00000	NONE	.
23	FE	BS	120.79079	40.79079-	80.00000	NONE	.
24	CU	BS	13.09082	7.09082-	6.00000	NONE	.
25	MN	BS	35.92139	25.92139-	10.00000	NONE	.
26	ZN	LL	50.00000	.	50.00000	NONE	.54425-
27	SE	LL	.10000	.	.10000	NONE	41.07401-
28	I	BS	.44891	.22891-	.22000	NONE	.

## SECTION 2 - COLUMNS

NUMBER	.COLUMNS	AT	...ACTIVITY...	..INPUT COST..	..LOWER LIMIT.	..UPPER LIMIT.	.REDUCED COST.
29	MAIZ	BS	.74275	318.00000	.	NONE	.
30	SORGO	LL	.	305.00000	.	NONE	38.01179
31	T.SOJA	BS	.07306	770.00000	.	NONE	.
32	T.GIRASO	BS	.11929	700.00000	.	NONE	.
33	T.MANI	LL	.	710.00000	.	NONE	209.38815
34	AFRECHO	LL	.	500.00000	.	NONE	190.43983
35	D.UVA	LL	.	30.00000	.	NONE	14.57494
36	D.ACEITU	BS	.03725	38.00000	.	NONE	.
37	HENO	LL	.	320.00000	.	NONE	143.70638
38	VITAM.1	BS	.00449	4935.00000	.	NONE	.
39	VITAM.2	BS	.00093	3872.00000	.	NONE	.
40	C.HUESO	BS	.02223	1200.00000	.	NONE	.
41	SAL	LL	.	100.00000	.	NONE	335.40132



## RACIONES DE COSTO MINIMO

. PARRILLEROS I

. PARRILLEROS II

. PONEDORAS

PRIMAL OBJ R CCSTO RHS R PA1

TIME R 0.00 MINS. PRICING R 5

SCALE R

NUMBER OF NEGATIVE DJAS R 14 CYCLING 10

	ITER NUMBER	VECTOR OUT	VECTOR IN	REDUCED COST	NUMBER NONOPT	FUNCTION VALUE	NUMBER INFEAS	SUM INFEAS
M	1	10	45	9.22859-	14	1750.0000	10	1.3116
	2	26	51	4.36993-		1772.8568	4	1.2225
	3	38	46	.38750-		1884.4061	3	1.2150
M	4	37	55	1.96345-	4	1909.5701	4	.1268
	5	5	53	1.15625-		1168.3694	6	.0793
	6	23	50	.25626-		1142.0811	5	.0712
M	7	50	26	2.85650-	6	1185.5056	1	.0349
	8	51	43	.38775-		892.3184	2	.0233
	9	24	44	.06152-		959.9800	1	.0231
M	10	17	38	1.01437-	5	644.8237	1	.0026
	11	16	23	.46809-		585.1567	1	.0007
M	12	6	24	.25781-	1	567.6664	0	.

FEASIBLE SOLUTION

XCCFEAS DEMAND SET

PRIMAL OBJ R COSTO RHS R PA1

TIME R 0.01 MINS. PRICING R 5

SCALE R 1.00000

	ITER NUMBER	VECTOR OUT	VECTOR IN	REDUCED COST	NUMBER NONOPT	FUNCTION VALUE	NUMBER INFEAS	SUM INFEAS
M	13	36	48	.50276-	10	550.9468	0	.
M	14	48	17	.01469-	1	549.3839	0	.

INVERT - TIME R 0.01 - ITERATION....14

BASIS STRUCTURAL.....6 ELEM...140 NUCLEUS.....5 - TRANSFORMED.....4 PIVOTING BY SIZE.....4  
OLD INVERSE -L- BUF...6 REC...1 VEC.....52 ELEM...477 -U- BUF...0 REC...1 VEC.....0 ELEM.....0 - U-VEC. OBS.....0  
NEW INVERSE -L- BUF...3 REC...1 VEC.....5 ELEM.....25 -U- BUF...3 REC...1 VEC.....38 ELEM...152 - TIME TAKEN..0.000

PRIMAL OBJ R CCSTC RHS R PA1

TIME R 0.01 MINS. PRICING R 5

SCALE R 1.00000

NUMBER OF NEGATIVE DJAS R 0 CYCLING 10

OPTIMAL SOLUTION

XCCOPT DEMAND SET

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69

SOLUTION OPTIMALE

TIME 0.01 MINS. ITERATION NUMBER 14

...NAME...	...ACTIVITY...	DEFINED AS
FUNCTIONAL RESTRAINTS	549.38389	CCSTO PA1



## SECTION 1 - ROWS

NUMBER	...ROW...	AT	...ACTIVITY...	SLACK ACTIVITY	..LOWER LIMIT.	..UPPER LIMIT.	..DUAL ACTIVITY
1	EM.BCVIN	BS	2263.14406	2263.14406-	.	NCNE	.
2	EM.CERCO	BS	2837.88006	2837.88006-	.	NONE	.
3	CCSTO	BS	549.38389	549.38389-	NCNE	NCNE	1.00000
4	GRUJOS	BS	.	.	NCNE	NONE	.
5	EM.AVES	LL	2970.00000	.	2970.00000	NONE	.14181-
6	KG	UL	1.03000	.	NCNE	1.03000	275.86410
7	PRCTEINA	BS	.23852	.01352-	.22500	NONE	.
8	VIT.A	BS	10829.72090	2029.72090-	8800.00000	NONE	.
9	VIT.E	BS	5502.73049	5491.73049-	11.00000	NCNE	.
10	CA	LL	10.00000	.	10.00000	NONE	4.91955-
11	FC	BS	9.19123	4.69123-	4.50000	NCNE	.
12	CLNA	BS	11.49440	8.49440-	3.00000	NONE	.
13	MG	BS	2.02921	1.48921-	.55000	NCNE	.
14	S	BS	.02008	.02008-	.	NONE	.
15	CC	BS	.	.	.	NCNE	.
16	LISINA	LL	10.10000	.	10.10000	NONE	5.35230-
17	METIONIN	BS	5.33099	.83099-	4.50000	NONE	.
18	TRIPTOFA	BS	3.11998	.91998-	2.20000	NONE	.
19	VIT.C	BS	.	.	.	NONE	.
20	VIT.B2	BS	7.51689	3.11689-	4.40000	NONE	.
21	PANTOTEN	BS	23.00002	7.60002-	15.40000	NONE	.
22	COLINA	BS	1411.73629	91.73629-	1320.00000	NONE	.
23	FE	BS	114.86987	26.86987-	88.00000	NCNE	.
24	CU	BS	14.29768	3.29768-	11.00000	NONE	.
25	MN	BS	107.28582	52.28582-	55.00000	NONE	.
26	ZN	BS	55.00000	11.00000-	44.00000	NCNE	.
27	SE	BS	1.11435	.96435-	.15000	NONE	.
28	I	BS	1.15500	.78500-	.37000	NONE	.
29	ARGININA	BS	15.87926	4.67926-	11.20000	NCNE	.
30	HISTIDIN	BS	5.87188	1.37188-	4.50000	NONE	.
31	ISOLEUCI	BS	11.84782	2.84782-	9.00000	NCNE	.
32	CISTINA	BS	3.52246	1.32246-	2.20000	NONE	.
33	FENILALA	BS	12.93092	5.03092-	7.90000	NONE	.
34	TREONINA	BS	9.09180	1.19180-	7.90000	NONE	.
35	VALINA	BS	13.15589	3.45589-	9.70000	NCNE	.
36	GLICINA	LL	11.20000	.	11.20000	NONE	22.80057-
37	VIT.D3	LL	2200.00000	.	2200.00000	NONE	.02442-
38	TIAMINA	BS	2.82047	.62047-	2.20000	NONE	.
39	VIT.B12	BS	.01320	.00420-	.00900	NONE	.
40	K	BS	7.16360	3.16360-	4.00000	NONE	.
41	LEUCINA	BS	21.69284	5.99284-	15.70000	NONE	.

## SECTION 2 - COLUMNS

NUMBER	COLUMNS	AT	...ACTIVITY...	..INPUT COST..	..LOWER LIMIT.	..UPPER LIMIT.	..REDUCED COST.
42	MAIZ	LL	.	318.00000	.	NONE	29.03046
43	SCRG	BS	.63287	305.00000	.	NONE	.
44	T.SCJA	BS	.14347	770.00000	.	NONE	.
45	T.GIRASO	BS	.20079	700.00000	.	NONE	.
46	T.MANI	BS	.02418	710.00000	.	NONE	.
47	AFRECHO	LL	.	500.00000	.	NONE	353.54737
48	C.LVA	LL	.	30.00000	.	NONE	96.25102
49	C.ACEITU	LL	.	38.00000	.	NONE	91.95062
50	HEND	LL	.	320.00000	.	NONE	131.06959
51	VITAM.1	LL	.	4935.00000	.	NONE	5210.86410
52	VITAM.2	LL	.	3872.00000	.	NONE	4147.86410
53	C.HUESC	BS	.02869	1200.00000	.	NONE	.
54	SAL	LL	.	100.00000	.	NONE	375.86410
55	VITAM.3	BS	.01100	4885.00000	.	NONE	.

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69

MPSX/370 R1.6

PARRILLEROS 2

PAGE 1 81/120

PRIMAL DBJ N CCSTC RHS N PA2

TIME N 0.01 MINS. PRICING N 4

SCALE N 1.00000

NUMBER OF NEGATIVE DJAS N 0

CYCLING 10

OPTIMAL SOLUTION

XDECEPT DEMAND SET

444783



49



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69

SCLUTICA %OPTIMAL

TIME R 0.01 MINS. ITERATION NUMBER R 14

...NAME...	...ACTIVITY...	DEFINED AS
FUNCTIONAL RESTRAINTS	524.31464	CUSTO PA2



## SECTION 1 - ROWS

NUMBER	...ROW...	AT	...ACTIVITY...	SLACK ACTIVITY	..LOWER LIMIT.	..UPPER LIMIT.	..DUAL ACTIVITY
1	EM.BLVIN	BS	2264.77003	2264.77003-	.	NONE	.
2	EM.CERCO	BS	2876.69780	2876.69780-	.	NONE	.
3	CCSTO	BS	524.31464	524.31464-	NCNE	NONE	1.00000
4	CRUJOS	BS	.	.	NCNE	NONE	.
5	EM.AVES	LL	3080.00000	.	3080.00000	NONE	.14181-
6	KG	UL	1.03000	.	NCNE	1.03000	275.86410
7	PRCTEINA	BS	.22743	.02243-	.20500	NONE	.
8	VIT.A	BS	10858.47937	4258.47937-	6600.00000	NONE	.
9	VIT.E	BS	5501.99251	5492.99251-	9.00000	NONE	.
10	CA	LL	8.00000	.	8.00000	NONE	4.91955-
11	FG	BS	7.96869	3.96869-	4.00000	NONE	.
12	CLNA	BS	7.92798	5.92798-	2.00000	NONE	.
13	MG	BS	1.98036	1.43036-	.55000	NONE	.
14	S	BS	.01362	.01362-	.	NONE	.
15	CC	BS	.	.	.	NONE	.
16	LISINA	LL	8.60000	.	8.60000	NONE	5.35230-
17	METIONIN	BS	4.36686	.26686-	4.10000	NONE	.
18	TRIPTOFA	BS	2.92510	.92510-	2.00000	NONE	.
19	VIT.D	BS	.	.	.	NONE	.
20	VIT.B2	BS	7.67849	3.27849-	4.40000	NONE	.
21	PANTOTEN	BS	26.28763	13.08763-	13.20000	NONE	.
22	COLINA	BS	1190.82299	200.82299-	990.00000	NONE	.
23	FE	BS	110.74648	55.74648-	55.00000	NONE	.
24	CU	BS	12.34471	1.34471-	11.00000	NONE	.
25	MN	BS	107.36996	52.36996-	55.00000	NONE	.
26	ZN	BS	55.00000	22.00000-	33.00000	NONE	.
27	SE	BS	1.10876	.95876-	.15000	NONE	.
28	I	BS	1.15500	.78500-	.37000	NONE	.
29	ARGININA	BS	15.51276	5.31276-	10.20000	NONE	.
30	HISTIDIN	BS	5.57170	1.47170-	4.10000	NONE	.
31	ISCLEUCI	BS	10.86849	2.66849-	8.20000	NONE	.
32	CISTINA	BS	3.27384	1.27384-	2.00000	NONE	.
33	FENILALA	BS	12.42436	5.22436-	7.20000	NONE	.
34	TREONINA	BS	8.39938	1.19938-	7.20000	NONE	.
35	VALINA	BS	12.66331	3.86331-	8.80000	NONE	.
36	GLICINA	LL	10.20000	.	10.20000	NONE	22.80057-
37	VIT.D3	LL	2200.00000	.	2200.00000	NONE	.02442-
38	TIAMINA	BS	3.46559	1.26559-	2.20000	NONE	.
39	VIT.B12	BS	.01320	.00820-	.00500	NONE	.
40	K	BS	6.52234	2.52234-	4.00000	NONE	.
41	LEUCINA	BS	21.56388	7.16388-	14.40000	NONE	.

## SECTION 2 - COLUMNS

NUMBER	COLUMNS	AT	...ACTIVITY...	...INPUT COST...	...LOWER LIMIT...	...UPPER LIMIT...	...REDUCED COST...
42	MAIZ	LL	.	318.00000	.	NONE	29.03046
43	SORGO	BS	.68080	305.00000	.	NONE	.
44	T.SOJA	BS	.08758	770.00000	.	NONE	.
45	T.GIRASO	BS	.13618	700.00000	.	NONE	.
46	T.MANI	BS	.10277	710.00000	.	NONE	.
47	AFRECHO	LL	.	500.00000	.	NONE	353.54737
48	O.UVA	LL	.	30.00000	.	NONE	96.25102
49	O.ACEITU	LL	.	38.00000	.	NONE	91.95062
50	HENO	LL	.	220.00000	.	NONE	131.06959
51	VITAM.1	LL	.	4935.00000	.	NONE	5210.86410
52	VITAM.2	LL	.	3872.00000	.	NONE	4147.86410
53	C.HUESO	BS	.02267	1200.00000	.	NONE	.
54	SAL	LL	.	100.00000	.	NONE	375.86410
55	VITAM.3	BS	.01100	4885.00000	.	NONE	.

PRIMAL OBJ R CCSTC RHS R PCN

TIME R 0.02 MINS. PRICING R 4

SCALE R

NUMBER OF NEGATIVE DJ&amp;S R 13

CYCLING 10

	ITER NUMBER	VECTOR OUT	VECTOR IN	REDUCED COST	NUMBER NONOPT	FUNCTION VALUE	NUMBER INFEAS	SUM INFEAS
M	15	46	36	34.7505-	13	566.6713	2	.0043
M	16	22	16	1.25913-	4	586.9899	0	.

FEASIBLE SOLUTION

XCCFEAS DEMAND SET

PRIMAL OBJ R CCSTC RHS R PCN

TIME R 0.02 MINS. PRICING R 4

SCALE R 1.00000

	ITER NUMBER	VECTOR OUT	VECTOR IN	REDUCED COST	NUMBER NONOPT	FUNCTION VALUE	NUMBER INFEAS	SUM INFEAS
M	17	32	42	.03005-	4	584.1658	0	.
M	18	17	48	.00595-	2	584.0861	0	.

INVERT - TIME R 0.02 - ITERATION....18

BASIS STRUCTURAL.....7 ELEM...152 NUCLEUS.....6 - TRANSFORMED.....5 PIVCTING BY SIZE.....5

OLD INVERSE -L- BUF...3 REC...1 VEC.....9 ELEM....47 -U- BUF...3 REC...1 VEC....42 ELEM...203 - U-VEC. OBS.....4

NEW INVERSE -L- BUF...3 REC...1 VEC.....6 ELEM....26 -U- BUF...3 REC...1 VEC....38 ELEM...163 - TIME TAKEN..0.001

PRIMAL OBJ R CCSTC RHS R PCN

TIME R 0.02 MINS. PRICING R 4

SCALE R 1.00000

NUMBER OF NEGATIVE DJ&amp;S R 0

CYCLING 10

OPTIMAL SOLUTION

XCCOPT DEMAND SET

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69

54

SOLUTION %OPTIMAL

TIME 0.02 MINS. ITERATION NUMBER 18

NAME... ACTIVITY... DEFINED AS

FUNCTIONAL RESTRAINTS 584.08612 COSTO PON



## SECTION 1 - ROWS

NUMBER	...ROW...	AT	...ACTIVITY...	SLACK	ACTIVITY	..LOWER LIMIT.	..UPPER LIMIT.	..DUAL ACTIVITY
1	EM.BOVIN	BS	2109.67803	2109.67803-	.	NONE	.	
2	EM.CERCO	BS	2623.23928	2623.23928-	.	NONE	.	
3	CGSTG	BS	584.08612	584.08612-	NCNE	NONE	1.00000	
4	GRUJOS	BS	.00654	.00654-	NCNE	NONE	.	
5	EM.AVES	LL	2860.00000	.	2860.00000	NONE	.09764-	
6	KG	UL	1.03000	.	NCNE	1.03000	120.41247	
7	PROTEINA	BS	.19007	.02007-	.17000	NONE	.	
8	VIT.A	BS	10869.94642	4269.94642-	6600.00000	NONE	.	
9	VIT.E	BS	5502.27233	5502.27233-	.	NCNE	.	
10	CA	LL	37.00000	.	37.00000	NONE	4.40137-	
11	FC	BS	20.77296	16.77296-	4.00000	NCNE	.	
12	CLNA	BS	4.29470	1.29470-	3.00000	NCNE	.	
13	MG	BS	2.49768	1.94768-	.55000	NONE	.	
14	S	BS	.00521	.00521-	.	NCNE	.	
15	CO	BS	.	.	.	NONE	.	
16	LISINA	BS	8.76862	1.96862-	6.80000	NONE	.	
17	METIONIN	LL	3.40000	.	3.40000	NCNE	.42283-	
18	TRIPTOFA	BS	2.55271	.85271-	1.70000	NONE	.	
19	VIT.D	BS	.	.	.	NONE	.	
20	VIT.B2	BS	7.06808	2.66808-	4.40000	NONE	.	
21	PANTOTEN	BS	20.89878	15.39878-	5.50000	NCNE	.	
22	COLINA	LL	1100.00000	.	1100.00000	NONE	.07514-	
23	FE	BS	118.20435	74.20435-	44.00000	NONE	.	
24	CU	BS	15.68158	4.68158-	11.00000	NONE	.	
25	MN	BS	104.39360	71.39360-	33.00000	NCNE	.	
26	ZN	BS	55.48021	33.48021-	22.00000	NONE	.	
27	SE	BS	1.13370	.98370-	.15000	NONE	.	
28	I	BS	1.15500	.82500-	.33000	NONE	.	
29	ARGININA	BS	11.48994	2.98994-	8.50000	NONE	.	
30	HISTIDIN	BS	4.75183	1.55183-	3.20000	NONE	.	
31	ISCLEUCI	BS	9.55094	1.05094-	8.50000	NONE	.	
32	CISTINA	LL	2.70000	.	2.70000	NONE	58.10157-	
33	FENILALA	BS	10.37835	2.87835-	7.50000	NCNE	.	
34	TREONINA	BS	7.52508	1.62508-	5.90000	NONE	.	
35	VALINA	BS	10.42078	1.92078-	8.50000	NCNE	.	
36	GLICINA	BS	7.80366	7.80366-	.	NCNE	.	
37	VIT.C3	LL	2200.00000	.	2200.00000	NONE	.01138-	
38	TIAMINA	BS	2.82665	.62665-	2.20000	NONE	.	
39	VIT.B12	BS	.01320	.00420-	.00900	NONE	.	
40	K	BS	6.39605	2.39605-	4.00000	NONE	.	
41	LEUCINA	BS	18.89086	6.19086-	12.70000	NCNE	.	

SECTION 2 - COLUMNS

NUMBER	.COLUMNS	AT	...ACTIVITY...	..INPUT COST..	..LOWER LIMIT.	..UPPER LIMIT.	.REDUCED COST.
42	MAIZ	BS	.04851	318.00000	.	NONE	.
43	SGRGO	BS	.61098	305.00000	.	NCNE	.
44	T.SGJA	BS	.19144	770.00000	.	NCNE	.
45	T.GIRASC	BS	.05213	700.00000	.	NCNE	.
46	T.MANI	LL	.	710.00000	.	NCNE	56.56551
47	AFRECHC	LL	.	500.00000	.	NCNE	242.82601
48	C.UVA	BS	.00654	30.00000	.	NCNE	.
49	O.ACEITU	LL	.	38.00000	.	NCNE	1.96431
50	HENG	LL	.	320.00000	.	NCNE	25.86210
51	VITAM.1	LL	.	4935.00000	.	NCNE	3098.77398
52	VITAM.2	LL	.	3872.00000	.	NCNE	3992.41247
53	C.HUESC	BS	.12040	1200.00000	.	NCNE	.
54	SAL	LL	.	100.00000	.	NCNE	220.41247
55	VITAM.3	BS	.01100	4885.00000	.	NCNE	.

