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PROYECTO TRIGO

**RESULTADOS DEL  
DUODECIMO  
VIVERO DE  
LINEAS AVANZADAS  
DEL CONO SUR  
(L.A.C.O.S.)  
1992 - 1993**



MINISTERIO DE AGRICULTURA Y GANADERIA



CIMMYT Int.

CENTRO INTERNACIONAL DE MEJORAMIENTO DE MAZ Y TRIGO



**PROGRAMA COOPERATIVO PARA EL DESARROLLO TECNOLÓGICO AGROPECUARIO DEL CONO SUR  
(PROCISUR)**

Centro Interamericano de  
Documentación e  
Información Agrícola

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RECIBIDO

**RESULTADOS DEL DUODECIMO  
VIVERO DE LINEAS AVANZADAS  
DEL CONO SUR**

1992 - 1993

Editores: *Dr. M. M. Kohli*  
*Ing. Carlos Paniagua*

PARAGUAY, 1994

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GLOSARIO DE LOS NOMBRES DE LAS VARIABLES USADOS EN LOS CUADROS  
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# GLOSARIO DE LOS NOMBRES DE LAS VARIABLES USADOS EN LOS CUADROS

## LISTAGEM DOS NOMES DAS VARIÁVEIS UTILIZADAS NAS TABELAS

### GLOSSARY OF VARIABLE NAMES USED IN THE TABLES

Abreviaturas	Nombre de la variable	Nome de variavel	Variable name
ACAME	Acame o tendidura	Acamamento	Lodging
ALT.	Altura de la planta (cm)	Altura de la planta (cm)	Plant height (cm)
ESP.	Espigazón (días)	Espigação (días)	Heading (days)
MAD.	Madurez (días)	Maturação (días)	Maturity (days)
ROYA TALLO	Roya del tallo	Ferrugem do colmo	Stem rust
ROYA HOJA	Roya de la hoja	Ferrugem da folha	Leaf rust
ROYA ESPG.	Roya estriada (lineal)	Ferrugem da gluma	Stripe rust
OIDIO	Oidio o mildiu polvoriento	Oidio	Powdery mildew
SEPT. HOJA	Septoriosis de la hoja	Septoriosis da folha	Septoria leaf blotch
SEPT. GLUM	Septoriosis de la gluma	Septoriosis da gluma	Septoria glume blotch
HEL. SAT.	Mancha marrón	Helmintosporiose	Spot blotch
H.T.R.	Mancha amarilla	Mancha amarela	Tan spot
FUS.	Fusariosis o golpe blanco	Giberela o fusariose	Fusarium head blight or scab
BYD.	Enanismo de cebada (virus)	Nanismo amarelo da cevada	Barley yellow dwarf (virus)
SEL.	Selección	Seleção	Selection



# Desarrollo del Duodécimo L.A.C.O.S. en 25 localidades

## INTRODUCCIÓN

El vivero Líneas Avanzadas del Cono Sur (LACOS) de trigo está organizado de acuerdo a las actividades previstas en el Proyecto Trigo del Programa Cooperativo para el Desarrollo Tecnológico Agropecuario del Cono Sur (PROCISUR). Este vivero representa un vehículo para el intercambio de las mejores líneas de trigo desarrolladas e identificadas en los Programas Nacionales de la región. El 12º vivero fue coordinado y distribuido por el Programa de Trigo MAG/CIMMYT, Paraguay; durante el ciclo 1992-93.

Para lograr la homogeneidad de la semilla, ésta fue multiplicada en el Centro Regional de Investigación Agrícola (CRIA), en Capitán Miranda. Los datos sobre el número de líneas enviados por cada país para formar el 12º LACOS, su distribución y también los resultados recibidos son como sigue:

PAIS	LINEAS ENTRADAS	EST. EXPERIM. REPRESENTADAS	JUEGOS ENVIADOS	RESULTADOS RECIBIDOS	RESPUESTA PORCIENTO
Argentina	38	5	7	4	57
Bolivia	43	2	4	2	50
Brasil	67	7	12	5	42
Chile	73	4	5	4	80
Paraguay	47	2	3	3	100
Uruguay	32	1	3	2	67
Otro	--	--	11	5	45
<b>TOTAL</b>	<b>300</b>	<b>21</b>	<b>45 *</b>	<b>25</b>	<b>156</b>

\* Cinco de los viveros fueron enviados para inoculación artificial con *Septoriosis*.

En el Cuadro 1 (pág. 7) se presenta la información sobre los cooperadores que devolvieron los resultados. Como en los años anteriores, la roya de la hoja sigue siendo la enfermedad más prevalente en la región. La mancha amarilla y la septoriosis de la hoja también se presentaron como serios problemas durante la evaluación del 12º LACOS.



## RESULTADOS

El análisis de los resultados recibidos hasta el 15 de setiembre de 1994, fue hecho por el Programa Regional del CIMMYT, con sede en Montevideo, Uruguay.

Toda la información recibida de los cooperadores fue revisada y adecuada para lograr mayor claridad en las diferencias genéticas de los materiales sobre localidades claves. Fueron excluidos todos aquellos datos que no permitían distinguir entre los materiales del vivero; como muy baja presión de enfermedades en alguna localidad. Asimismo, los pocos e incompletos datos de rendimiento, recibidos en algunos casos, no fueron considerados para el análisis, dando así importancia a la selección visual de las mejores líneas sobre todas las localidades que representaría una adaptación amplia.

El análisis de los datos se presenta en tres tipos de cuadros:

1. Un cuadro que presenta el promedio general de los caracteres de todas las líneas en todas las localidades. (Cuadro 2, pág. 8)
2. Los cuadros de mejores líneas seleccionadas para un carácter en particular y considerando otros caracteres importantes, incluyendo las líneas de más amplia adaptación y resistencia a las enfermedades. (Cuadro 3-11, pág. 32)
3. Un cuadro sobre el índice de infección de algunas enfermedades en localidades que presentaron un mayor grado de infección en promedio. (Cuadro 12, pág. 47)

Este año no se pudo lograr obtener los resultados de infección de royas de la hoja y del tallo en estado de plántula realizada por el CNPT, Brasil y Cereals Rust Laboratory, Minnesota, USA debido al tratamiento de semilla que dificultó lograr la infección. Asimismo, la reacción del BYDV bajo condiciones de inoculación artificial en St. Foy, Quebec, Canadá, fue incluida en el resumen general del vivero.

## TRANSFORMACIÓN DE LOS DATOS

Las notas de enfermedades observadas por los colaboradores fueron transformadas a un Coeficiente de Infección (CI), para su análisis posterior. Los promedios de los CI's están presentados en todos los cuadros. Las notas de las royas tomadas en la escala Cobb modificada fue transformada al CI usando los valores de 0.2, 0.4, 0.6, 0.8 y 1.0 para las reacciones R, MR, M, MS y S respectivamente. Estos valores fueron multiplicados con el porcentaje de la severidad para obtener el CI para cada línea.

En el caso de las manchas foliares (ej.: Septoriosis) y otras enfermedades, donde las notas fueron tomadas en la escala de doble dígito (Saari-Prescott modificada) o alguna otra escala,



estas fueron transformadas usando la metodología adoptada para el LACOS en los años anteriores. Los coeficientes de infección para cada localidad fueron obtenidos usando la siguiente fórmula:

- a. Valor de Infección (VI) = Primer dígito (Alt. de Infección) X Segundo dígito (promedio de severidad)  
 b. Coeficiente de Infección Relativo (CIR) = (Valor de Infección/Valor de Infección + 1) 100

Los datos en los cuadros muestran los coeficientes de infección promedio para cada enfermedad. No fue utilizado el siguiente paso para corregir los datos de acuerdo a la altura y ciclo vegetativo de cada material.

### OBSERVACIONES SOBRE LOS RESULTADOS

1. Debido a un año extremadamente húmedo en la mayor parte de la región, hubo incidencias severas de las enfermedades, especialmente de las royas, el oidio, las manchas foliares y fusariosis que permitieron una buena selección de materiales por parte de cooperadores. Este hecho reconfirma la importancia de las enfermedades en la región y requiere mayores esfuerzos en el desarrollo de los materiales resistentes con un alto potencial de rendimiento.
2. Las mejores localidades durante 1992-93 para evaluar la variabilidad genética para diferentes enfermedades fueron las siguientes:
 

Roya de la hoja:	Pergamino, Paraná, Chillan y Young
Roya estriada:	Sta. Catalina, Ecuador; Hidango y Chillán, Chile
Oidio:	Campinas, Passo Fundo, Caacupé y Plains, Georgia, EE.UU.
Sept. de la hoja:	Balcarce y La Estanzuela
Mancha amarilla:	Cap. Miranda, Bella Vista, Pergamino, Young
Fusariosis:	Cruz Alta, Marcos Juárez, La Estanzuela
3. Los materiales incluidos en el 12 LACOS mostraron un buen grado de resistencia combinada a las royas de la hoja y del tallo (91 materiales con CI<5 para ambas royas). La resistencia a la roya estriada parece ser algo débil considerando que sólo 17 materiales presentaron CI<5 para las tres royas.
4. Asimismo, el número de líneas con resistencia a las tres royas y al oidio y/o manchas foliares es muy reducida. La mayor susceptibilidad del material de LACOS a la mancha amarilla es preocupante. A pesar de tener un mejor nivel de resistencia a Septoriosis de la hoja, se encontraron sólo dos materiales con CIR<30 para ambas manchas.



5. La resistencia de la mayoría de los materiales para fusariosis sigue siendo débil. Aunque el material avanzado con cruza de material chino, esta filtrando a LACOS, sería importante hacer un esfuerzo especial para incrementar esta resistencia en los programas de mejoramiento de la región.
6. Las siguientes líneas podrían ser consideradas como las mejores por su alto índice de selección y también por su bajo a moderado índice de infección sobre las enfermedades principales. Para la selección de estas líneas la condición fue que todas estén seleccionadas por más de 20% de los cooperadores y que tuvieran el promedio del coeficiente de infección como sigue: la roya de la hoja menor que 20, oidio menor que 30, septoriosis de la hoja menor que 30 y helmintosporiosis menor que 45.

Código	Cruza	Indice de					
		Sel.	RH	Oid.	Sept.	H.sat.	Fus.
J3139	BOW"S"/4/COW"S"/3/NAD//BB//INIA	31.6	4.0	18.0	17.3	29	43
CEP 8818	BUTUI//BR14//PF79790//CEP 75203	36.8	10.0	11.0	25.3	28	27
W 90-3017	LI 59/LACOS 81-4017	21.1	5.5	24.0	28.1	- -	30
E 90165	CHAT"S"/CEP7780//PRL"S"/BOW"S"	26.3	17.0	4.0	23.0	21	54
E 91076	CHAT"S"/CEP7780//PRL"S"/BOW"S"	42.1	22.0	15.0	16.5	25	64
LE 2172	INIA BOYERO	21.1	2.6	24.0	14.6	42	66

## SUMMARY

Twelveth Southern Cone Advanced Lines Nursery (LACOS) organized under the auspices of Wheat Project of PROCISUR and coordinated by CIMMYT Regional Program then based in Paraguay consisted of 300 entries from 21 wheat breeding programs of the region. The nursery was distributed to 45 cooperators both in and outside the region. Of these 25 cooperators reported results from field and/or green-house screening tests.

The data for agronomic characters and infection index for each disease was averaged over the reporting locations and presented in Table 2. In addition specific entries showing low infection index for a particular disease are presented in Tables 3-9. The lines with higher selection index over locations taken as a measure of wide adaption are included in Table 10.

A selected group of lines with overall low disease index and showing wide adaptation are presented in Table 11. Based on the average coefficient of infection for a particular disease over all entries the key locations with high disease pressure were selected. Raw data from these locations is presented in Table 12. This year the seedling reaction for BYDV from artificially inoculated test is included in the summary Table 2. The seedling rust evaluations from USA and Brazil were not received due to failure of test conditions.

Based on the high selection index (over 20) and low disease reaction for leaf rust, powdery mildew, septoria leaf blotch and spot blotch the entries number 22, 120, 238, 247, 252 and 300 were selected as overall outstanding lines.



CUADRO 1. COOPERADORES DEL 12º LACOS Y SU LOCALIZACION GEOGRAFICA

PAIS	LOCALIDAD	ESTACION EXPERIMENTAL	COOPERADORES	LATITUD	LONGITUD	ELEVACION M S.n.m
ARGENTINA	BALCARCE	E.E.A. INTA BALCARCE	JOSE HORACIO BARIFFI	37o45'S	58o18'O	-
ARGENTINA	MARCOS JUAREZ	E.E.A. INTA MARCOS JUAREZ	CARLOS RAINOTTI, JOSE SALINES	32o42'S	62o07'O	110
ARGENTINA	PARANA	E.E.A. INTA PARANA	VICTORINO RAMOS	31o50'S	60o31'O	110
ARGENTINA	PERGAMINO	E.E.A. INTA PERGAMINO	O.POLIDORO, H.CONTIA, A.CALZOLARI	33o56'S	60o33'O	66
BOLIVIA	COCHABAMBA	E.E. SAN BENITO	RENE GOMEZ, JORGE VELASCO	17o30'S	66o06'O	2730
BOLIVIA	SAAVEDRA	E.E.A. CIAT	CASIANO QUINTANA, EDGAR GUZMAN	17o14'S	63o10'O	320
BRASIL	LONDRINA	INST. AGRONOMICO DO PARANA	DR. CARLOS ROBERTO RIEDE	23o22'S	51o10'W	540
BRASIL	CAMPINAS	INST. AGRONOMICO CAMPINAS	C. CAMARGO, A. FERREIRA FILHO	22o54'S	47o05'O	669
BRASIL	CRUZ ALTA	CENT. DE EXP. E PESQUISA FUNDACEP	L.SVOBODA, R.MATZENBACHER, N.NETO	28o38'S	53o36'O	473
BRASIL	PASSO FUNDO	CENT.NAC. DE PESQ. DE TRIGO	E.GOMES, C. SOUSA	28o15'S	52o24'O	684
BRASIL	PASSO FUNDO	O.R.MELHORAMENTO	OTTONI DE SOUZA ROSA	28o15'S	52o24'O	684
CANADA	SAINT-FOY	AGRICULTURE CANADA-QUEBEC	ANDRE COMEAU	46o N	71o O	
CHILE	CHILLAN	INIA, QUILAMAPU	M.MELLADO, I.MATUS	36o31'S	71o55'O	217
CHILE	HIDANGO	INIA, SUB. EST. EXP. HIDANGO	I. RAMIREZ, P. QUESADA, E. HACKE	34o06'S	71o47'O	
CHILE	SANTIAGO	INIA, LA PLATINA	I.RAMIREZ Y EQUIPO DE TRIGO	33o34'S	70o38'O	625
CHILE	TEMUCO	INIA, CARILLANCA	CRISTIAN HEWSTONE M., CLAUDIO JOBET F.	38o41'S	72o25'O	200
ECUADOR	PICHINCHA	INIAP, SANTA CATALINA	MIGUEL RIVADENEIRA	0o22'S	78o33'O	3050
MEXICO	TOLUCA	CIMMYT, TOLUCA	PROGRAMA DE TRIGO	19o16'N	99o51'O	2640
PARAGUAY	BELLA VISTA	COLONIAS UNIDAS/CRIA	A.VISNIESKY, L.VIEDMA, C.PANIAGUA	27o17'S	55o49'O	200
PARAGUAY	CAACUPE	INSTITUTO AGRONOMICO NACIONAL	J.SCHVARTZMAN, H.CACERES, C.FERREIRA	25o24'S	57o06'O	228
PARAGUAY	CAP. MIRANDA	CENTRO REG. DE INVESTIG.AGRICOLA	L.VIEDMA, W.MOREL, C.PANIAGUA	27o17'S	55o49'O	200
TAILANDIA	LAMPANG	LAMP.AGRI.RESEARCH & TRAINING CENT.	K.UKOSKIT, S.MEECHOU	18o21'N	99o36'E	
URUGUAY	YOUNG	UNIDAD EXPERIMENTAL DE YOUNG	S. GERMAN, M. DIAZ, R. VERGES, C. TAVELLA	32o40'S	57o41'O	80
URUGUAY	LA ESTANZUELA	INIA, LA ESTANZUELA	S.GERMAN, R.VERGES, C.TAVELLA, M.FERREIRA	34o20'S	57o41'O	81
USA	PLAINS, GA	SOUTHWEST BRANCH STATION-GEORGIA	BARRY M. CUNFER	32o N	84o O	50



CUADRO 2. RESUMEN GENERAL (Promedio de 25 localidades).

ENT	REGISTRO	CRUZA y PEDIGRI	ORIG	ALT CM	ESP DIAS	MAD DIAS	ROYA HOJA	ROYA TALLO
1		PROINTA FEDERAL	ARG	78	84	116	2.3	0.0
2	B05186	BG/HORK"S"//ALDAN//FOREY A5151-1B-1B-2B-0B	ARG	82	90	115	4.9	0.1
3	B03689	MG41/MJI//MI/MON"S"	ARG	84	85	115	2.1	0.1
4	P02350	AMX7861-6B-2N-1B-1B-0B						
		MY"S"//BON//ALERCE	ARG	86	84	116	1.3	0.0
		APG5468-1P-1P-3B-1P-0P						
5	P02883	VI//DTEI//PTESI/3/SERI	ARG	78	81	116	5.1	0.2
		AMX8527-6P-2N-2B-1P-0P						
6	P03061	COCHICO/3/TOB*27C//MN72/3/	ARG	105	91	116	4.7	0.2
		APG10965-2B-501N-2B-1P-0P						
7	P03075	OASIS/TRM"S"//LAURELI	ARG	81	93	115	0.3	0.1
		APG11038-1B-501N-28B-1P-0P						
8	P03104	KVZ/CG-//KFOR/3/F2/TI(RES)//ANA	ARG	93	93	116	1.0	0.1
		APG9734-10P-3N-1B-1P-1P-0P						
9	P02853	CT800/BB"S"//BOW"S"//3/ARCE I	ARG	89	90	115	1.1	0.1
		APG9769-16P-1N-1B-1P-0P						
10	T00029	LPI//PROFED	ARG	75	80	112	0.6	0.0
		A5441.1T-3T-1T-1B-1T-0T						
11	T00034	JUP/ZP//COC/3/VEE"S"	ARG	82	87	115	4.8	0.1
		CM72061-(0P86)-1T-0T						
12	T00035	CN067/GLL//ND81/TZPP/3/PVN"S"//4/BOW"S"	ARG	96	85	116	7.2	0.1
		CM85289-1T-1N-1B-1T-1T-0T						
13	T00037	T00011/T00007	ARG	88	91	115	13	0.1
		A8972-1T-2N-1B-1T-1T-0T						
14	T00039	BUC"S"//4/TZPP//IRN46/CN067/3/PRT/5/HPO"S"	ARG	82	85	113	13	0.1
		A9097-6T-2N-2B-2T-1T-0T						
15	T00040	A9097-1T-4N-1B-2T-1T-0T	ARG	72	78	112	5.1	0.1
16	P89:3415	T00007/T00016	ARG	90	87	116	11	1.0
		A16060-1T-1N-1B-2T-2T-0T						
17	P89:3447	TZPP*4/P68:16359//NS879-4	ARG	83	81	113	2.1	0.1
		DESCON.-4T-1N-2B-2T-2T-0T						
18	P89:3456	MY74"S"//BON//SERI	ARG	87	87	113	14	0.1
		A11920-1T-2N-1B-2T-1T-0T						
19	P89:3507	T00008//PROFED//KEA"S"//TOW"S"	ARG	83	86	112	1.3	0.1
		A9065-1T-2N-1B-1T-1T-0T						
20	P89:3513	TZPP/SERI//BUC"S"	ARG	90	82	115	8.8	0.0
		A9078.1T-1N-1B-2T-1T-0T						
21	P89:3557	GREN/MY//NAC	ARG	104	91	116	0.0	0.1
		CM88044.2M-0Y-0M-1T-1T-0T						
22	J03139	BOW"S"//4/COW"S"//3/NAD//BB//INIA	ARG	91	92	116	4.0	0.1
		CM70050.62J-1J-3J-0J						
23	J03153	BG/HORK//ALDAN"S"//3/CNDR"S"//ALD"S"	ARG	83	87	113	4.3	0.4
		A5137-84J-1B-1J-0J						
24	J03254	BPUC/3/JAR"S"//CNO"S"//JAR"S"	ARG	88	82	112	6.3	0.1
		AMJ5702.1J-1J-1B						
25	J03244	TAN"S"//MY74"S"//MON"S"	ARG	83	80	116	1.3	0.1
		CM73921-0YA-11J-3J-5J						



ROYA ESPG	OIDIO	SEPT HOJA	SEPT GLUM	HEL SAT	HTR	FUS	BYD	SEL %
10	43	45.0	56	32	50	21	7.5	31.6
1.7	58	43.5	42	41	28	35	8.0	5.30
20	48	45.5	28	37	54	59	7.5	10.5
15	53	48.5	42	67	64	31	8.7	0.00
28	46	48.5	28	53	34	59	7.8	26.3
32	48	17.5	14	22	44	40	8.2	10.5
1.3	56	13.4	28	35	44	50	8.2	0.00
1.5	13	18.0	28	83	42	50	7.8	10.5
7.2	40	18.0	28	60	64	37	8.2	21.1
7.8	50	53.0	42	38	46	32	8.4	10.5
19	48	45.0	28	51	42	40	7.5	15.8
5.7	45	48.5	28	60	46	20	8.7	5.30
2.6	48	45.5	40	69	30	11	8.3	5.30
1.1	46	37.5	28	83	34	35	8.3	10.5
0.3	53	26.0	56	45	46	32	8.2	10.5
11	44	57.5	28	37	56	89	7.8	0.00
25	43	61.5	28	60	42	47	8.0	10.5
15	50	50.0	42	53	55	44	8.2	10.5
10	41	45.5	42	90	46	35	7.8	10.5
22	61	41.0	56	45	50	49	7.5	5.30
3.5	54	24.1	42	37	35	50	8.5	15.8
0.4	18	17.3	36	29	43	9.9	8.3	31.6
0.3	45	27.5	56	74	63	59	8.2	10.5
0.4	53	56.0	42	51	42	46	7.5	15.8
12	20	51.1	56	64	42	77	8.0	5.30



(Continuación) CUADRO 2. RESUMEN GENERAL (Promedio de 25 localidades).

ENT	REGISTRO	CRUZA y PEDIGRI	ORIG	ALT CM	ESP DÍAS	MAD DÍAS	ROYA HOJA	ROYA TALLO
26	J03239	VEE"S"/3/FLN/ACC//ANA CM67391.2J-2J-1J	ARG	81	88	116	3.2	0.1
27	J03240	CKR"S"/TTM"S" CM68200.4J-5J-2J	ARG	88	89	116	0.6	0.1
28	J03452	JUP"S"/ALD"S"//ALD"S"/MN72131 AMX7622.7J-0N-7B-0J	ARG	80	98	117	4.8	0.1
29	J03455	KEA"S"/TAN"S" CM74591.7M-1Y-3M-5Y-4B-0Y-1J-0J	ARG	82	89	114	0.6	0.1
30	J03456	MON"S"/ALD"S" CM53460.4M-1Y-5Y-4M-1Y-0M-1J-0J	ARG	84	83	116	0.0	3.0
31	J03457	TSI/VEE5"S" CM64335.3AP-1AP-1AP-0AP-0Y-1Y-1J-0J	ARG	77	79	116	5.6	0.0
32		CRUZ ALTA INTA	ARG	82	87	115	7.8	1.0
33		ANB"S"/BUC"S" CM84758-10Y-0M-0Y-1M-0Y	BOLIV	83	79	112	2.8	3.0
34		ANB"S"/BUC"S" CM84758-10Y-0M-0Y-4M-0Y	BOLIV	82	78	110	5.4	14
35		KEA"S"/BUC"S"//FCT"S" CM85839-44M-0Y-0M-5Y-0M	BOLIV	83	79	112	2.1	20
36		ALDAN"S"/VUL"S"//JUN"S" CM90483-1Y-0H-0Y-1M-0Y	BOLIV	85	78	114	12	2.2
37		PRL"S"/TONI//CHIL"S" CM90591-35Y-0H-0Y-1M-0Y	BOLIV	92	78	112	0.0	5.0
38		FONGCHAN#3/TRT"S"//VEE#9 CM82534-08TOPM-7Y-025H-0Y-12M-0Y	BOLIV	87	77	109	7.7	15
39		K2 MM8210-1MM-0MM-2MM-0MM-7MM-0MM	BOLIV	97	84	112	14	0.1
40		SIREN CM64609-5Y-4M-4Y-0M	BOLIV	77	77	110	1.8	4.5
41		CNT7//KVZ/BUHO"S"/3/PEL72390 F12404-G-1M-3Y-3Y-0P	BOLIV	82	78	110	32	5.0
42		ALD"S"/PF72514//CNT10 F12310-B-2M-1Y-1Y-0Z-0Y	BOLIV	82	78	112	39	10
43		AAR"S" CM 70112-10Y-3M-1Y-2M-1Y-0B	BOLIV	84	78	110	24	10
44		CS/A.ELONG/3"NAC/3/GLEN CIGM 84.25 1PR-2B-1M	BOLIV	79	79	116	16	0.0
45		URES/BOW"S" CM78108-3M-02Y-02M-7Y-1B-0Y	BOLIV	84	84	115	7.5	0.0
46		IAS58/4/KAL/BB//CJ"S"/3/ALD//YAV CD58620	BOLIV	80	82	116	11	0.1
47		FINK"S" CM74553	BOLIV	96	80	112	5.9	1.5
48		TRAP1"S"/BOW"S" CM84548-34Y-0M-0Y-8M-0Y	BOLIV	88	82	112	4.6	1.5
49		THB"S"//MON"S"/ALD"S" CM78600-11Y-101F-2F-0Y	BOLIV	99	80	112	1.6	1.8
50		URES/BOW"S" CM78108-3M-2Y-2M-2Y-3B-0Y	BOLIV	85	85	112	2.2	0.1



ROYA ESPG	OIDIO	SEPT HOJA	SEPT GLUM	HEL SAT	HTR	FUS	BYD	SEL %
13	40	37.0	42	19	18	30	8.0	21.1
3.0	46	41.0	28	35	73	59	8.0	5.30
34	52	27.8	14	27	98	31	8.2	5.30
16	41	26.0	28	45	34	40	8.0	21.1
23	52	41.3	42	28	46	56	8.3	10.5
11	48	44.5	70	51	56	54	8.0	15.8
13	50	31.0	28	53	46	40	8.1	5.30
7.7	45	33.0	56	31	46	30	8.0	31.6
8.4	59	50.0	56	6.5	46	43	7.7	21.1
13	58	38.0	28	38	46	49	7.0	26.3
5.7	68	38.1	28	24	46	31	7.5	15.8
18	60	54.5	42	38	38	25	7.2	15.8
26	53	61.5	56	38	49	52	8.0	10.5
40	34	36.5	42	49	38	43	6.5	31.6
17	57	57.3	56	24	56	30	8.2	0.00
29	53	47.3	28	22	49	13	7.0	15.8
40	61	44.6	28	31	73	12	7.3	15.8
17	56	55.5	42	38	44	23	7.7	15.8
20	61	54.0	70	56	38	30	8.2	0.00
9.1	45	54.6	42	16	49	9.9	8.5	10.5
0.1	50	47.8	56	31	49	34	8.6	10.5
13	58	44.5	36	51	42	20	7.2	31.6
22	60	54.5	28	51	52	35	8.0	26.3
25	40	59.0	28	31	38	25	6.6	21.1
15	50	36.5	28	41	38	6.0	8.7	21.1



(Continuación) CUADRO 2. RESUMEN GENERAL (Promedio de 25 localidades).

ENT	REGISTRO	CRUZA y PEDIGRI	ORIG	ALT CM	ESP DIAS	MAD DIAS	ROYA HOJA	ROYA TALLO
51		BATUIRA=KEA"S" CM21335-C-9Y-3M-1Y-1Y-1Y-0B-6KE-0Y-0HL	BOLIV	80	81	112	27	3.0
52		JUN"S"/BOW"S"/VEE5/BUC"S" CM75748	BOLIV	84	84	113	14	2.2
53		BR8/PF81230//CEP11/BR14 F26189-A-900G-902F-901F-901F-900R	BOLIV	88	78	112	28	36
54		KAUZ"S" CM67458-4Y-1M-3Y-1M-2Y-0B	BOLIV	85	81	112	19	26
55		BJY"S"/4/TZPP//IRN46/CNO67/3/PRT CM50323-12Y-1M-1Y-0M	BOLIV	94	79	112	8.5	0.8
56		MOR"S"/VEE"S" CM67443-12Y-1M-3Y-1M-0Y	BOLIV	85	77	112	15	1.5
57		LD*4/PPI//TIF/3/BH1146*3/ALD"S" F17762-3F-100F-6F-2F-9F1F-2F-0F	BOLIV	96	80	113	6.5	0.8
58		CS/E.GIG//2*CS/3/CNO79 C16M83.29-1Y-1B-1PR-1B-0PR-4M	BOLIV	82	78	110	18	0.1
59		K5 MM8210-16MM-0MM-3MM-0MM-12MM-0MM	BOLIV	97	82	112	7.9	2.5
60		CC/ALD"S"/3//IAS54/S62//CNT8	BOLIV	88	79	110	12	1.0
61		VEE/2*PVN"S" CM72866	BOLIV	84	77	112	5.3	4.5
62		CHILERO"S" CM66684	BOLIV	86	78	114	10	2.2
63		F3.71/TRM/KVZ/CG• CM79861	BOLIV	81	78	112	4.8	2.2
64		VEE8"S"/3/R37/GHL121//KAL/BB CM76710-11Y-02M-01Y-3B-2Y-0B	BOLIV	80	82	110	14	5.0
65		VEE5/TRAP1 CM72723	BOLIV	82	81	112	0.7	7.5
66		CNO67/MFD//.....4/KVK CM82716	BOLIV	86	79	110	11	4.5
67		CS/A.CURVIF//GLEN/3/GEN CGM87-107	BOLIV	79	75	112	10	0.2
68		AGUA DULCE CIAT = OPATA 85	BOLIV	83	81	112	8.3	2.2
69		PAI COMOMOCI = NACUZARI	BOLIV	80	77	110	11	2.2
70		PAI AURORA = AURORA	BOLIV	80	81	112	17	2.2
71		CHANE CIAT	BOLIV	76	83	114	19	7.2
72		NDD/SEL 101//PVN/SIS CM59710-2Y-1M-1Y-2M-2Y-1M-0Y	BOLIV	84	76	109	10	0.2
73		BUC/BJY"S" CM49641	BOLIV	79	78	110	6.3	1.5
74		SAGUAYO	BOLIV	82	77	110	31	5.1
75	CPAC 8711	OC73124/LIRA"S" CM74275-0R-6R-2R-1R-0R	BRAS	82	76	108	13	10



ROYA ESPG	OIDIO	SEPT HOJA	SEPT GLUM	HEL SAT	HTR	FUS	BYD	SEL %
19	64	44.2	42	67	40	35	8.2	10.5
18	54	30.5	28	22	49	37	8.2	15.8
34	36	40.0	28	31	49	9.9	8.0	31.6
21	48	37.5	28	24	46	35	7.8	5.30
190	44	39.5	28	24	76	15	7.2	26.3
23	57	49.5	56	24	40	30	7.3	10.5
31	26	54.1	30	24	31	21	7.8	21.1
25	64	52.0	56	22	34	27	7.7	5.30
39	58	36.0	42	31	46	37	5.7	31.6
25	50	39.8	28	38	46	25	7.2	15.8
15	51	42.3	42	38	50	30	8.7	0.00
27	60	49.0	56	38	46	30	7.5	5.30
10	67	66.1	70	45	46	35	8.5	10.5
2.0	58	22.0	36	38	35	30	6.0	42.1
22	53	36.5	42	58	46	35	7.3	5.30
15	54	45.0	43	84	35	46	7.0	21.1
34	56	64.0	42	37	46	38	8.2	15.8
9.4	71	39.8	42	41	50	24	7.3	10.5
20	57	43.3	56	6.5	46	43	7.7	5.30
15	58	25.5	56	22	46	31	7.2	15.8
21	50	48.5	56	31	42	36	8.2	0.00
20	55	41.0	28	56	73	60	8.0	5.30
12	64	51.0	63	24	50	18	8.2	26.3
13	62	77.0	42	56	46	37	8.0	10.5
13	48	49.6	42	51	46	37	8.2	5.30



(Continuación) CUADRO 2. RESUMEN GENERAL (Promedio de 25 localidades).

ENT	REGISTRO	CRUZA y PEDIGRI	ORIG	ALT CM	ESP DIAS	MAD DIAS	ROYA HOJA	ROYA TALLO
76	CPAC8717	ALD4546/IMU R565-0R-1R-2R-1R-0R	BRAS	82	80	112	2.2	9.0
77	CPAC8759	PF70402/ALD/PAT72160//ALD"S"/3/PHO"S" CM70469-0R-0R-3R-1R-030Y-1R-0R	BRAS	85	81	112	21	6.5
78	CPAC8854	PF781113/PF781121 F26945-0F-0R-0F-4R-0R	BRAS	106	79	110	17	9.5
79	PF869149	BR12*2/3/JUP//PAR214*6/FB6631 F26249-A-401Y-803F-799Y-801F-0Y	BRAS	80	77	112	1.4	3.0
80	PF869176	BR12*2//JUP*5/RL6010 F26244-B-451Y-452F-799Y-451F-0Y	BRAS	78	76	114	4.5	1.5
81	PF869185	BR12*3/4/IAS55*4/CI14123/3/IAS55*4/EAGLE//IAS55*4/ALD"S F27202-A-451R-901F-803F-0Y	BRAS	77	78	112	9.5	6.0
82	GD905	ALD"S"/PJA/3/CMH74A.630/BUC"S"/CMH74A.630/VEE"S" CM76448-12Y-08M-08Y-2B-2Y-0B	BRAS	87	78	113	28	0.1
83	GD9010	PF801004/OC812 F25269-16D-3D-1D-2D-0D	BRAS	81	78	114	2.2	0.0
84	GD9017	CEP777/GD798//ANA/GD798 F26108-7D-2D-2D-1D-0D	BRAS	84	79	113	24	0.1
85	GD9018	PF815/POLO1/3/PAR214*4/TW275-7//PF79780 F26124-5D-2D-1D-1D-0D	BRAS	91	79	114	16	0.1
86	GD9019	PF815/POLO1/3/PAR214*4/TN275-7//PF79780 F26124-5D-2D-2D-1D-2D-0D	BRAS	91	77	112	17	0.2
87	GD9020	IAPAR6/MS7936//PF828/PF813 F26131-0F-0R-0F-2D-2D-0D	BRAS	74	77	110	22	0.5
88	GD9023	GD8157/MS7878 F26956-1D-1D-2D-0D	BRAS	85	82	112	18	2.2
89	GD9025	IA7920/PF813 F27652-1D-5D-2D-0D	BRAS	82	79	112	8.8	0.1
90	IAC120	IRN 33/70/MARINGA	BRAS	88	84	113	6.9	35
91	IAC307	KVZ/3/TOB/CTFN//BB/4/BLO"S"/5/SNB"S"	BRAS	88	82	113	33	2.5
92	IAC317	INIA 66/IAC-18/3/BH/7C//OLESEN	BRAS	93	75	112	23	42
93	IAC318	IAC 69/IAC 47	BRAS	103	80	113	19	2.2
94	IAC319	ALD//BH 1146/LONDRINA	BRAS	96	79	114	31	24
95	IAC320	IAC 58/IAC 161	BRAS	82	80	112	17	0.1
96	IAC321	JUP/3/IAC-5/IAC 17//BH-1146	BRAS	84	78	110	20	22
97	IAC322	IAC 107/IAC 57	BRAS	94	81	110	35	0.3
98	IAC323	E.DAKURU//IAC 5/SUPER X/3/IAC 5/4/IAC 5	BRAS	104	75	112	31	12
99	IAC324	SPN/YACO"S"	BRAS	83	81	112	44	30
100	LD883	MN 72506/BUC"S" CM 73966-1L-1L-1L-0L	BRAS	92	81	112	12	0.4



ROYA ESPG	OIDIO	SEPT HOJA	SEPT GLUM	HEL SAT	HTR	FUS	BYD	SEL %
5.0	36	35.0	42	53	34	18	7.5	26.3
1	15	68.0	56	37	44	37	7.2	31.6
36	16	53.5	42	24	46	29	7.5	15.8
12	42	55.5	85	42	64	79	7.0	21.1
39	49	34.6	42	60	59	50	7.8	5.30
6.9	32	39.0	56	35	63	37	7.8	15.8
30	37	68.0	42	24	77	50	7.2	15.8
19	12	52.5	74	60	43	28	7.7	10.5
39	34	55.5	56	31	50	44	7.2	15.8
27	44	61.5	28	24	50	21	7.2	5.30
28	34	74.0	28	24	55	19	6.2	15.8
22	23	55.5	60	44	35	31	8.5	26.3
35	46	32.0	28	24	63	12	7.6	26.3
21	46	69.5	42	44	46	42	8.5	0.00
29	36	34.6	28	37	59	28	7.5	10.5
46	55	68.0	56	56	46	36	8.2	0.00
48	58	77.0	42	22	42	24	7.3	5.30
35	53	64.0	42	24	52	16	7.5	5.30
39	52	39.0	42	31	63	32	7.0	10.5
18	40	49.5	42	45	77	13	7.8	0.00
22	53	51.0	56	38	59	29	8.2	5.30
17	48	45.0	42	45	59	12	7.7	5.30
38	55	54.5	14	58	81	11	6.5	10.5
23	58	37.0	56	38	63	51	8.4	5.30
11	64	41.4	56	44	68	60	8.0	10.5



(Continuación) CUADRO 2. RESUMEN GENERAL (Promedio de 25 localidades).

ENT	REGISTRO	CRUZA y PEDIGRI	ORIG	ALT CM	ESP DÍAS	MAD DÍAS	ROYA HOJA	ROYA TALLO
101	LD891	BH 1146/OC 731070//AFM/COC IP 5788-E-7L-1L-0L-3L-0L	BRAS	91	85	114	30	0.2
102	LD8913	IAS54/ALDAN"S"//ALD"S"//COC75 IP 5022-4L-2L-0L-2L-0L	BRAS	98	80	116	19	0.2
103	LD8940	MEZCEP 7780//PF 70354/ALD"S" IP 6617-2L-2L-3L-0L-1L-0L	BRAS	96	82	114	3.2	2.7
104	LD8945	THB"S"//SERI 2//CEP 80111 CM 90201-E-6M-0YL-0G-0L	BRAS	86	83	116	26	5.1
105	LD8949	PJN"S"//BOW"S" CM 76777-4L-2L-0L-2L-0L	BRAS	85	82	112	5.3	10
106	LD8950	THB"S"//CEP 11 CM76635-8Y-0Z-0Y-4M-0YL-0G-0L	BRAS	87	81	114	2.2	0.4
107	LD8951	PAT 7219//IA 7989 IP 5770-2L-2L-0L-2L-0L	BRAS	91	77	112	8.2	0.2
108	LD8952	CNT8//BOW"S" CM 72535-6L-1L-0L-5L-0L	BRAS	86	83	114	4.4	1.0
109	IA9012		BRAS	91	87	112	4.8	2.5
110	OC912	VEE"S"//3/BAGE/HORK"S"//ALDAN"S" CM76728-7P-5P-3P-3P-0P	BRAS	79	86	114	44	25
111	OC913	P.AR*2//H567.71//GEN CM84251-200P-200P-4P-0P	BRAS	84	83	112	8.9	1.0
112	OC914	VEE*5//TOW"S" CM69576-16P-1P-1P-1P-1P-0P	BRAS	81	79	112	19	0.1
113	OC915	URES//PF70354/MUS"S"//3/SARA CM85153-BR-1P-1P-1P-0P	BRAS	82	84	113	36	0.4
114	OC916	VEE"S"//CHARRUA CO4635-10P-2P-2P-1P-3P-0P	BRAS	85	87	112	39	20
115	OC918	IOC8315//OC8124 CO6174-101P-1P-3P-0P	BRAS	84	84	114	52	30
116	OC9110	KVZ/K4500L.A.4//CEP7780/3/TR/TRF"S"//BOW"S" CO4264-B-1T-6T-2T-5T-0T	BRAS	100	87	114	33	22
117	OC9111	OC8124//IOC811 CO4553-4P-1P-1P-2P-0P	BRAS	88	82	110	14	21
118	OC9112	VEE"S"//CHARRUA CO4635-10P-2P-2P-1P-6P-0P	BRAS	88	85	112	22	1.0
119	OC9116	AU//UP301//GLL/SX/3//CEP7780//BR4//CEP7780 CO3719-C-3T-2T-2T-2T-4T-0T	BRAS	94	84	110	35	1.0
120	CEP8818	BUTUI//BR14//PF79790//CEP75203 B30654-0Z-0A-3A-0A	BRAS	96	85	113	10	0.0
121	CEP8878	CEP8057//BUTUI//CEP8324 B30726-A-0Z-0A-3A-0A	BRAS	88	85	113	2.6	0.0
122	CEP891	ALD"S"//CEP75630//CEP75234//PAT7219/3//KEA"S" CM90944-4Y-0M-0Y-2M-900Y-0Z	BRAS	89	87	114	3.0	0.2
123	CEP8953	CEP11//CEP19/3//BNQ"S"//CNT8//ALDAN"S"//IAS58 B31740-B-0Z-0A-2A-0A	BRAS	102	81	114	5.8	1.0
124	CEP8956	CEP11//OASIS//BR14 B31743-0A-0Z-2A-0A	BRAS	108	87	116	7.8	0.1
125	CEP89124	CEP82149//MNO82 B31098-0Z-0A-1A-1A-0A	BRAS	94	87	114	5.1	2.5

ROYA ESPG	OIDIO	SEPT HOJA	SEPT GLUM	HEL SAT	HTR	FUS	BYD	SEL %
32	36	40.0	28	44	46	24	7.7	0.00
36	30	35.3	27	24	46	54	7.5	10.5
7.2	21	31.0	36	35	46	35	7.9	15.8
35	29	52.5	28	38	50	31	6.8	10.5
4.0	34	41.5	68	74	38	24	9.0	26.3
0.1	66	40.5	60	65	49	12	8.7	31.6
33	34	22.0	42	60	46	21	7.7	10.5
19	36	40.5	56	37	50	24	7.8	15.8
20	39	25.3	42	22	46	28	8.2	15.8
39	58	48.5	42	35	46	31	7.7	10.5
31	37	29.0	56	35	38	47	8.0	21.1
2.6	31	67.5	56	35	50	28	8.0	10.5
11	40	47.5	42	44	34	37	8.3	15.8
25	32	42.0	70	60	44	29	7.8	10.5
56	49	64.0	42	22	34	36	8.0	0.00
14	20	29.0	56	51	34	21	7.8	5.30
37	28	18.4	70	60	30	20	7.9	0.00
30	31	32.5	28	67	34	31	7.7	0.00
48	19	30.0	42	28	46	24	7.6	15.8
27	11	25.3	38	28	27	30	8.2	36.8
74	27	45.0	36	57	32	38	7.5	21.1
33	38	36.0	43	32	35	31	7.5	31.6
44	28	22.0	43	59	40	11	7.7	0.00
32	19	33.5	43	27	27	8.8	7.8	10.5
42	13	33.5	14	51	34	20	8.3	21.1



(Continuación) CUADRO 2. RESUMEN GENERAL (Promedio de 25 localidades).

ENT	REGISTRO	CRUZA y PEDIGRI	ORIG	ALT CM	ESP DIAS	MAD DIAS	ROYA HOJA	ROYA TALLO
126	CEP89140	CNT10/TAM105//MCR/BR14 B31543-E-900Y-0Z-4A-0A	BRAS	87	89	114	1.1	0.0
127	CEP89171	MNO82/BR14//BR4/CEP14 B30848-D-0Z-0A-3A-6A-0A	BRAS	96	90	116	4.9	0.0
128	PF88452	ENC/PF79768//PF80284 F22976-A-2F-701Y-3F-7F-205F-3F-205R-1F-0	BRAS	99	83	115	10	0.0
129	PF88501	PF7815/LAP689//PF7815/PF80278 F25089-1F-1F-0R-1F-0R-1F-0R-0F	BRAS	89	83	114	0.1	0.0
130	PF88513	LAP689/2*CNT10//PF79777 F23707-3F-6F-0R-2F-0R-1F-0R-0F	BRAS	86	82	114	0.1	0.0
131	PF88522	MNO82/PF79777//OASIS/JACUI F24841-6F-2F-0R-1F-0R-1F-0R-0F	BRAS	89	81	114	0.0	0.0
132	PF88536	COKER762/MNO82 F24976-2F-5F-0R-1F-0R-0F	BRAS	95	81	112	0.0	0.0
133	PF88543	PEL73101/BR5//PF79777/OASIS F24795-9F-11F-201R-1F-0R-1F-0R-0F	BRAS	94	83	112	5.5	0.0
134	PF88566	AMIGO/JACUI//PF7673/CDA F17909-299F-99F-99F-99F-1F-2F-0R-3F-0R-0	BRAS	94	87	112	0.2	0.0
135	PF88603	TIF SEL/PF79763/3/N.BOZU/3*LD//B7902 F23062-8F-22F-0R-1F-0R-4F-0R-25F-0F	BRAS	95	80	112	1.4	5.0
136	PF8950	F22449/BR14 F30442-A-553F-554F-0R-551F-0R	BRAS	99	82	110	6.3	0.1
137	PF889199	PF839197/5/F16946/3/NBAY*2//LD*2/ALD"S"1B/4/F16955 F27948-C-38F-501F-550F-553F-550R-551F-55	BRAS	98	82	110	6.7	0.4
138		URES/BOW"S" CM-78108-1M-02Y-02M-10Y-2B-0Y	CHILE	85	86	112	3.6	0.1
139		MAITEN INIA	CHILE	81	78	108	7.8	2.0
140		ONDA INIA	CHILE	85	79	111	18	2.2
141		NOBO INIA	CHILE	83	87	114	43	0.2
142		SERI	CHILE	78	81	112	44	0.4
143		VEE/4/BB/GLL/CJ71/T.AEST/3/KAL/B A-20225-2P-1P-1P (PLA 4188)	CHILE	79	83	112	38	0.1
144		LILEN INIA	CHILE	75	83	114	28	0.1
145		BOW"S"/BUC"S" CM-74005-8M-1Y-03M-6Y-1B-0Y-1B-0Y	CHILE	84	87	112	21	0.5
146		BOW"S"*2/PRL"S" CM-90319-C-5B-2Y-2B-0Y	CHILE	76	84	112	17	0.1
147		CHASQUI/5/SONKA/4/TOB"S"/NAPQ/NO66/ERA/3/BB/GALLO A-20632-8P-2P-4P (PLA 15589)	CHILE	76	81	112	11	1.5
148		HAHN"S"*2/PRL"S" CM-90320-A-1B-4Y-0B	CHILE	66	90	116	20	0.2
149		CHAGUAL INIA	CHILE	72	84	116	5.1	0.1
150		KAUZ"S" (BACANORA 88) CM-67458-4Y-1M-3Y-1M-5Y-0Y	CHILE	72	79	110	13	0.2

ROYA ESPG	OIDIO	SEPT HOJA	SEPT GLUM	HEL BAT	HTR	FUS	BYD	SEL %
48	26	31.0	24	14	39	9.9	6.8	26.3
28	7.5	31.0	24	32	60	31	7.1	5.30
52	17	35.5	38	27	39	18	7.3	15.8
41	9.7	31.0	28	16	38	21	7.0	5.30
40	13	43.0	36	51	29	61	8.0	10.5
57	14	49.0	28	45	34	22	8.3	15.8
51	20	53.5	28	37	38	15	8.3	5.30
53	12	61.5	36	35	29	11	6.3	36.8
75	17	46.0	14	43	46	40	8.3	15.8
62	32	57.5	14	16	34	66	7.5	26.3
44	23	36.8	28	37	34	24	7.0	31.6
46	17	53.5	56	24	34	42	6.7	10.5
9.2	46	45.0	56	37	46	32	8.7	21.1
7.5	62	52.8	56	24	46	43	8.3	5.30
10	64	52.0	42	24	50	50	8.2	5.30
24	52	44.0	56	44	34	44	8.7	5.30
25	62	61.5	70	38	54	88	8.3	0.00
26	62	40.0	85	45	46	54	8.0	5.30
14	70	51.5	50	51	28	24	8.2	26.3
4.7	56	42.0	56	60	46	23	8.7	26.3
5.3	59	57.5	42	58	63	40	8.7	10.5
31	70	64.0	56	65	42	83	7.7	10.5
1.4	49	48.0	56	45	73	56	8.4	15.8
1.1	53	16.0	56	31	46	43	8.3	10.5
0.6	60	57.0	42	24	38	30	8.0	10.5



(Continuación) CUADRO 2. RESUMEN GENERAL (Promedio de 25 localidades).

ENT	REGISTRO	CRUZA y PEDIGRI	ORIG CM	ALT DIAS	ESP DIAS	MAD HOJA	ROYA TALLO	ROYA
151		KAUZ"S" CM-67458-4Y-2M-1Y-1M-3Y-0B-49M-0T	CHILE	76	83	112	4.7	0.1
152		KAUZ"S" CM-67458-4Y-2M-1Y-1M-3Y-0B-11M-0Y	CHILE	73	84	112	5.2	0.1
153		KAUZ"S" CM-67458-4Y-1M-3Y-1M-2Y-0B-3Y-0Y	CHILE	67	81	113	16	2.6
154		CNR"S"/SERI CM-83505-1P-1P-1P (PLA3889)	CHILE	70	82	114	30	6.8
155		VEE"S"/VEE"S" (PLA12786) A-19367-15P-1P-2P	CHILE	72	82	114	16	0.1
156		MILLALEU INIA	CHILE	76	82	112	26	0.2
157		PF72640/PF7326//PF7065/ALD"S"/3/VEE"S" CM-81131-21Y-025H-OSY-1M-0Y	CHILE	80	83	112	5.5	0.8
158		MAYA74"S"/EMU"S"/4/TOB"S"/NPO/3/NO66/ERA//BB/GALLOCHILE A-19327-18P-3P-2P-1P (PLA5087)	CHILE	78	79	110	11	1.0
159		KAUZ"S" CM-67458-4Y-1M-1Y-1M-0Y	CHILE	75	81	114	6.2	0.1
160		RL6010/4*INIA//4*GEN CMH-24323-C-2Y-1B-3Y-0B	CHILE	75	79	110	7.2	0.1
161		MRL"S"/BUC"S" CM-61949-3M-4Y-1M-3Y-1M-0Y-1B-0Y	CHILE	78	79	110	2.2	4.5
162		TSI/VEE5"S" CM-64335-3AP-2AP-2AP-0AP	CHILE	73	79	110	10	0.4
163		VEE"S"/VEE"S" A-19354-2P-4P-1P-2P (PLA6787)	CHILE	73	84	112	22	0.1
164		ND/VG9144//KAL/BB/3/YACO/4/VEE5 CM85836-45Y-OM-0Y-4M-0Y	CHILE	73	82	112	28	0.5
165		REIHUE INIA	CHILE	75	82	113	22	0.1
166		INIA66/A.DIST//INIA66/3/2*CNO79 CIGM83-7-1B-1Y-2B-0Y	CHILE	76	74	110	3.5	10
167		TALHUEN INIA	CHILE	78	81	112	21	0.1
168		BACANORA88	CHILE	71	78	112	23	0.1
169		PAPAGO86	CHILE	75	81	112	14	10
170		CNO79/PRL CM83271-18Y-1B-5Y-1B-0Y	CHILE	74	76	112	7.3	9.0
171		BACANORA88	CHILE	73	78	112	22	0.5
172		HD2402	CHILE	81	75	112	29	2.0
173		URES/BOW"S" CM-78108-1M-02Y-02M-21Y-0B	CHILE	82	86	114	5.7	0.8
174	PLA9089	BOW"S"/MILLALEU A20355-1P-1P-1P	CHILE	82	80	112	13	0.8
175		JUN"S"/BOW"S"/VEE5/BUC"S" CM-75748-F-1M-2Y-04M-3Y-1B-0Y	CHILE	84	84	112	13	4.5

ROYA ESPG	OIDIO	SEPT HOJA	SEPT GLUM	HEL SAT	HTR	FUS	BYD	SEL %
0.0	62	43.5	56	24	44	44	8.2	21.1
0.1	68	74.7	56	37	22	29	8.0	26.3
0.1	72	53.6	42	22	49	41	8.0	5.30
17	53	61.5	56	37	34	60	8.2	15.8
31	65	51.5	56	35	34	36	8.2	10.5
32	69	61.5	56	24	34	31	8.0	10.5
24	58	61.5	56	60	46	20	8.7	10.5
13	53	64.0	14	58	46	60	8.2	10.5
24	60	57.5	56	37	38	45	8.3	21.1
36	58	42.6	70	44	46	39	8.7	10.5
5.6	57	69.5	42	64	50	30	7.3	21.1
19	60	61.5	85	35	30	44	8.2	10.5
25	56	52.0	85	24	34	37	8.3	5.30
28	60	52.0	56	35	38	68	7.7	26.3
35	62	58.0	56	31	38	29	8.5	10.5
11	62	64.0	42	60	63	37	8.2	15.8
11	67	59.0	56	51	35	11	8.2	15.8
0.1	65	65.0	56	24	54	44	8.6	21.1
7.4	60	43.5	42	53	63	34	8.6	15.8
18	67	61.5	70	69	56	61	8.0	10.5
0.1	66	49.5	42	24	59	34	8.7	5.30
35	64	51.0	42	32	50	48	8.2	0.00
14	52	58.5	56	37	34	50	8.2	31.6
11	46	31.0	70	6.5	64	43	8.0	15.8
20	60	23.3	70	24	46	37	8.5	21.1



(Continuación) CUADRO 2. RESUMEN GENERAL (Promedio de 25 localidades).

ENT	REGISTRO	CRUZA y PEDIGRI	ORIG CM	ALT DÍAS	ESP DÍAS	MAD HOJA	ROYA TALLO	ROYA
176		BULK QUIL 1984 C24 AF6 SEL13	CHILE	82	79	108	17	1.0
177	PLA19089	COOK/VEE"S"//DOVE"S"//SERI/3/BJY"S"//COC CM-90507-12Y-0M-1P	CHILE	82	80	112	13	5.8
178		BUC"S"//CHRC"S" CM-52421-26Y-1Y-1M-4Y-0M	CHILE	86	85	112	3.9	9.0
179		BOW"S"//BUC"S" CM-74005-8M-1Y-03M-5Y-2B-0Y	CHILE	83	83	112	9.3	3.0
180	PLA23285	BOW/KENYA 6297-2 A-19004-1-2P-1P	CHILE	78	81	112	7.8	0.5
181		MAYA/NAC CM-39424-1Y-1M-4Y-1M-1Y-1M-0Y	CHILE	76	78	112	3.4	2.2
182	PLA7489	GEN/3/PVN"S"//MN691465/MN69.1016 CM-84617-8P-2P-1P	CHILE	78	85	114	33	0.5
183	PLA3487	23584/CNO//TOF/3/H.84466/MR20//2*CNO"S"//CHRIS A.19980-30P-3P-1P	CHILE	80	78	112	30	3.0
184	PLA387	FLN//ACCIA10/ANA75/3/T.AEST.//MOCHIS73/NAC76/4/CHASQUI A.19557-19P-1P-1P	CHILE	76	80	112	9.5	1.5
185		DWL5023/2*SNB"S" CM-84986-H-1M-3Y-3B-0Y	CHILE	77	81	112	8.8	1.5
186	BWYT5		CHILE	79	79	110	11	2.2
187		ND/VG9144//KAL/BB/3/YACO"S" CM-62661-D-1M-1Y-4M-1Y-0M	CHILE	78	87	123	2.3	0.8
188		BUCK"S"//BJY"S"//GJO"S"//EMU"S" CM-60419-C-3Y-1M-5Y-2M-1Y-1M-0Y	CHILE	92	84	112	6.2	0.1
189		PRL"S"//VEE6 CM-64624-2Y-1M-4Y-0M-9Y-0M	CHILE	71	80	110	5.9	0.1
190		MOR"S"//MON"S" CM-64736-9Y-2M-1Y-2M-1Y-012AL-0Y-03AL-0Y	CHILE	82	78	112	8.0	32
191		BOW"S"//NKT"S" CM-67428-6M-1Y-2M-05M-3Y-0B	CHILE	75	81	114	13	22
192		CNO79*2//HE1 CM-90313-A-4B-4Y-2B-0Y	CHILE	76	79	112	2.3	2.2
193	QUP2002-89	TTR"S"//JUN"S" CM-59123-3M-1Y-1M-4Y-1M-1Y-0M	CHILE	75	84	112	0.7	0.1
194	QUP2009-89	BAGULA CM59123-3M-1Y-1M-2Y-1M-0M	CHILE	80	79	112	3.5	12
195	QUP2028-89	ONDA/NEELKANT QUP-2461-3C-1C	CHILE	84	92	116	23	3.0
196	QUP2031-89	ONDA/4/MRS/3/KAL/BB//AZ QUP-2466-1C-2C	CHILE	85	87	116	8.4	3.0
197	QUP2035-89	SIPA/4/MRS/3/KAL/BB/AZ QUP-2485-1C-1C	CHILE	85	82	112	15	9.0
198	QUP2037-89	SIPA/4/MRS/3/KAL/BB/AZ QUP-2485-1C-3C	CHILE	86	90	116	11	15
199	QUP2062-89	KVZ//BB/CHA/3/TRM/4/TEMU36-78/5/OVACION QUP-2552-2C-1C	CHILE	86	92	114	2.5	0.8
200	QUP2063-89	KVZ//BB/CHA/3/TRM/4/TEMU36-78/5/OVACION QUP-2552-2C-3C	CHILE	88	91	114	3.8	0.8

ROYA ESPG	OIDIO	SEPT HOJA	SEPT GLUM	HEL SAT	HTR	FUS	BYD	SEL %
17	43	42.0	42	64	42	54	8.7	10.5
32	63	55.5	70	81	46	62	7.8	15.8
3.7	49	38.9	28	97	46	32	7.2	26.3
2.4	49	26.5	42	74	50	16	8.7	26.3
22	51	61.5	70	58	50	55	8.2	5.30
1.7	57	57.5	70	97	46	50	8.0	10.5
13	42	50.0	56	51	38	65	7.7	0.00
12	58	57.5	70	51	59	60	8.5	5.30
9.0	56	44.8	42	51	52	60	7.8	10.5
5.7	52	36.5	85	65	50	45	8.5	15.8
5.2	58	51.0	56	44	50	39	8.2	26.3
0.0	52	22.0	42	43	46	26	8.0	26.3
1.5	44	35.5	42	58	50	43	8.2	26.3
11	61	36.5	42	51	50	59	8.2	15.8
10	58	43.0	70	58	50	30	8.5	31.6
11	58	53.0	70	35	38	27	8.8	15.8
10	40	45.0	42	64	59	21	8.0	21.1
15	66	28.5	56	58	56	8.8	8.3	15.8
18	66	19.0	56	74	47	19	8.7	26.3
4.6	44	33.0	56	57	59	79	8.2	21.1
6.9	47	24.8	56	57	46	79	8.3	15.8
16	52	31.5	56	41	50	37	8.3	15.8
13	44	37.5	70	35	50	37	8.4	15.8
0.4	64	22.0	56	35	46	59	7.7	26.3
2.9	66	16.3	56	37	46	33	8.0	36.8



(Continuación) CUADRO 2. RESUMEN GENERAL (Promedio de 25 localidades).

ENT	REGISTRO	CRUZA y PEDIGRI	ORIG	ALT CM	ESP DIAS	MAD DIAS	ROYA HOJA	ROYA TALLO
201	QUP2212-89	TEMU49-82/QU-10-096 QU-1864-2C-2C-1C-6C	CHILE	91	87	114	8.3	1.0
202		CIKO INIA	CHILE	87	80	112	2.4	0.8
203		CISNE INIA	CHILE	101	91	117	9.5	0.0
204		SAETA INIA	CHILE	85	86	114	0.3	0.8
205	TEMU2058-8	KVZ/CG•//ALBA T-23232-T-1P-7T	CHILE	79	93	116	0.2	0.1
206	TEMU2060-8	KVZ/CG•//ALBA T-23232-T-1P-10T	CHILE	83	91	116	1.5	1.5
207	TEMU2089-8	DOVE"S"/NAUTICA T-23288-T-3P-4T	CHILE	84	94	118	12	6.0
208	TEMU2093-8	DOVE"S"/NAUTICA T-23288-T-3P-8T	CHILE	83	95	118	11	6.0
209	TEMU2105-8	NEELKANT"S"/TEMU58-82 T-23296-T-2P-6T	CHILE	82	87	112	22	16
210	W90-2738	LI 61/KIMP	URUGU	82	94	117	26	0.8
211	W90-2831	T 800//PPI/T 800	URUGU	64	98	116	0.1	0.1
212	W90-2833	H 570-71//2 IAS 20/P.AR/3/E CAL	URUGU	72	79	112	0.3	0.1
213	W90-2840	LE 2087/E JIL	URUGU	85	83	112	2.2	0.0
214	W90-2843	T 800/ E JIL	URUGU	102	92	116	15	0.0
215	W90-2846	T 800/E JIL	URUGU	96	97	126	1.2	0.0
216	W90-2848	LI 61/K IMP	URUGU	90	85	115	4.8	0.0
217	W90-2852	T 800//PPI/T 800	URUGU	76	98	135	0.6	0.2
218	W90-2893	F5-83-7792(BAJAS)/T 800	URUGU	96	91	118	2.9	0.3
219	W90-2895	E FED/E JIL	URUGU	95	93	118	1.1	0.2
220	W90-2897	E FED/F5-83-7792 (BAJAS)	URUGU	88	97	116	5.6	0.0
221	W90-2899	E FED/F5-83-7792(BAJAS)	URUGU	89	93	115	9.8	0.5
222	W90-2900	E FED/E JIL	URUGU	94	91	114	1.4	0.4
223	W90-2903	E FED/F5-83-7792(BAJAS)	URUGU	86	83	112	0.0	1.0
224	W90-2906	E CAL/LI 62	URUGU	69	90	112	0.0	0.0
225	W90-2907	E CAL/LE2120	URUGU	99	87	115	0.0	0.0

ROYA ESPG	OIDIO	SEPT HOJA	SEPT GLUM	HEL SAT	HTR	FUS	BYD	SEL %
.3	58	22.0	70	16	46	35	8.7	21.1
11	38	31.0	70	53	56	60	8.7	15.8
3.7	48	22.0	42	22	44	59	8.0	5.30
9.2	43	26.5	38	44	35	13	8.2	42.1
1.6	61	21.0	42	60	89	35	8.3	36.8
1.4	48	11.5	56	51	46	40	8.3	36.8
0.2	34	14.0	28	35	46	26	8.2	10.5
0.2	37	20.5	28	35	55	0.0	8.3	10.5
6.0	48	30.0	42	60	77	14	7.3	21.1
30	44	25.5	28	48	69	7.2	8.2	5.30
42	46	33.0	42	32	50	4.5	8.5	0.00
32	41	14.0	42	45	46	51	8.0	10.5
33	40	48.0	70	35	42	16	7.8	5.30
27	56	35.5	28	37	46	9.5	8.2	0.00
8.8	52	19.5	42	37	34	2.2	7.8	0.00
29	46	58.5	70	51	46	14	8.2	5.30
39	59	23.5	56	32	38	9.1	8.2	0.00
10	45	34.0	99	37	34	14	8.0	10.5
25	28	42.0	42	29	64	21	6.8	5.30
13	44	40.5	42	69	34	0.0	7.5	15.8
21	46	36.5	14	32	42	0.0	7.0	10.5
28	62	26.5	56	32	40	4.9	7.3	21.1
29	58	50.0	42	6.5	50	26	8.4	10.5
38	54	36.0	50	6.5	34	16	8.5	10.5
36	40	30.1	56	6.5	59	26	8.6	0.00



(Continuación) CUADRO 2. RESUMEN GENERAL (Promedio de 25 localidades).

ENT	REGISTRO	CRUZA y PEDIGRI	ORIG	ALT CM	ESP DIAS	MAD DIAS	ROYA HOJA	ROYA TALLO
226	W90-2909	E FED/F5-83-7792(BAJAS)	URUGU	86	86	112	0.0	0.0
227	W90-2911	E FED/F5-83-7792(BAJAS)	URUGU	86	96	129	1.6	0.0
228	W90-2949	E HOR/E FED	URUGU	89	89	114	4.3	0.0
229	W90-2951	LI 39/LI 62	URUGU	78	96	115	1.8	1.0
230	W90-2952	E FED/L A. PARG 8475	URUGU	88	89	114	3.6	1.0
231	W90-2955	EFED/CHAT"S"	URUGU	74	83	114	9.4	0.5
232	W90-2960	LI 62/E HOR	URUGU	78	89	114	47	5.0
233	W90-2972	E FED/L A. PARG 8475	URUGU	84	92	116	4.1	0.0
234	W90-2973	LI 39/LI 62	URUGU	84	86	114	9.0	0.0
235	W90-2974	E HOR/E FED	URUGU	83	91	118	21	0.0
236	W90-3004	LI 59/LI 47	URUGU	82	86	114	37	0.0
237	W90-3011	LI 59/LI 47	URUGU	78	90	116	13	0.0
238	W90-3017	LI 59/LACOS 81-4017	URUGU	84	85	112	5.5	0.0
239	W90-3026	LI 59/LI 47	URUGU	79	85	114	8.8	0.0
240	W90-3029	LI 59/L A. PARG 8975	URUGU	77	82	112	17	0.0
241	E 91007	KITE/PGO CM90738-6Y-0M-0Y-4M-0Y-0E	PARAG	75	80	109	6.4	2.0
242	E 91027	CORDILLERA 4/ BAGULA "S" CP2691- 6E-0Y-9E-0E-0P	PARAG	87	80	108	2.0	2.0
243	E 91028	CORDILLERA 4/ BAGULA "S" CP2691- 6E-0Y-16E-0E-0P	PARAG	85	78	109	0.1	2.0
244	E 91038	PIRAPO/3/CMH74A.754//PEL72380/ATR CP2692- 5E-0Y-23E-0E-0P	PARAG	84	83	118	8.9	0.0
245	E 91043	CAR853/COC//VEE"S"/3/PIRAPO CP2754- 1E-0Y-4E-0E-0P	PARAG	80	83	117	14	0.0
246	E 91044	CAR853/COC//VEE"S"/3/CEP 84186 CP2758- 2E-0Y-12E-0E-0P	PARAG	96	80	116	12	0.0
247	E 91065	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 4E-0Y-3E-0E-0P	PARAG	90	82	114	17	0.0
248	E 91066	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 4E-0Y-7E-0E-0P	PARAG	88	80	116	18	0.0
249	E 91067	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 4E-0Y-15E-0E-0P	PARAG	92	83	116	6.5	0.0
250	E 91074	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 5E-0Y-5E-0E-0P	PARAG	89	83	114	5.1	4.0



ROYA ESPG	OIDIO	SEPT HOJA	SEPT GLUM	HEL SAT	HTR	FUS	BYD	SEL %
18	58	42.0	85	6.5	46	0.0	6.5	15.8
28	68	42.0	42	32	34	0.0	7.7	10.5
36	41	47.0	42	6.5	46	4.5	8.2	0.00
17	20	18.5	85	64	50	21	8.5	15.8
54	44	40.5	42	64	34	9.8	7.5	31.6
32	50	35.5	56	64	46	4.5	8.7	15.8
58	27	46.0	42	0.0	42	28	7.3	10.5
31	63	34.6	50	0.0	46	9.5	7.8	42.1
21	40	9.0	70	0.0	73	20	8.7	0.00
57	56	36.5	42	0.0	34	4.5	8.4	15.8
25	57	42.0	56	0.0	54	14	7.7	10.5
19	22	37.0	85	0.0	38	16	8.3	10.5
27	24	26.1	43	0.0	30	30	8.0	21.1
33	30	25.3	70	0.0	34	21	7.6	21.1
17	48	31.0	85	0.0	56	9.8	8.3	10.5
19	45	39.0	28	70	56	65	8.7	10.5
42	51	32.0	70	25	64	25	7.8	21.1
36	35	15.0	70	25	34	20	8.2	21.1
16	46	43.5	70	21	42	70	8.3	0.00
21	44	43.5	42	21	73	40	8.5	21.1
50	15	39.3	56	21	56	48	8.7	5.30
22	4.0	23.0	85	21	54	51	8.7	26.3
23	20	31.0	56	37	34	45	8.5	5.30
14	15	31.0	56	25	34	40	8.2	26.3
13	15	40.5	43	37	40	30	8.0	36.8



(Continuación) CUADRO 2. RESUMEN GENERAL (Promedio de 25 localidades).

ENT	REGISTRO	CRUZA y PEDIGRI	ORIG	ALT CM	ESP DIAS	MAD DIAS	ROYA HOJA	ROYA TALLO
251	E 91075	CHAT'S'/CEP7780//PRL'S'/BOW'S' CP2825- 5E-0Y-6E-0E-0P	PARAG	82	80	112	0.0	0.0
252	E 91076	CHAT'S'/CEP7780//PRL'S'/BOW'S' CP2825- 5E-0Y-9E-0E-0P	PARAG	85	82	112	2.2	4.0
253	E 91077	CHAT'S'/CEP7780//PRL'S'/BOW'S' CP2825- 5E-0Y-11E-0E-0P	PARAG	86	81	114	6.3	0.0
254	E 91078	CHAT'S'/CEP7780//PRL'S'/BOW'S' CP2825- 5E-0Y-14E-0E-0P	PARAG	92	84	112	16	0.4
255	E 91079	CHAT'S'/CEP7780//PRL'S'/BOW'S' CP2825- 5E-0Y-15E-0E-0P	PARAG	81	82	112	3.2	0.0
256	E 91097	CEP 84187/PIRAPO CP2829- 3E-0Y-16E-0E-0P	PARAG	96	85	114	7.2	2.0
257	E 91106	CHILERO 'S'/URES 81 CP2886- 2E-0Y-7E-0E-0P	PARAG	81	83	114	1.6	0.0
258	E 91132	WUHAN3/KAUZ'S'//VEE'S'/MYNA'S' CM103106- 1C-0Y-5E-0E-0P	PARAG	90	84	115	8.1	6.0
259	E 91154	793-3402/PJ331 CM98953- 1C-0Y-5E-0E-0P	PARAG	82	83	110	7.4	8.0
260	E 91186	PRL'S'/BOW'S'//ITAPUA 25 CP2875-0Y-0C-4E-0E-0P	PARAG	90	81	113	11	0.0
261	C-90228	LIRA'S'/CHAT'S' CM88148-28M-0Y-0M-1Y-0M	PARAG	91	83	114	4.1	2.5
262	C-90229	LIRA'S'/CHAT'S' CM88148-28M-0Y-0M-4Y-0M	PARAG	89	77	112	21	10
263	C-90240	BUC'S'/FLK'S'//MYNA'S'/VUL'S' CM91575-24Y-0H-0Y-4M-0Y	PARAG	86	80	110	24	0.0
264	C-90241	BUC'S'/FLK'S'//MYNA'S'/VUL'S' CM91575-24Y-0H-0Y-5M-0Y	PARAG	82	81	110	22	1.0
265	C-90243	GCW1/SERI//DOVE'S'/BUC'S' CM92095-F-0Y-0H-0Y-1M-0Y	PARAG	88	80	114	14	23
266	C-90269	TAN'S'/HPO'S'//THB'S' CM82889-021TOPM-7Y-02M-0Y-8M-1Y-0M-0M	PARAG	79	81	112	6.6	5.0
267	C-90313	BOW'S'//BUC'S'/BUL'S' CM90526-3Y-0M-0Y-1M-0Y	PARAG	84	85	110	5.1	0.2
268	C-90324	PRL'S'/VEE#6//MYNA'S'/VUL'S' CM90722-22Y-0M-0Y-3M-0Y	PARAG	82	84	112	1.5	0.2
269	C-90328	PRL'S'/VEE#6//MYNA'S'/VUL'S' CM90722-26Y-0M-0Y-2M-0Y	PARAG	84	83	111	2.9	0.2
270	C-90346	DR791432/VEE#3'S' CM90797-1Y-0M-0Y-5M-0Y	PARAG	82	85	114	16	0.1
271	C-90369	FUFAN17/VEEP15'S' CM88930-12Y-0M-0Y-2M-5Y-0B	PARAG	78	82	114	14	0.1
272	C-90378	GCW1/SERI CM86992-6M-0Y-0M-10Y-0M	PARAG	91	82	112	12	0.1
273	C-90411	PFAU'S'/SERI//BOW'S' CM85295-0101TOPY-2M-0Y-0M-1Y-0M	PARAG	86	88	114	9.5	0.1
274	C-90489	VEE'S'/BOW'S' CM67394-11Y-1M-2Y-1M-3Y-0B-14M-0Y	PARAG	87	90	112	8.9	0.4
275	C-90492	KAUZ'S' CM67458-4Y-2M-1Y-1M-3Y-0B-11M-0Y	PARAG	76	89	112	10	0.2

ROYA ESPG	OIDHO	SEPT HOJA	SEPT GLUM	HEL SAT	HTR	FUS	BYD	SEL %
12	16	34.0	42	42	64	26	8.2	21.1
7.3	15	26.5	28	25	64	71	8.0	42.1
8.6	14	31.0	42	42	46	36	9.0	10.5
11	16	29.3	56	25	66	29	8.3	15.8
13	16	43.0	50	37	35	36	8.0	36.8
22	33	39.5	28	25	34	36	7.5	31.6
4.6	39	37.5	70	37	52	24	8.2	42.1
0.2	37	28.0	70	56	56	36	8.5	15.8
5.7	25	49.5	42	56	81	34	7.7	0.00
40	36	31.6	42	42	46	52	7.7	0.00
18	34	34.0	42	25	66	34	7.8	31.6
30	41	64.0	42	56	66	36	8.1	15.8
0.7	44	55.5	56	42	30	25	7.9	21.1
4.0	52	46.0	56	28	46	16	7.7	26.3
11	48	49.5	56	25	64	47	7.3	10.5
35	35	49.0	50	42	48	25	8.5	15.8
24	38	19.3	56	56	63	9.5	8.0	21.1
20	35	42.0	42	56	46	21	8.5	36.8
10	37	35.5	42	42	56	28	8.2	36.8
12	39	36.5	56	25	52	60	8.7	5.30
30	36	25.0	70	25	56	14	7.8	10.5
2.9	36	43.5	42	37	69	41	7.3	15.8
13	37	17.0	42	25	34	34	7.7	31.6
15	41	28.0	42	25	34	36	7.8	21.1
0.6	54	26.5	42	42	34	26	8.3	10.5



(Continuación) CUADRO 2. RESUMEN GENERAL (Promedio de 25 localidades).

ENT	REGISTRO	CRUZA y PEDIGRI	ORIG	ALT CM	ESP DÍAS	MAD DÍAS	ROYA HOJA	ROYA TALLO
276	C-90499	URES'2/PRL'S' CM90315-A-2B-2Y-1B-0Y	PARAG	73	84	114	5.2	5.0
277	C-90518	CC/ALD'S'/3/	PARAG	87	79	114	15	15
278	C-90538	ALD'S'/BOW'S' CM67318-17Y-3M-1Y-1M-0Y	PARAG	78	84	114	15	0.1
279	C-90548	CQT/AZ//JA555/ALD'S'/3/NAFN/4/PIN'S' CM58478-B-2Y-1Y-2M-1Y-0M	PARAG	102	88	113	1.9	0.0
280	C-90048	BJY'S'/JUP//THB'S" CO7121-2C-0C-0Y- 1C-0C	PARAG	83	86	114	58	12
281		PROINTA ISLA VERDE	ARG	76	80	108	4.5	2.5
282		PROINTA OASIS	ARG	76	94	114	6.2	0.0
283		PROINTA FEDERAL	ARG	79	87	116	1.1	0.0
284		PROINTA FIGUE	ARG	83	90	114	28	10
285		CRUZ ALTA INTA	ARG	84	88	114	16	0.1
286		DON ERNESTO INTA	ARG	80	86	114	1.2	0.2
287		TRIGO BR34	BRAS	88	86	114	34	14
288		TRIGO BR35	BRAS	96	80	113	25	5.0
289		CEP17 JATAI	BRAS	104	88	116	27	0.5
290		NOBO INIA	CHILE	81	90	114	42	15
291		ANAHUAC	BRAS	82	79	112	30	10
292		ITAPUA 1	PARAG	97	73	110	18	14
293		CORDILLERA 3	PARAG	75	81	112	23	5.0
294		IAN7	PARAG	84	83	116	16	1.0
295		ITAPUA35	PARAG	78	84	116	0.6	0.0
296		IAN8 PIRAPO	PARAG	85	86	115	0.8	0.1
297	E8554	BOW'S'/GEN	PARAG	79	83	115	22	1.1
298	C86240	VEE'S'/MYNA'S'	PARAG	82	87	114	14	2.0
299		MOYJA CIAT	BOLIV	83	78	112	6.1	0.2
300	LE2172	INIA BOYERO	URUG	89	87	115	2.6	0.5
301	PROMEDIO GENERAL			84	83	113	12	3.4
302	VALOR MAXIMO			108	98	135	58	42
303	VALOR MINIMO			64	0	108	0.0	0.0

ROYA ESPG	OIDIO	SEPT HOJA	SEPT GLUM	HEL SAT	HTR	FUS	BYD	SEL %
10	51	52.0	56	42	34	26	8.3	0.00
31	43	45.5	28	56	54	30	8.0	10.5
0.5	41	23.0	85	56	76	12	8.2	5.30
47	37	25.6	44	37	39	12	8.5	15.8
25	34	41.3	56	56	34	50	8.3	0.00
8.6	43	28.8	70	70	46	61	7.7	26.3
4.2	44	42.0	70	56	56	25	8.5	26.3
6.9	37	45.0	85	42	64	14	8.0	21.1
6.6	31	31.0	42	70	69	21	7.8	10.5
11	39	32.6	42	56	42	38	8.1	5.30
22	33	45.0	70	42	46	42	8.3	21.1
58	5.7	59.0	42	42	44	9.8	8.0	10.5
31	8.8	45.0	14	70	50	17	7.2	21.1
47	21	64.5	28	37	46	9.8	7.5	21.1
28	35	51.5	70	56	64	12	8.7	5.30
47	62	74.0	56	70	34	43	8.0	5.30
59	48	74.0	56	0.0	46	29	8.4	10.5
28	52	64.0	42	56	38	53	8.6	5.30
22	40	77.0	42	42	46	71	8.3	5.30
40	32	41.3	38	25	29	55	8.6	10.5
10	48	27.1	70	37	52	31	8.2	26.3
6.6	31	29.1	70	42	46	19	8.3	15.8
0.6	70	23.3	56	42	46	26	8.3	21.1
13	26	55.5	70	0.0	64	12	8.7	21.1
14	24	14.6	28	42	66	9.5	8.1	21.1
21	45	42.0	48	40	47	33	8.0	14.9
190	72	77.0	99	97	98	89	9.0	42.1
0.0	4.0	9.0	14	0.0	18	0.0	5.7	0.00



**CUADRO 3. MEJORES ENTRADAS PARA ROYA DE LA HOJA**

ENT	REGISTRO	CRUZA y PEDIGRI	ROYA HOJA	ROYA TALLO	OID	SEPT HOJA	SEL
			(11)	(2)	(6)	(3)	(19)
21	P89:3557	GREN/MY//NAC CM88044.2M-0Y-0M-1T-1T-0T	0.0	0.1	54.0	24.1	15.80
30	J03456	MON"S"/ALD"S" CM53460.4M-1Y-5Y-4M-1Y-0M-1J-0J	0.0	3.0	52.0	41.3	10.50
37		PRL"S"/TONI//CHIL"S" CM90591-35Y-0H-0Y-1M-0Y	0.0	5.0	60.0	54.5	15.80
131	PF88522	MNO82/PF79777//OASIS/JACUI F24841-6F-2F-0R-1F-0R-1F-0R-0F	0.0	0.0	14.0	49.0	15.80
132	PF88536	COKER762/MNO82 F24976-2F-5F-0R-1F-0R-0F	0.0	0.0	20.0	53.5	5.30
223	W90-2903	E FED/F5-83-7792(BAJAS)	0.0	1.0	58.0	50.0	10.50
224	W90-2906	E CAL/LI 62	0.0	0.0	54.0	36.0	10.50
225	W90-2907	E CAL/LE2120	0.0	0.0	40.0	30.1	10.00
226	W90-2909	E FED/F5-83-7792(BAJAS)	0.0	0.0	58.0	42.0	15.80
251	E 91075	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 5E-0Y-6E-0E-0P	0.0	0.0	16.0	34.0	21.10
3030		VALOR MINIMO	0.0	0.0	4.0	9.0	0.00
129	PF88501	PF7815/LAP689//PF7815/PF80278 F25089-1F-1F-0R-1F-0R-1F-0R-0F	0.1	0.0	9.7	31.0	5.30
130	PF88513	LAP689/2* <u>CNT</u> 10//PF79777 F23707-3F-6F-0R-2F-0R-1F-0R-0F	0.1	0.0	13.0	43.0	10.50
211	W90-2831	T 800//PPI/T 800	0.1	0.1	46.0	33.0	0.00
243	E 91028	CORDILLERA 4/ BAGULA "S" CP2691- 6E-0Y-16E-0E-0P	0.1	2.0	35.0	15.0	21.10
134	PF88566	AMIGO/JACUI//PF7673/CDA F17909-299F-99F-99F-99F-1F-2F-0R-3F-0R-0	0.2	0.0	17.0	46.0	15.80
205	TEMU2058-8	KVZ/CGÑ//ALBA T-23232-T-1P-7T	0.2	0.1	61.0	21.0	36.80
7	P03075	OASIS/TRM"S"//LAURELI APG11038-1B-501N-28B-1P-0P	0.3	0.1	56.0	13.4	0.00
204		SAETA INIA	0.3	0.8	43.0	26.5	42.10
212	W90-2833	H 570-71// <sup>2</sup> IAS 20/P.AR/3/E CAL	0.3	0.1	41.0	14.0	10.50
10	T00029	LPI/PROFED A5441.1T-3T-1T-1B-1T-0T	0.6	0.0	50.0	53.0	10.50
27	J03240	CKR"S"/TTM"S" CM68200.4J-5J-2J	0.6	0.1	46.0	41.0	5.30
29	J03455	KEA"S"/TAN"S" CM74591.7M-1Y-3M-5Y-4B-0Y-1J-0J	0.6	0.1	41.0	26.0	21.10
217	W90-2852	T 800//PPI/T 800	0.6	0.2	59.0	23.5	0.00
295		ITAPUA35	0.6	0.0	32.0	41.3	10.50
65		VEE5/TRAP1 CM72723	0.7	7.5	53.0	36.5	5.30
193	QUP2002-89	TTR"S"/JUN"S" CM-59123-3M-1Y-1M-4Y-1M-1Y-0M	0.7	0.1	66.0	28.5	15.80
296		IAN8 PIRAPO	0.8	0.1	48.0	27.1	26.30



CUADRO 4. MEJORES ENTRADAS PARA ROYA DEL TALLO

ENT REGISTRO	CRUZA y PEDIGRI	ROYA TALLO	ROYA HOJA	ROYA ESTR	OID	SEPT HOJA
		(2)	(11)	(8)	(6)	(3)
10 T00029	LPI/PROFED A5441.1T-3T-1T-1B-1T-0T	0.0	0.6	7.8	50.0	53.0
126 CEP89140	CNT10/TAM105/MCR/BR14 B31543-E-900Y-0Z-4A-0A	0.0	1.1	48.0	26.0	31.0
29 PF88501	PF7815/LAP689//PF7815/PF80278 F25089-1F-1F-0R-1F-0R-0F	0.0	0.1	41.0	9.7	31.0
130 PF88513	LAP689/2*CNT10//PF79777 F23707-3F-6F-0R-2F-0R-1F-0R-0F	0.0	0.1	40.0	13.0	43.0
131 PF88522	MNO82/PF79777//OASIS/JACUI F24841-6F-2F-0R-1F-0R-1F-0R-0F	0.0	0.0	57.0	14.0	49.0
132 PF88536	COKER762/MNO82 F24976-2F-5F-0R-1F-0R-0F	0.0	0.0	51.0	20.0	53.5
134 PF88566	AMIGO/JACUI//PF7673/CDA F17909-299F-99F-99F-99F-1F-2F-0R-3F-0R-0	0.0	0.2	75.0	17.0	46.0
224 W90-2906	E CAL/LI 62	0.0	0.0	38.0	54.0	36.0
225 W90-2907	E CAL/LE2120	0.0	0.0	36.0	40.0	30.1
226 W90-2909	E FED/F5-83-7792(BAJAS)	0.0	0.0	18.0	58.0	42.0
251 E 91075	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 5E-0Y-6E-0E-0P	0.0	0.0	12.0	16.0	34.0
283	PROINTA FEDERAL	0.0	1.1	6.9	37.0	45.0
295	ITAPUA35	0.0	0.6	40.0	32.0	41.3
3030	VALOR MINIMO	0.0	0.0	0.0	4.0	9.0
7 P03075	OASIS/TRM"S"//LAURELI APG11038-1B-501N-28B-1P-0P	0.1	0.3	1.3	56.0	13.4
8 P03104	KVZ/CGÑ//KFOR/3/F2/TI(RES)//ANA APG9734-10P-3N-1B-1P-1P-0P	0.1	1.0	1.5	13.0	18.0
9 P02853	CT800/BB"S"//BOW"S"/3/ARCE I APG9769-16P-1N-1B-1P-0P	0.1	1.1	7.2	40.0	18.0
21 P89:3557	GREN/MY//NAC CM88044.2M-0Y-0M-1T-1T-0T	0.1	0.0	3.5	54.0	24.1
27 J03240	CKR"S"/TTM"S" CM68200.4J-5J-2J	0.1	0.6	3.0	46.0	41.0
29 J03455	KEA"S"/TAN"S" CM74591.7M-1Y-3M-5Y-4B-0Y-1J-0J	0.1	0.6	16.0	41.0	26.0
193 QUP2002-89	TTR"S"/JUN"S" CM-59123-3M-1Y-1M-4Y-1M-1Y-0M	0.1	0.7	15.0	66.0	28.5
205 TEMU2058-8	KVZ/CGÑ//ALBA T-23232-T-1P-7T	0.1	0.2	1.6	61.0	21.0
211 W90-2831	T 800//PPI/T 800	0.1	0.1	42.0	46.0	33.0
212 W90-2833	H 570-71//2 IAS 20/P.AR/3/E CAL	0.1	0.3	32.0	41.0	14.0
296	IAN8 PIRAPO	0.1	0.8	10.0	48.0	27.1
217 W90-2852	T 800//PPI/T 800	0.2	0.6	39.0	59.0	23.5
219 W90-2895	E FED/E JIL	0.2	1.1	25.0	28.0	42.0
204	SAETA INIA	0.8	0.3	9.2	43.0	26.5



**CUADRO 5. MEJORES ENTRADAS PARA ROYA ESTRIADA**

ENT	REGISTRO	CRUZA Y PEDIGRI	ROYA ESTR	ROYA HOJA	ROYA TALLO	SEPT HOJA	FUS
			(8)	(11)	(2)	(3)	(3)
151		KAUZ"S" CM-67458-4Y-2M-1Y-1M-3Y-0B-49M-0T	0.0	4.7	0.1	43.5	44.0
187		ND//G9144//KAL//BB//3/YACO"S" CM-62661-D-1M-1Y-4M-1Y-0M	0.0	2.3	0.8	22.0	26.0
3030		VALOR MINIMO	0.0	0.0	0.0	9.0	0.0
46		IAS58/4/KAL//BB//CJ"S"/3/ALD//YAV CD58620	0.1	11.0	0.1	47.8	34.0
106	LD8950	THB"S"/CEP11 CM76635-8Y-0Z-0Y-4M-0YL-0G-0L	0.1	2.2	0.4	40.5	12.0
152		KAUZ"S" CM-67458-4Y-2M-1Y-1M-3Y-0B-11M-0Y	0.1	5.2	0.1	74.7	29.0
153		KAUZ"S" CM-67458-4Y-1M-3Y-1M-2Y-0B-3Y-0Y	0.1	16.0	2.6	53.6	41.0
168		BACANORA88	0.1	23.0	0.1	65.0	44.0
171		BACANORA88	0.1	22.0	0.5	49.5	34.0
207	TEMU2089-8	DOVE"S"/NAUTICA T-23288-T-3P-4T	0.2	12.0	6.0	14.0	26.0
208	TEMU2093-8	DOVE"S"/NAUTICA T-23288-T-3P-8T	0.2	11.0	6.0	20.5	0.0
258	E 91132	WUHAN3//KAUZ"S"/VEE"S"/MYNA"S" CM103106- 1C-0Y-5E-0E-0P	0.2	8.1	6.0	28.0	36.0
15	T00040	A9097-1T-4N-1B-2T-1T-0T	0.3	5.1	0.1	26.0	32.0
23	J03153	BG//HORK//ALDAN"S"/3/CNDR"S"/ALD"S" A5137-84J-1B-1J-0J	0.3	4.3	0.4	27.5	59.0
22	J03139	BOW"S"/4/COW"S"/3/NAD//BB//INIA CM70050.62J-1J-3J-0J	0.4	4.0	0.1	17.3	9.9
24	J03254	BPUC//3/JAR"S"/CNO"S"/JAR"S" AMJ5702.1J-1J-1B	0.4	6.3	0.1	56.0	46.0
199	QUP2062-89	KVZ//BB//CHA//3/TRM//4/TEMU36-78//5/OVA. QUP-2552-2C-1C	0.4	2.5	0.8	22.0	59.0
278	C-90538	ALD'S//BOW'S' CM67318-17Y-3M-1Y-1M-0Y	0.5	15.0	0.1	23.0	12.0

(Continuación) CUADRO 5. MEJORES ENTRADAS PARA ROYA ESTRIADA

ENT	REGISTRO	CRUZA y PEDIGRI	ROYA ESTR	ROYA HOJA	ROYA TALLO	SEPT HOJA	FUS
			(8)	(11)	(2)	(3)	(3)
150		KAUZ"S" (BACANORA 88) CM-67458-4Y-1M-3Y-1M-5Y-0Y	0.6	13.0	0.2	57.0	30.0
275	C-90492	KAUZ'S' CM67458-4Y-2M-1Y-1M-3Y-0B-11M-0Y	0.6	10.0	0.2	26.5	26.0
298	C86240	VEE'S'/MYNA'S'	0.6	14.0	2.0	23.3	26.0
263	C-90240	BUC'S'/FLK'S'//MYNA'S'/VUL'S' CM91575-24Y-0H-0Y-4M-0Y	0.7	24.0	0.0	55.5	25.0
14	T00039	BUC"S"/4/TZPP//IRN46/CN067/3/PRT/5/HPO"S A9097-6T-2N-2B-2T-1T-0T	1.1	13.0	0.1	37.5	35.0
149		CHAGUAL INIA	1.1	5.1	0.1	16.0	43.0
7	P03075	OASIS/TRM"S"//LAURELI APG11038-1B-501N-28B-1P-0P	1.3	0.3	0.1	13.4	50.0
201	QUP2212-89	TEMU49-82/QU-10-096 QU-1864-2C-2C-1C-6C	1.3	8.3	1.0	22.0	35.0
148		HAHN"S""2/PRL"S" CM-90320-A-1B-4Y-0B	1.4	20.0	0.2	48.0	56.0
206	TEMU2060-8	KVZ/CGÑ//ALBA T-23232-T-1P-10T	1.4	1.5	1.5	11.5	40.0



**CUADRO 6. MEJORES ENTRADAS PARA OIDIO**

ENT	REGISTRO	CRUZA y PEDIGRI	OID	ROYA HOJA	ROYA TALLO	HELM SAT
			( 6)	(11)	( 2)	( 2)
8	P03104	KVZ/CGÑ//KFOR/3/F2/TI(RES)//ANA APG9734-10P-3N-1B-1P-1P-0P	13.0	1.0	0.1	83.0
22	J03139	BOW"S"/4/COW"S"/3/NAD//BB/INIA CM70050.62J-1J-3J-0J	18.0	4.0	0.1	29.0
77	CPAC8759	PF70402/ALD/PAT72160//ALD"S"/3/PHO"S" CM70469-0R-0R-3R-1R-030Y-1R-0R	15.0	21.0	6.5	37.0
78	CPAC8854	PF781113/PF781121 F26945-0F-0R-0F-4R-0R	16.0	17.0	9.5	24.0
83	GD9010	PF801004/OC812 F25269-16D-3D-1D-2D-0D	12.0	2.2	0.0	60.0
119	OC9116	AU/UP301//GLL/SX/3/CEP7780/BR4//CEP7780 CO3719-C-3T-2T-2T-4T-0T	19.0	35.0	1.0	28.0
120	CEP8818	BUTUI/BR14//PF79790/CEP75203 B30654-0Z-0A-3A-0A	11.0	10.0	0.0	28.0
124	CEP8956	CEP11/OASIS//BR14 B31743-0A-0Z-2A-0A	19.0	7.8	0.1	27.0
125	CEP89124	CEP82149/MNO82 B31098-0Z-0A-1A-1A-0A	13.0	5.1	2.5	51.0
128	PF88452	ENC/PF79768//PF80284 F22976-A-2F-701Y-3F-7F-205F-3F-205R-1F-0	17.0	10.0	0.0	27.0
130	PF88513	LAP689/2*CNT10//PF79777 F23707-3F-6F-0R-2F-0R-1F-0R-0F	13.0	0.1	0.0	51.0
131	PF88522	MNO82/PF79777//OASIS/JACUI F24841-6F-2F-0R-1F-0R-1F-0R-0F	14.0	0.0	0.0	45.0
133	PF88543	PEL73101/BR5//PF79777/OASIS F24795-9F-11F-201R-1F-0R-1F-0R-0F	12.0	5.5	0.0	35.0
134	PF88566	AMIGO/JACUI//PF7673/CDA F17909-299F-99F-99F-99F-1F-2F-0R-3F-0R-0	17.0	0.2	0.0	43.0
137	PF889199	PF839197/5/F16946/3/NBAY*2//LD*2/ALD"S"1B/4/F16955 F27948-C-38F-501F-550F-553F-550R-551F-55	17.0	6.7	0.4	24.0
246	E 91044	CAR853/COC//VEE"S"/3/CEP 84186 CP2758- 2E-0Y-12E-0E-0P	15.0	12.0	0.0	21.0
249	E91067	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 4E-0Y-15E-0E-0P	15.0	6.5	0.0	25.0
250	E 91074	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 5E-0Y-5E-0E-0P	15.0	5.1	4.0	37.0

(Continuación) CUADRO 6. MEJORES ENTRADAS PARA OIDIO

ENT	REGISTRO	CRUZA y PEDIGRI	OID	ROYA HOJA	ROYA TALLO	HELM SAT
			(6)	(11)	(2)	(2)
252	E 91076	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 5E-0Y-9E-0E-0P	15.0	2.2	4.0	25.0
253	E 91077	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 5E-0Y-11E-0E-0P	14.0	6.3	0.0	42.0
254	E 91078	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 5E-0Y-14E-0E-0P	16.0	16.0	0.4	25.0
255	E 91079	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 5E-0Y-15E-0E-0P	16.0	3.2	0.0	37.0
247	E 91065	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 4E-0Y-3E-0E-0P	4.0	17.0	0.0	21.0
3030		VALOR MINIMO	4.0	0.0	0.0	0.0
287		TRIGO BR34	5.7	34.0	14.0	42.0
127	CEP89171	MNO82/BR14//BR4/CEP14 B30848-D-0Z-0A-3A-6A-0A	7.5	4.9	0.0	32.0
288		TRIGO BR35	8.8	25.0	5.0	70.0
129	PF88501	PF7815/LAP689//PF7815/PF80278 F25089-1F-1F-0R-1F-0R-1F-0R-0F	9.7	0.1	0.0	16.0



**CUADRO 7. MEJORES ENTRADAS PARA HELMINTOSPORIOSIS**

ENT	REGISTRO	CRUZA y PEDIGRI	HELM SAT	ROYA HOJA	OID	SETP HOJA
			( 2)	(11)	( 6)	( 3)
26	J03239	VEE"S"/3/FLN/ACC//ANA CM67391.2J-2J-1J	19.0	3.2	40.0	37.0
45		URES/BOW"S" CM78108-3M-02Y-02M-7Y-1B-0Y	16.0	7.5	45.0	54.6
126	CEP89140	CNT10/TAM105//MCR/BR14 B31543-E-900Y-0Z-4A-0A	14.0	1.1	26.0	31.0
129	PF88501	PF7815/LAP689//PF7815/PF80278 F25089-1F-1F-0R-1F-0R-1F-0R-0F	16.0	0.1	9.7	31.0
135	PF88603	TIF SEL/PF79763/3/N.BOZU/3*LD//B7902 F23062-8F-22F-0R-1F-0R-4F-0R-25F-0F	16.0	1.4	32.0	57.5
201	QUP2212-89	TEMU49-82/QU-10-096 QU-1864-2C-2C-1C-6C	16.0	8.3	58.0	22.0
244	E 91038	PIRAPO/3/CMH74A.754//PEL72380/ATR CP2692- 5E-0Y-23E-0E-0P	21.0	8.9	46.0	43.5
245	E 91043	CAR853/COC//VEE"S"/3/PIRAPO CP2754- 1E-0Y-4E-0E-0P	21.0	14.0	44.0	43.5
246	E 91044	CAR853/COC//VEE"S"/3/CEP84186 CP2758- 2E-0Y-12E-0E-0P	21.0	12.0	15.0	39.3
247	E 91065	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 4E-0Y-3E-0E-0P	21.0	17.0	4.0	23.0
232	W90-2960	LI 62/E HOR	0.0	47.0	27.0	46.0
233	W90-2972	E FED/L.A. PARG 8475	0.0	4.1	63.0	34.6
234	W90-2973	LI 39/LI 62	0.0	9.0	40.0	9.0
235	W90-2974	E HOR/E FED	0.0	21.0	56.0	36.5
236	W90-3004	LI 59/LI 47	0.0	37.0	57.0	42.0
237	W90-3011	LI 59/LI 47	0.0	13.0	22.0	37.0
238	W90-3017	LI 59/LACOS 81-4017	0.0	5.5	24.0	26.1
239	W90-3026	LI 59/LI 47	0.0	8.8	30.0	25.3

(Continuación) CUADRO 7. MEJORES ENTRADAS PARA HELMINTOSPORIOSIS

ENT	REGISTRO	CRUZA Y PEDIGRI	HELM SAT	ROYA HOJA	OID	SETP HOJA
			(2)	(11)	(6)	(3)
240	W90-3029	LI 59/L.A. PARG 8975	0.0	17.0	48.0	31.0
292		ITAPUA 1	0.0	18.0	48.0	74.0
299		MOYJA CIAT	0.0	6.1	26.0	55.5
3030		VALOR MINIMO	0.0	0.0	4.0	9.0
34		ANB"S"/BUC"S" CM84758-10Y-0M-0Y-4M-0Y	6.5	5.4	59.0	50.0
69		PAI COMOMOCI = NACUZARI	6.5	11.0	57.0	43.3
174	PLA9089	BOW"S"/MILLALEU A20355-1P-1P-1P	6.5	13.0	46.0	31.0
223	W90-2903	E FED/F5-83-7792(BAJAS)	6.5	0.0	58.0	50.0
224	W90-2906	E CAL/LI 62	6.5	0.0	54.0	36.0
225	W90-2907	E CAL/LE2120	6.5	0.0	40.0	30.1
226	W90-2909	E FED/F5-83-7792(BAJAS)	6.5	0.0	58.0	42.0
228	W90-2949	E HOR/E FED	6.5	4.3	41.0	47.0



**CUADRO 8. MEJORES ENTRADAS PARA SEPTORIOSIS DE LA HOJA**

ENT	REGISTRO	CRUZA y PEDIGRI	SETP HOJA	ROYA HOJA	ROYA ESTR	FUS
			( 3)	(11)	( 8)	( 3)
234	W90-2973	LI 39/LI 62	9.0	9.0	21.0	20.0
3030		VALOR MINIMO	9.0	0.0	0.0	0.0
206	TEMU2060-8	KVZ/CGÑ//ALBA T-23232-T-1P-10T	11.5	1.5	1.4	40.0
7	P03075	OASIS/TRM"S"//LAUREL I APG11038-1B-501N-28B-1P-0P	13.4	0.3	1.3	50.0
207	TEMU2089-8	DOVE"S"//NAUTICA T-23288-T-3P-4T	14.0	12.0	0.2	26.0
212	W90-2833	H 570-71//2 IAS 20/P.AR/3/E CAL	14.0	0.3	32.0	51.0
300	LE2172	INIA BOYERO	14.6	2.6	14.0	9.5
243	E 91028	CORDILLERA 4/ BAGULA "S" CP2691- 6E-0Y-16E-0E-0P	15.0	0.1	36.0	20.0
149		CHAGUAL INIA	16.0	5.1	1.1	43.0
200	QUP2063-89	KVZ//BB/CHA/3/TRM/4/TEMU36-78/5/OVACION QUP-2552-2C-3C	16.3	3.8	2.9	33.0
273	C-90411	PFAU'S//SERI//BOW'S' CM85295-0101TOPY-2M-0Y-0M-1Y-0M	17.0	9.5	13.0	34.0
22	J03139	BOW"S"/4/COW"S"/3/NAD//BB//INIA CM70050.62J-1J-3J-0J	17.3	4.0	0.4	9.9
6	P03061	COCHICO/3/TOB*2/7C//MN72/3/ APG10965-2B-501N-2B-1P-0P	17.5	4.7	32.0	40.0
8	P03104	KVZ/CGÑ//KFOR/3/F2/TI(RES)//ANA APG9734-10P-3N-1B-1P-1P-0P	18.0	1.0	1.5	50.0
9	P02853	CT800/BB"S"//BOW"S"/3/ARCE I APG9769-16P-1N-1B-1P-0P	18.0	1.1	7.2	37.0
117	OC9111	OC8124//IOC811 CO4553-4P-1P-1P-2P-0P	18.4	14.0	37.0	20.0
229	W90-2951	LI 39/LI 62	18.5	1.8	17.0	21.0
194	QUP2009-89	BAGULA CM59123-3M-1Y-1M-2Y-1M-0M	19.0	3.5	18.0	19.0

(Continuación) CUADRO 8. MEJORES ENTRADAS PARA SEPTORIOSIS DE LA HOJA

ENT	REGISTRO	CRUZA y PEDIGRI	SETP HOJA	ROYA HOJA	ROYA ESTR	FUS
			(3)	(11)	(8)	(3)
267	C-90313	BOW'S//BUC'S//BUL'S' CM90526-3Y-0M-0Y-1M-0Y	19.3	5.1	24.0	9.5
215W90-2846		T 800/E JIL	19.5	1.2	8.8	2.2
208	TEMU2093-8	DOVE"S//NAUTICA T-23288-T-3P-8T	20.5	11.0	0.2	0.0
205	TEMU2058-8	KVZ//CGÑ//ALBA T-23232-T-1P-7T	21.0	0.2	1.6	35.0
64		VEE8"S//3/R37//GHL121//KAL//BB CM76710-11Y-02M-01Y-3B-2Y-0B	22.0	14.0	2.0	30.0
107	LD8951	PAT 7219//IA 7989 IP 5770-2L-2L-0L-2L-0L	22.0	8.2	33.0	21.0
123	CEP8953	CEP11//CEP19//3//BNQ"S"//CNT8//ALDAN"S"//IAS58 B31740-B-0Z-0A-2A-0A	22.0	5.8	44.0	11.0
187		ND//VG9144//KAL//BB//3//YACO"S" CM-62661-D-1M-1Y-4M-1Y-0M	22.0	2.3	0.0	26.0
199	QUP2062-89	KVZ//BB//CHA//3//TRM//4//TEMU36-78//5//OVACION QUP-2552-2C-1C	22.0	2.5	0.4	59.0
201	QUP2212-89	TEMU49-82//QU-10-096 QU-1864-2C-2C-1C-6C	22.0	8.3	1.3	35.0
203		CISNE INIA	22.0	9.5	3.7	59.0



**CUADRO 9. MEJORES ENTRADAS PARA FUSARIOSIS**

ENT	REGISTRO	CRUZA y PEDIGRI	FUS	ROYA HOJA	OID	SEPT HOJA	HELM SAT	SEL
			(3)	(11)	(6)	(3)	(2)	(19)
208	TEMU2093-8	DOVE"S"/NAUTICA T-23288-T-3P-8T	0.0	11.0	37.0	20.5	35.0	10.50
220	W90-2897	E FED/F5-83-7792 (BAJAS)	0.0	5.6	44.0	40.5	69.0	15.80
221	W90-2899	E FED/F5-83-7792(BAJAS)	0.0	9.8	46.0	36.5	32.0	10.50
226	W90-2909	E FED/F5-83-7792(BAJAS)	0.0	0.0	58.0	42.0	6.5	15.80
227	W90-2911	E FED/F5-83-7792(BAJAS)	0.0	1.6	68.0	42.0	32.0	10.50
3030		VALOR MINIMO	0.0	0.0	4.0	9.0	0.0	0.00
215	W90-2846	T 800/E JIL	2.2	1.2	52.0	19.5	37.0	0.00
211	W90-2831	T 800//PPI/T 800	4.5	0.1	46.0	33.0	32.0	0.00
228	W90-2949	E HOR/E FED	4.5	4.3	41.0	47.0	6.5	0.00
231	W90-2955	EFED/CHAT"S"	4.5	9.4	50.0	35.5	64.0	15.80
235	W90-2974	E HOR/E FED	4.5	21.0	56.0	36.5	0.0	15.80
222	W90-2900	E FED/E JIL	4.9	1.4	62.0	26.5	32.0	21.10
50		URES/BOW"S" CM78108-3M-2Y-2M-2Y-3B-0Y	6.0	2.2	50.0	36.5	41.0	21.10
210	W90-2738	LI 61/KIMP	7.2	26.0	44.0	25.5	48.0	5.30
124	CEP8956	CEP11/OASIS//BR14 B31743-0A-0Z-2A-0A	8.8	7.8	19.0	33.5	27.0	10.50
193	QUP2002-89	TTR"S"/JUN"S" CM-59123-3M-1Y-1M-4Y-1M-1Y-0M	8.8	0.7	66.0	28.5	58.0	15.80
217	W90-2852	T 800//PPI/T 800	9.1	0.6	59.0	23.5	32.0	0.00
214	W90-2843	T 800/ E JIL	9.5	15.0	56.0	35.5	37.0	0.00

(Continuación) CUADRO 9. MEJORES ENTRADAS PARA FUSARIOSIS

ENT	REGISTRO	CRUZA y PEDIGRI	FUS	ROYA HOJA	OID	SEPT HOJA	HELM SAT	SEL
			(3)	(11)	(6)	(3)	(2)	(19)
233	W90-2972	E FED/L.A. PARG 8475	9.5	4.1	63.0	34.6	0.0	42.10
267	C-90313	BOW'S//BUC'S/BUL'S' CM90526-3Y-0M-0Y-1M-0Y	9.5	5.1	38.0	19.3	56.0	21.10
300	LE2172	INIA BOYERO	9.5	2.6	24.0	14.6	42.0	21.10
230	W90-2952	E FED/L.A. PARG 8475	9.8	3.6	44.0	40.5	64.0	31.60
240	W90-3029	LI 59/L.A. PARG 8975	9.8	17.0	48.0	31.0	0.0	10.50
287		TRIGO BR34	9.8	34.0	5.7	59.0	42.0	10.50
289		CEP17 JATAI	9.8	27.0	21.0	64.5	37.0	21.10
22	J03139	BOW"S"/4/COW"S"/3/NAD//BB//INIA CM70050.62J-1J-3J-0J	9.9	4.0	18.0	17.3	29.0	31.60
45		URES/BOW"S" CM78108-3M-02Y-02M-7Y-1B-0Y	9.9	7.5	45.0	54.6	16.0	10.50
53		BR8/PF81230//CEP11/BR14 F26189-A-900G-902F-901F-901F-900R	9.9	28.0	36.0	40.0	31.0	31.60
126	CEP89140	CNT10/TAM105//MCR/BR14 B31543-E-900Y-0Z-4A-0A	9.9	1.1	26.0	31.0	14.0	26.30



CUADRO 10. LINEAS CON MAYOR FRECUENCIA DE SELECCION

ENT	RÉGISTRO	CRUZA y PEDIGRI	SEL	ROYA HOJA	ROYA TALLO	OID (6)	SEPT HOJA	HELM SAT	ESP DÍAS	FUS (3)
			(19)	(11)	(2)	(6)	(3)	(2)	(13)	(3)
1		PROINTA FEDERAL	31.6	84	2.3	0.0	43.0	45.0	32.0	21.0
22	J03139	BOW"S"/4/COW"S"/3/NAD//BB/INIA CM70050.62J-1J-3J-0J	31.6	92	4.0	0.1	18.0	17.3	29.0	9.9
33		ANB"S"/BUC"S" CM84758-10Y-0M-0Y-1M-0Y	31.6	79	2.8	3.0	45.0	33.0	31.0	30.0
39		K2 MM8210-1MM-0MM-2MM-0MM-7MM-0MM	31.6	84	14.0	0.1	34.0	36.5	49.0	43.0
47		FINK"S" CM74553	31.6	80	5.9	1.5	58.0	44.5	51.0	20.0
53		BR8/PF81230//CEP11/BR14 F26189-A-900G-902F-901F-901F-900R	31.6	78	28.0	36.0	36.0	40.0	31.0	9.9
59		K5 MM8210-16MM-0MM-3MM-0MM-12MM-0MM	31.6	82	7.9	2.5	58.0	36.0	31.0	37.0
64		VEE8"S"/3/R37/GHL121//KAL/BB CM76710-11Y-02M-01Y-3B-2Y-0B	42.1	82	14.0	5.0	58.0	22.0	38.0	30.0
77	CPAC8759	PF70402/ALD/PAT72160//ALD"S"/3/PHO"S" CM70469-0R-0R-3R-1R-030Y-1R-0R	31.6	81	21.0	6.5	15.0	68.0	37.0	37.0
106	LD8950	THB"S"/CEP11 CM76635-8Y-0Z-0Y-4M-0YL-0G-0L	31.6	81	2.2	0.4	66.0	40.5	65.0	12.0
120	CEP8818	BUTUI/BR14//PF79790/CEP75203 B30654-0Z-0A-3A-0A	36.8	85	10.0	0.0	11.0	25.3	28.0	30.0
122	CEP891	ALD"S"/CEP75630//CEP75234/PAT7219/3/KEA"S" CM90944-4Y-0M-0Y-2M-900Y-0Z	31.6	87	3.0	0.2	38.0	36.0	32.0	31.0
133	PF88543	PEL73101/BR5//PF79777/OASIS F24795-9F-11F-201R-1F-0R-1F-0R-0F	36.8	83	5.5	0.0	12.0	61.5	35.0	11.0
136	PF8950	F22449/BR14 F30442-A-553F-554F-0R-551F-0R	31.6	82	6.3	0.1	23.0	36.8	37.0	24.0
173		URES/BOW"S" CM-78108-1M-02Y-02M-21Y-0B	31.6	86	5.7	0.8	52.0	58.5	37.0	50.0
190		MOR"S"/MON"S" CM-64736-9Y-2M-1Y-2M-1Y-012AL-0Y-03AL-0Y	31.6	78	8.0	32.0	58.0	43.0	58.0	30.0
200	QUP2063-89	KVZ//BB/CHA/3/TRM/4/TEMU36-78/5/OVACION QUP-2552-2C-3C	36.8	91	3.8	0.8	66.0	16.3	37.0	33.0
204		SAETA INIA	42.1	86	0.3	0.8	43.0	26.5	44.0	13.0

(Continuación) CUADRO 10. LINEAS CON MAYOR FRECUENCIA DE SELECCION

ENT	REGISTRO	CRUZA y PEDIGRI	SEL HOJA	ROYA TALLO	ROYA TALLO	OID (6)	SEPT HOJA	HELM SAT	ESP DIAS	FUS (3)
			(19)	(11)	(2)	(6)	(3)	(2)	(13)	(3)
205	TEMU2058-8	KVZ/CGÑ//ALBA T-23232-T-1P-7T	36.8	93	0.2	0.1	61.0	21.0	60.0	35.0
206	TEMU2060-8	KVZ/CGÑ//ALBA T-23232-T-1P-10T	36.8	91	1.5	1.5	48.0	11.5	51.0	40.0
230	W90-2952	E FED/L.A. PARG 8475	31.6	89	3.6	1.0	44.0	40.5	64.0	9.8
233	W90-2972	E FED/L.A. PARG 8475	42.1	92	4.1	0.0	63.0	34.6	0.0	9.5
250	E 91074	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 5E-0Y-5E-0E-0P	36.8	83	5.1	4.0	15.0	40.5	37.0	30.0
252	E 91076	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 5E-0Y-9E-0E-0P	42.1	82	2.2	4.0	15.0	26.5	25.0	71.0
255	E 91079	CHAT"S"/CEP7780//PRL"S"/BOW"S" CP2825- 5E-0Y-15E-0E-0P	36.8	82	3.2	0.0	16.0	43.0	37.0	36.0
256	E 91097	CEP 84187/PIRAPO CP2829- 3E-0Y-16E-0E-0P	31.6	85	7.2	2.0	33.0	39.5	25.0	36.0
257	E 91106	CHILERO "S"/URES 81 CP2886- 2E-0Y-7E-0E-0P	42.1	83	1.6	0.0	39.0	37.5	37.0	24.0
261	C-90228	LIRA'S/CHAT'S' CM88148-28M-0Y-0M-1Y-0M	31.6	83	4.1	2.5	34.0	34.0	25.0	34.0
268	C-90324	PRL'S/VEE#6//MYNA'S/VUL'S' CM90722-22Y-0M-0Y-3M-0Y	36.8	84	1.5	0.2	35.0	42.0	56.0	21.0
269	C-90328	PRL'S/VEE#6//MYNA'S/VUL'S' CM90722-26Y-0M-0Y-2M-0Y	36.8	83	2.9	0.2	37.0	35.5	42.0	28.0
273	C-90411	PFAU'S/SERI//BOW'S CM85295-0101TOPY-2M-0Y-0M-1Y-0M	31.6	88	9.5	0.1	37.0	17.0	25.0	34.0
302		VALOR MAXIMO	42.1	98	58.0	42.0	72.0	77.0	97.0	89.0



**CUADRO 11. LINEAS CON AMPLIA RESISTENCIA A ENFERMEDADES**

ENT	REGISTRO	ROYA HOJA	ROYA TALLO	ROYA ESTR	OID	SEPT HOJA	HELM SAT	FUS	BYD	SEL
		(11)	(2)	(8)	(6)	(3)	(2)	(3)	(1)	(19)
37	-	0.0	5.0	18.0	60.0	54.5	38.0	25.0	7.2	15.80
3030	-	0.0	0.0	0.0	4.0	9.0	0.0	0.0	5.7	0.00
204	-	0.3	0.8	9.2	43.0	26.5	44.0	13.0	8.2	42.10
243	E 91028	0.1	2.0	36.0	35.0	15.0	25.0	20.0	8.2	21.10
251	E 91075	0.0	0.0	12.0	16.0	34.0	42.0	26.0	8.2	21.10
30	J03456	0.0	3.0	23.0	52.0	41.3	28.0	56.0	8.3	10.50
7	P03075	0.3	0.1	1.3	56.0	13.4	35.0	50.0	8.2	0.00
21	P89:3557	0.0	0.1	3.5	54.0	24.1	37.0	50.0	8.5	15.80
129	PF88501	0.1	0.0	41.0	9.7	31.0	16.0	21.0	7.0	5.30
130	PF88513	0.1	0.0	40.0	13.0	43.0	51.0	61.0	8.0	10.50
131	PF88522	0.0	0.0	57.0	14.0	49.0	45.0	22.0	8.3	15.80
132	PF88536	0.0	0.0	51.0	20.0	53.5	37.0	15.0	8.3	5.30
134	PF88566	0.2	0.0	75.0	17.0	46.0	43.0	40.0	8.3	15.80
205	TEMU2058-8	0.2	0.1	1.6	61.0	21.0	60.0	35.0	8.3	36.80
211	W90-2831	0.1	0.1	42.0	46.0	33.0	32.0	4.5	8.5	0.00
212	W90-2833	0.3	0.1	32.0	41.0	14.0	45.0	51.0	8.0	10.50
223	W90-2903	0.0	1.0	29.0	58.0	50.0	6.5	26.0	8.4	10.50
224	W90-2906	0.0	0.0	38.0	54.0	36.0	6.5	16.0	8.5	10.50
225	W90-2907	0.0	0.0	36.0	40.0	30.1	6.5	26.0	8.6	0.00
226	W90-2909	0.0	0.0	18.0	58.0	42.0	6.5	0.0	6.5	15.80

CUADRO 12. NOTAS DE ENFERMEDADES EN LOCALIDADES CLAVES

ENT	PREC PERG	PREC YOU	PREC PAR	PST CHILL	PST HIDAN	PST ECU	OID IAN	OID IAC	OID OR	SEPT BALC	SEPT LE	SEPN DEOR	HELS CIAT	HTR PERG	HTR BELL	FUS CZA
1	20MSS	-	0	50S	0	30MR	6.0	20	7.0	82	85	4	63	71	3	40
2	20MRMS	-	20S	10MR	0	20MR	8.0	60	7.0	72	85	3	52	81	1	50
3	20S	-	5R	40MS	40S	40MS	6.0	40	7.0	53	76	2	83	35	2	80
4		-	10S	60S	40S	20MR	9.0	60	7.0	54	85	3	73	72	3	60
5	30S	-	5R	60S	40S	40MS	7.0	20	7.0	54	85	2	83	51	2	80
6	20X	-	0	90S	90S	0	7.0	40	7.0	53	32	1	73	52	2	40
7	-	-	10R	20MR	0	SR	7.0	40	7.0	42	43	2	73	52	2	50
8	10MSS		5R	20MR	0	10MR	0.0	0	1.0	52	43	2	85	31	3	50
9	-	-	0	30MS	0	30MS	6.0	20	7.0	52	43	2	84	72	3	70
10	-	-	5R	10MR	0	50S	9.0	40	7.0	92	86	3	85	51	3	50
11	30MSS	-	10R	60S	40S	40MS	8.0	60	7.0	82	85	2	73	31	3	60
12	30S	-	30S	10MS	0	40MS	8.0	30	7.0	54	85	2	84	51	3	20
13	40S	-	70S	20MR	0	50R	8.0	20	7.0	53	76	1	83	51	2	20
14	60S	-	50S	10MR	0	10R	7.0	30	7.0	55	54	2	85	51	2	60
15	60MRMS	-	10MS	0	0	10R	9.0	60	7.0	43	54	4	86	51	3	60
16	70S	-	10S	50S	40MRMS	10R	6.0	40	7.0	57	75	2	73	52	3	90
17	30MRMS	-	5MR	80S	80S	30MR	7.0	20	7.0	57	85	2	84	31	3	50
18	70S	-	50S	40MS	60S	30MR	7.0	40	7.0	54	76	3	83	31	4	80
19	TMR	-	5MR	40MS	40MS	20MR	6.0	20	7.0	53	76	3	86	51	3	60
20	30MSS	-	20S	60S	60MS	40MS	8.0	20	7.0	45	86	4	86	71	3	80
21	TMRR	-	0	30MS	0	TR	6.0	20	7.0	45	43	3	83	51	3	50
22	20SMR	-	10S	5MR	TMR	TR	0.0	0	1.0	52	22	2	72	51	4	10
23	20SMS	-	20S	5MR	0	TR	7.0	20	7.0	52	64	4	86	71	4	60
24	40SMS	-	20MS	5MR	0	5R	9.0	40	7.0	53	87	3	85	31	3	60
25	TR	-	5R	60S	40MR	20MR	4.0	10	1.0	93	88	4	0	31	3	90



(Continuación) CUADRO 12. NOTAS DE ENFERMEDADES EN LOCALIDADES CLAVES

ENT	PREC PERG	PREC YOU	PREC PAR	PST CHILL	PST HIDAN	PST ECU	OID IAN	OID IAC	OID OR	SEPT BALC	SEPT LE	SEPN GEOR	HELS CIAT	HTR PERG	HTR BELL	FUS CZA
26	-	-	5MS	60S	40MRMR	30MR	5.0	10	7.0	54	85	3	63	31	1	50
27	-	-	5S	30MR	20MR	5R	3.0	30	7.0	54	86	2	73	0	3	60
28	20S	-	10S	90S	90S	30MS	6.0	20	7.0	53	84	1	62	0	4	60
29	-	-	T	80S	10MR	30MS	6.0	20	7.0	43	54	2	72	51	2	60
30	-	-	0	30MR	40S	40MS	8.0	40	7.0	71	88	3	74	51	3	90
31	20S	-	30S	50MR	30MS	40MS	8.0	30	7.0	91	88	5	85	52	3	80
32	20MSS	-	70R	40MS	60S	10R	7.0	40	7.0	72	64	2	83	51	3	60
33	30MSS	-	0	0	0	50S	7.0	20	7.0	54	54	4	84	51	3	40
34	40S	-	5S	0	0	50S	8.0	30	7.0	53	86	4	0	51	3	40
35	-	-	5S	80S	TMS	5R	8.0	20	7.0	53	86	2	85	51	3	60
36	20S	30S	5S	0	0	40MR	9.0	20	7.0	43	86	2	83	51	3	40
37	-	-	0	60S	50MS	30MS	9.0	20	7.0	54	86	3	85	71	2	30
38	50S	-	20S	90S	80S	5R	7.0	40	7.0	64	88	4	85	0	2	80
39	30S	-	30S	60S	60S	50S	2.0	10	7.0	64	54	3	74	71	2	80
40	-	-	10R	5MR	0	70S	7.0	60	7.0	54	88	4	83	52	3	50
41	30MSS	40S	90S	99S	60S	10MR	7.0	60	7.0	83	87	2	73	0	2	10
42	50S	40S	80S	99S	90S	30MS	7.0	50	7.0	63	86	2	84	0	3	10
43	60S	30S	5S	50S	20MS	40MS	7.0	20	7.0	72	87	3	85	52	2	50
44	50S	10S	5S	70S	40MS	40MS	9.0	20	7.0	73	87	5	84	71	2	40
45	10MSS	-	5S	60S	10R	10R	8.0	30	7.0	54	85	3	72	0	2	10
46	-	-	10MR	0	0	5R	9.0	20	7.0	72	86	4	84	0	2	60
47	20MS	-	5S	50S	50MS	5R	6.0	30	7.0	54	75	2	85	81	3	20
48	TS	-	5S	60S	40MS	60S	9.0	50	7.0	54	86	2	85	81	3	60
49	TS	-	5S	90S	60S	10MR	6.0	20	7.0	55	86	2	84	71	2	40
50	-	-	5MS	70S	40MS	10R	8.0	50	7.0	56	64	2	74	71	2	10

(Continuación) CUADRO 12. NOTAS DE ENFERMEDADES EN LOCALIDADES CLAVES

ENT	PREC PERG	PREC YOU	PREC PAR	PST CHILL	PST HHDAN	PST ECU	OID IAN	OID IAC	OID OR	SEPT BANC	SEPT LE	SEPN GEOR	HELS CIAT	HTR PERG	HTR BELL	FUS CZA
51	-	-	90S	80S	30MS	30MS	9.0	50	7.0	54	54	3	85	81	2	60
52	10S	-	60S	70S	40MS	20MR	9.0	60	7.0	45	64	2	73	0	2	80
53	10MS	40S	50S	90S	90S	40MS	2.0	30	7.0	54	65	2	84	0	2	10
54	50S	-	50S	70S	30MS	50S	8.0	30	7.0	34	75	2	83	51	3	60
55	60S	-	0	70S	50S	30MR	7.0	20	7.0	72	75	2	83	54	3	20
56	50S	20S	0	70S	50S	50MS	9.0	30	7.0	73	85	4	83	81	2	50
57	40S	-	0	90S	50S	80S	0.0	5	1.0	63	87	2	83	81	2	20
58	20S	40S	10S	80S	60S	40MS	9.0	20	7.0	64	85	4	73	51	2	30
59	-	-	10S	50MR	80S	60S	8.0	30	7.0	54	64	3	84	51	3	60
60	50S	-	5R	90S	50S	40MS	7.0	5	7.0	53	86	2	85	51	3	40
61	20S	-	10MR	60S	50MS	20MR	6.0	20	7.0	73	85	3	85	71	3	40
62	70S	-	30MS	90S	90S	40MS	7.0	40	7.0	55	75	4	85	51	3	50
63	20S	-	5R	70S	TMR	10R	9.0	40	7.0	84	88	5	86	51	3	60
64	50S	-	5S	0	10R	30MR	8.0	20	7.0	53	43	2	85	51	3	30
65	-	-	0	60S	50S	50S	9.0	20	7.0	64	54	3	86	51	3	60
66	50S	-	20S	80S	TR	TR	7.0	40	7.0	72	76	3	85	51	3	60
67	20S	60S	0	99S	80S	50S	9.0	60	7.0	64	87	3	73	51	3	80
68	TMR	60S	0	5MR	TR	10R	9.0	60	7.0	53	86	3	74	71	3	50
69	-	20S	50S	50MS	10MR	30MR	9.0	40	7.0	64	86	4	0	51	3	80
70	20S	70/10S	50S	60S	10MR	40MS	9.0	40	7.0	64	32	4	73	51	3	60
71	20MRMS	40S-MS	40S	70S	50MS	40MS	9.0	40	7.0	92	76	4	84	31	3	60
72	40S	10S	-	60S	30MS	50S	8.0	10	7.0	93	85	2	84	0	3	80
73	10SMS	-	0	50MS	20MR	30MR	9.0	20	7.0	91	87	5	83	72	3	30
74	-	60S	40S	50S	20MR	40MS	8.0	40	7.0	84	88	3	84	51	3	60
75	10MRMS	20S	30	70S	10MR	30MR	6.0	20	7.0	74	87	3	85	51	3	60



(Continuación) CUADRO 12. NOTAS DE ENFERMEDADES EN LOCALIDADES CLAVES

ENT	PREC PERG	PREC YOU	PREC PAR	PST CHILL	PST HIDAN	PST ECU	OID IAN	OID IAC	OID OR	SEPT BALC	SEPT LE	SEPN GEOR	HELS CIAT	HTR PERG	HTR BELL	FUS CZA
76	20S	-	0	0	TR	40MS	4.0	5	1.0	91	75	3	83	51	2	40
77	20RMR	-	100S	99S	50S	5R	0.0	0	1.0	67	85	4	83	52	2	60
78	40RMR	20MS-S	60S	99S	60S	60S	2.0	0	1.0	56	75	3	83	51	3	70
79	8S	-	10R	0	10MR	50S	7.0	20	7.0	74	85	6	83	72	3	80
80	30S	-	5S	90S	20MR	60S	7.0	20	7.0	91	86	3	84	51	4	60
81	50MSS	-	30S	0	20MR	50MS	6.0	20	1.0	91	85	4	73	71	4	80
82	60MSS	-	90S	90S	80S	30MS	9.0	10	7.0	67	85	3	84	72	4	90
83	20MRMS	-	5R	70S	60S	10MR	0.0	0	1.0	67	54	5	84	31	3	50
84	50SMS	-	60MS	99S	60S	60S	1.0	0	1.0	74	85	4	84	71	3	80
85	20RMR	-	70S	99S	60S	5R	9.0	20	7.0	75	85	2	83	71	3	30
86	20MRR	-	50S	99S	70S	5R	9.0	20	7.0	76	86	2	83	31	4	30
87	TR	60S	80S	90S	20MS	50S	3.0	0	1.0	74	85	3	84	51	3	30
88	50S	40MS	5S	99S	80S	60S	8.0	60	7.0	63	85	2	83	71	4	20
89	10S	-	10S	60S	40MS	50S	7.0	20	7.0	65	87	3	84	51	3	60
90	20MSS	-	0	90S	50MS	40MS	8.0	0	1.0	65	64	2	83	51	4	60
91	60S	40S	20S	99S	80S	60S	8.0	20	7.0	67	85	4	84	51	3	40
92	50S	50S	10S	99S	80S	50MS	9.0	20	7.0	84	88	3	73	31	3	30
93	60S	-	10S	99S	60S	30MS	7.0	20	7.0	76	75	3	83	81	3	30
94	70S	40S	60S	70S	60S	70S	8.0	20	7.0	63	65	3	84	71	4	60
95	5MSMR	40MS	10R	60S	50MS	30MS	6.0	0	7.0	65	65	3	86	82	4	20
96	30MSMR	60S	20S	60S	50MSS	40MS	7.0	20	7.0	65	87	4	85	51	4	50
97	60S	50S	30S	60S	30MS	30MR	6.0	30	7.0	65	64	3	86	51	4	20
98	70S	40S	50S	99S	80S	50MS	8.0	20	7.0	66	65	1	86	82	4	20
99	60S	70S	50S	50S	50MS	TR	9.0	60	7.0	82	65	4	85	71	4	80
100	60S	-	30S	50S	10MR	30MR	9.0	60	7.0	91	87	4	84	82	3	80

(Continuación) CUADRO 12. NOTAS DE ENFERMEDADES EN LOCALIDADES CLAVES

ENT	PREC PERG	PREC YOU	PREC PAR	PST CHILL	PST HIDAN	PST ECU	OID IAN	OID IAC	OID OR	SEPT BALC	SEPT LE	SEPN GEOR	HELS CIAT	HTR PERG	HTR BELL	FUS CZA
101	80S	50MS	10S	99	70S	60S	7.0	40	0.0	74	54	2	84	51	3	20
102	80S	-	10S	99S	80S	60S	7.0	30	0.0	91	85	3	83	51	3	80
103	40MRR	-	10S	40MS	10R	20MS	0.0	40	0.0	91	65	3	73	51	3	30
104	30MRMS	40MS	50S	80S	70S	60S	6.0	40	0.0	76	54	3	85	71	3	60
105	20MRR	20MS-S	10S	0	TR	30MS	6.0	5	0.0	67	32	5	86	51	3	40
106	10RMR	-	10MR	0	-	TR	7.0	40	0.0	54	65	3	87	52	3	30
107	TRA	-	0	60S	50MS	30MS	6.0	20	0.0	54	32	3	84	51	3	20
108	-	-	0	60S	40MS	30MS	7.0	20	0.0	54	65	4	83	71	3	40
109	40S	-	0	70S	40MS	20MS	6.0	60	0.0	91	65	3	73	51	3	40
110	80S	70S	40	80S	60MSS	40S	8.0	60	0.0	75	76	3	73	51	3	80
111	-	20MS	50	99S	70S	0	7.0	40	0.0	74	32	4	73	71	2	50
112	40S	10S	10	20MS	TMS	5R	6.0	20	0.0	75	86	4	73	71	3	60
113	80S	50S	30S	50MS	40MS	20MR	7.0	40	0.0	74	65	3	84	51	2	50
114	90S	70S	60S	80S	50MS	50MS	7.0	40	0.0	65	54	5	84	52	2	60
115	80S	70S	100S	99S	80S	70S	6.0	60	0.0	64	87	3	73	51	2	80
116	70S	70S	60S	60S	40MSS	TR	0.0	5	0.0	64	54	4	73	51	2	50
117	50S	-	30S	80S	80S	60S	3.0	20	0.0	91	54	5	84	31	2	30
118	60S	-	20S	70S	60MSS	60S	7.0	30	0.0	82	64	2	85	51	2	60
119	80S	-	40MR	99S	80S	60S	8.0	0	0.0	64	43	3	74	51	3	50
120	80S	-	20S	80S	60S	40MS	0.0	0	0.0	56	32	3	74	51	2	30
121	20S	40R	0	99S	80S	70S	0.0	0	0.0	56	64	2	74	31	3	10
122	30S	-	0	99S	60MSS	30S	0.0	30	1.0	54	64	3	63	51	3	30
123	TS	-	5R	80S	60S	30MS	6.0	0	1.0	53	43	3	62	31	4	20
124	20MSS	-	5R	80S	70S	30MS	0.0	0	7.0	47	43	3	62	51	2	20
125	TMS	-	50S	90S	90S	30MS	0.0	0	1.0	47	43	1	73	51	2	20



(Continuación) CUADRO 12. NOTAS DE ENFERMEDADES EN LOCALIDADES CLAVES

ENT	PREC PERG	PREC YOU	PREC PAR	PST CHILL	PST HDAN	PST ECU	OID IAN	OID IAC	OID OR	SEPT BALC	SEPT LE	SEPN GEOR	HELS CIAT	HTR PERG	HTR BELL	FUS CZA
126	TR	-	10S	99S	90S	30MS	0.0	30	7.0	56	32	1	62	72	2	10
127	30S	-	10R	70S	70S	30MS	0.0	0	1.0	55	43	1	63	83	3	30
128	50S	-	10S	99S	80S	60S	0.0	0	7.0	56	43	3	62	72	2	10
129	TR	-	0	99S	70S	40MS	0.0	0	1.0	56	32	2	72	71	2	50
130	-	-	5R	99S	70S	TR	0.0	0	1.0	74	64	2	73	71	2	40
131	-	-	0	99S	89S	TR	0.0	0	1.0	57	64	2	72	51	2	40
132	-	-	0	99S	80S	60S	0.0	0	1.0	57	65	2	83	71	2	40
133	10S	-	10S	99S	80S	90S	0.0	0	1.0	57	85	2	73	71	2	20
134	-	-	0	99S	80S	20MS	2.0	0	1.0	57	54	1	62	51	3	60
135	-	-	0	99S	80S	80S	0.0	0	1.0	57	75	1	72	51	2	50
136	10S	-	60R	99S	80S	40MS	0.0	0	1.0	64	84	2	73	51	2	20
137	20S	-	50MR	90S	70S	50MS	0.0	0	7.0	56	75	4	83	51	2	80
138	20MSMR	-	10R	60S	10R	TR	9.0	60	1.0	56	64	4	83	51	3	60
139	20MSMR	10S	10S	5MR	TR	TR	8.0	20	7.0	56	87	4	83	51	3	80
140	20MSMR	50S	10S	50S	20MR	30MR	7.0	20	7.0	64	85	3	83	71	3	90
141	70S	70S	100S	80S	70S	20MR	8.0	20	7.0	64	65	4	84	51	2	90
142	60S	70S	100S	80S	80S	10MR	8.0	20	7.0	73	87	5	85	53	2	90
143	80S	60MS	90S	80S	70S	5R	8.0	60	7.0	74	54	6	86	51	3	90
144	90S	40MS	70S	80S	20MRMS	5R	9.0	30	7.0	74	75	4	73	31	2	30
145	80S	-	50S	40MS	TR	5R	8.0	40	7.0	56	54	4	84	51	3	40
146	80S	-	10S	20MR	TR	5R	7.0	20	7.0	75	75	3	86	71	4	80
147	-	-	0	80S	40MS	30MS	8.0	40	7.0	76	75	4	87	31	3	90
148	20S	40S	10S	20MR	TR	5R	6.0	20	7.0	64	75	4	86	0	3	90
149	52I	-	0	5MR	TR	TR	7.0	40	7.0	33	0	4	84	51	3	80
150	20MRMS	-	30S	0	TR	10R	9.0	40	7.0	82	87	3	83	71	2	40

(Continuación) CUADRO 12. NOTAS DE ENFERMEDADES EN LOCALIDADES CLAVES

ENT	PREC PERG	PREC YOU	PREC PAR	PST CHILL	PST HDAN	PST ECU	OID IAN	OID IAC	OID OR	SEPT BALC	SEPT LE	SEPN GEOR	HELS CIAT	HTR PERG	HTR BELL	FUS CZA
15120MRMS	-	30MR	0	1P40S	TR	9.0	40	7.0	73	86	4	83	52	2	60	
152 30S	-	20R	0	TR	TR	9.0	40	7.0	56	86	4	83	51	1	60	
153 20S	-	50S	0	TR	TR	9.0	30	7.0	75	87	3	73	0	2	50	
154 80S	-	10S	60S	40MSS	20MS	6.0	40	7.0	73	87	4	83	51	2	90	
155 20MSMR	30MS-S	10S	90S	60S	50MS	9.0	40	7.0	74	87	4	73	51	2	60	
156 -	40S	50S	90S	60S	50MS	9.0	60	7.0	73	87	4	83	51	2	60	
157 10MRMS	20MS	0	90S	70S	0	9.0	40	7.0	73	87	4	84	51	3	40	
158 20MSS	10MS	20S	60S	30MS	TR	6.0	20	7.0	67	75	1	86	51	3	60	
159 20MSS	-	5S	70S	40MS	60S	9.0	50	7.0	56	85	4	83	71	2	50	
160 20MRMS	60	0	99S	90S	80S	9.0	40	7.0	91	88	5	84	51	3	80	
161 20S	-	0	0	10MSMR	5R	7.0	50	7.0	56	87	3	0	71	3	40	
162 80S	-	5S	60S	40MS	40MS	8.0	40	7.0	57	85	6	73	31	2	90	
163 80S	40S	30S	90S	40MS	40MS	8.0	40	7.0	64	85	6	83	51	2	60	
164 80S	50S	90S	90S	80S	20MR	9.0	60	7.0	75	74	4	73	71	2	80	
165 TR	60S	20S	90S	80S	40MS	9.0	40	7.0	83	86	4	84	71	2	60	
166 5MRR	-	0	0	10MR	50MS	7.0	30	7.0	83	87	3	84	71	4	60	
167 20S	40MS-S	90S	50S	30MRMS	TR	8.0	40	7.0	84	85	4	73	51	3	20	
168 20MSS	60S	5S	0	TR	TR	9.0	40	7.0	84	86	4	83	53	2	80	
169 50S	-	0	10MR	10R	40MS	7.0	40	7.0	72	85	3	83	71	4	80	
170 20S	-	0	0	TR1P60S	80S	8.0	50	7.0	73	87	5	83	52	3	80	
171 60S	-	40S	0	TR	TR	9.0	40	7.0	72	86	3	83	51	4	80	
172 20MRMS	70S	30S	80S	60MSS	40S	7.0	40	7.0	91	87	3	0	71	3	40	
173 20MSS	-	0	70S	TRS	TR	8.0	50	7.0	77	54	4	83	51	2	50	
174 60S	-	0	70S	10RMR	10R	8.0	20	7.0	72	64	5	0	72	3	60	
175 50S	-	30S	80S	30MS	TR	8.0	40	7.0	72	54	5	83	51	3	60	



(Continuación) CUADRO 12. NOTAS DE ENFERMEDADES EN LOCALIDADES CLAVES

ENT	PREC PERG	PREC YOU	PREC PAR	PST CHILL	PST HDAN	PST ECU	OID IAN	OID IAC	OID OR	SEPT BALC	SEPT LE	SEPN GEOR	HELS CIAT	HTR PERG	HTR BELL	FUS CZA
176	50MRMS	20MS	5R	70S	40MSS	30MR	7.0	20	7.0	65	54	3	0	31	3	90
177	50MRMS	-	50MR	99S	80S	40MS	8.0	40	7.0	73	86	5	87	51	3	80
178	20S	-	0	20MR	TMRMS	20MR	7.0	40	7.0	54	75	2	87	51	3	60
179	50S	40S	0	30MR	TR	TR	8.0	20	7.0	54	43	3	86	71	3	30
180	20MRMS	-	0	90S	20MS	20MR	7.0	20	7.0	72	88	5	86	71	3	70
181	50MSMR	-	0	0	TR	30MR	7.0	40	7.0	56	85	5	0	51	3	100
182	40SMS	80S	0	60S	60MD	40MR	5.0	40	7.0	66	64	4	85	71	2	90
183	80S	20MS	0	70S	TR	30MR	6.0	20	7.0	65	85	5	73	51	4	90
184	80S	-	0	40MS	30MD	30MR	7.0	10	7.0	65	85	3	85	81	3	80
185	30MSMR	-	0	40MS	40D	10R	9.0	30	7.0	64	54	6	87	71	3	70
186	60S	-	0	0	TR	40MS	9.0	40	7.0	73	76	4	84	71	3	70
187	20S	-	0	0	-	TR	7.0	20	7.0	45	32	3	62	51	3	50
188	60S	-	0	20MR	TR	10R	5.0	10	7.0	56	43	3	86	71	3	80
189	20RMR	-	0	80S	10RMR	TR	8.0	10	7.0	56	64	3	85	71	3	80
190	10MRR	-	20S	30MS	20MS	40MS	6.0	20	7.0	62	76	5	86	71	3	40
191	40S	20MS	40S	10MR	10MRMS	40MS	2.0	40	7.0	63	86	5	73	71	2	30
192	20MSS	-	0	0	10MR	50S	2.0	50	7.0	91	86	3	0	51	4	40
193	20RMR	-	0	60S	30MSS	40MS	2.0	30	7.0	53	54	4	86	73	3	20
194	10RMR	-	0	70S	50MSS	30MR	2.0	30	7.0	54	21	4	86	72	3	20
195	30S	20MS-S	0	0	TR	30MR	2.0	40	7.0	54	54	4	74	51	4	80
196	10S	-	0	40MS	20MS	0	1.0	40	7.0	54	54	4	74	51	3	80
197	50S	40MS	0	60S	60MS	0	2.0	20	7.0	53	64	4	74	71	3	80
198	50MRR	50MS	0	60S	40MS	TR	0.0	5	7.0	55	54	5	73	71	3	60
199	30MSMR	-	0	10R	TR	0	1.0	40	7.0	54	32	4	73	51	3	60
200	40MS	-	0	20MS	5MS	0	2.0	40	7.0	53	32	4	83	51	3	50

(Continuación) CUADRO 12. NOTAS DE ENFERMEDADES EN LOCALIDADES CLAVES

ENT	PREC PERG	PREC YOU	PREC PAR	PST CHILL	PST HHDAN	PST ECU	OID IAN	OID IAC	OID OR	SEPT BALC	SEPT LE	SEPN GEOR	HELS CIAT	HTR PERG	HTR BELL	FUS CZA	
201	20MSMR	-	0	10MS	T	0	0.0	40	7.0	54	32	5	72	51	3	60	
202	TMR	-	10R	0	T	30MS	0.0	40	7.0	55	43	5	84	52	3	60	
203	40S	-	10R	20MS	10MS	10R	0.0	30	7.0	45	32	3	73	52	2	60	
204	TMRMS	-	5R	50MS	30MS	5R	0.0	40	7.0	55	32	3	84	51	3	20	
205	-	-	0	10MS	5MRMS	TR	0.0	50	7.0	62		3	84	54	4	60	
206	5MRMS	-	10R	10MS	P20S	TR	0.0	1.0	20	7.0	62	11	4	73	51	3	70
207	40S	-	30S	0	TR	5R	0.0	30	7.0	72	21	2	73	51	3	30	
208	60S	-	5R	0	TR	5R	0.0	30	7.0	63	32	2	73	31	4	0	
209	90S	20MS	70S	0	TMMR	30MS	0.0	60	7.0	64	43	3	84	72	4	80	
210	80S	20S-MS	70S	60S	20MS	30MS	0.0	60	7.0	64	32	2	63	52	4	30	
211	-	-	0	99S	50MSS	40MS	0.0	5	7.0	54	54	3	0	71	3	0	
212	TR	-	10R	80S	50S	50MS	0.0	20	7.0	72	21	3	86	51	3	60	
213	10MS	-	10R	99S	50S	40MS	0.0	20	7.0	83	75	5	73	31	3	40	
214	40S	-	5R	60S	40MSS	10R	0.0	1.0	60	7.0	56	43	2	83	51	3	50
215	10S	-	0	30MS	40MSS	5R	0.0	20	7.0	62	43	3	83	51	2	20	
216	10RMR	-	0	99S	70S	10R	0.0	20	7.0	66	75	5	85	51	3	30	
217	-	-	5S	80S	60S	30MS	0.0	40	7.0	91	54	4	0	71	2	0	
218	20S	-	10MR	20MS	40S	10MR	0.0	40	7.0	73	54	7	83	51	2	20	
219	10S	-	0	80S	60S	20MR	0.0	5	1.0	56	54	3	72	72	3	20	
220	-	-	0	40MS	40S	10R	0.0	50	1.0	66	43	3	61	51	2	0	
221	50S	-	30S	50MS	40S	5R	0.0	40	7.0	64	54	1	0	31	3	80	
222	10RMR	-	0	70S	60S	30MS	0.0	40	7.0	54	43	4	0	31	4	20	
223	-	-	0	90S	60S	30MS	0.0	30	7.0	66	64	3	0	71	3	40	
224	-	-	0	60S	60S	40S	0.0	0	7.0	58	11	5	0	51	2	50	
225	-	-	0	70S	60S	30MS	0.0	40	1.0	65	43	4	0	51	4	50	



(Continuación) CUADRO 12. NOTAS DE ENFERMEDADES EN LOCALIDADES CLAVES

ENT	PREC PERG	PREC YOU	PREC PAR	PST CHILL	PST HUAN	PST ECU	OID IAN	OID IAC	OID OR	SEPT BALC	SEPT LE	SEPN GEOR	HELS CIAT	HTR PERG	HTR BELL	FUS CZA
226	-	-	0	50MS	50S	20MR	0.0	20	7.0	65	54	6	0	51	3	20
227	20MS	-	0	70S	40S	5R	1.0	40	7.0	65	54	3	0	51	2	10
228	20S	-	5S	80S	60S	20MR	0.0	40	7.0	66	54	3	0	51	3	40
229	-	-	20MS	60S	50S	20MR	0.0	0	1.0	54	11	6	0	71	3	50
230	-	-	30S	99S	80S	50S	0.0	40	7.0	55	64	3	0	51	2	60
231	60S	-	10S	70S	50S	40S	0.0	60	7.0	56	43	4	0	51	3	50
232	-	60S	40S	99S	90S	50S	1.0	20	1.0	76	43	3	0	31	3	50
233	20S	-	10R	80S	80S	30MS	6.0	40	7.0	56	64	5	0	51	3	50
234	80S	-	10S	50MS	60S	40MS	0.0	40	7.0	91	11	5	0	0	3	50
235	-	40S	30S	70S	60S	40MS	0.0	60	7.0	64	54	3	0	51	2	40
236	70S	-	80S	40MS	60S	60S	1.0	60	7.0	65	54	4	0	53	2	50
237	30S	-	50S	50MS	60S	40MS	0.0	20	7.0	73	64	6	0	71	2	30
238	30MS	-	30S	80S	70S	20R	0.0	5	1.0	75	32	3	0	51	2	30
239	50S	-	5R	80S	70S	60S	0.0	40	1.0	72	64	5	0	51	2	40
240	80S	-	10MR	50MS	60S	10R	0.0	60	7.0	64	64	6	0	52	3	60
241	60S	-	TR	40MS	60S	30MR	1.0	40	7.0	91	85	2	85	52	3	60
242	30MRMS	-	10R	99S	80S	40MS	0.0	40	7.0	63		5	72	54	2	30
243	TR	-	0	99S	80S	60S	0.0	30	7.0	62	32	5	72	51	2	60
244	TRMR	-	5R	40MS	40MS	50MS	0.0	30	7.0	72	85	5	62	31	3	40
245	10MRMS	-	40S	0	TR	40MS	0.0	20	7.0	73	86	3	62	0	3	60
246	-	-	60S	99S	80S	60S	0.0	5	1.0	83	85	4	62	52	3	40
247	TS	-	70S	70S	70S	30MS	0.0	5	1.0	73	32	6	62	53	2	50
248	40S	-	60S	50MS	70S	30MR	0.0	5	3.0	72	64	4	73	51	2	40
249	60S	-	19R	50MS	70S	10R	0.0	5	1.0	72	64	4	72	51	2	40
250	50S	-	0	40MS	60S	5R	0.0	0	1.0	54	54	3	73	53	2	40

(Continuación) CUADRO 12. NOTAS DE ENFERMEDADES EN LOCALIDADES CLAVES

ENT	PREC PERG	PREC YOU	PREC PAR	PST CHILL	PST HIDAN	PST ECU	OID IAN	OID IAC	OID OR	SEPT BALC	SEPT LE	SEPN GEOR	HELS CIAT	HTR PERG	HTR BELL	FUS CZA
251		-	0	30MS	60S	5R	0.0	0	1.0	72	74	3	83	72	3	30
252	20S	-	10R	50MS	60SSS	10R	0.0	0	1.0	91	64	2	72	72	3	30
253	20SMS	-	10R	10MS	50MSS	20MR	0.0	0	1.0	72	64	3	83	51	3	30
254	20S	-	50S	30MS	50S	10R	0.0	5	1.0	73	64	4	72	53	3	30
255	TR	-	5R	40MS	50S	10R	0.0	5	1.0	74	64	4	73	51	3	30
256	60S	-	5S	50MS	60S	30MS	0.0	20	7.0	64	64	2	72	51	2	20
257	TMS	-	5S	30MS	TR	0	1.0	30	7.0	62	75	5	73	72	2	50
258	50S	-	60R	0	TR	5R	0.0	30	7.0	72	54	5	84	52	3	60
259	71S	-	5R	30MS	20MRMS	19R	1.0	20	5.0	65	65	3	84	82	4	50
260		20MS-S	20S	90S	70S	60S	0.0	5	1.0	55	64	3	83	51	3	30
261	20MSS	-	10S	60MS	70S	20MR	0.0	10	7.0	73	54	3	72	53	3	60
262	60S	-	30S	90S	80S	50S	1.0	20	7.0	76	75	3	84	53	3	50
263	80S	-	20S	10MR	TR	5R	2.0	30	7.0	74	85	4	83	31	2	50
264	70S	-	40MS	0	30MR	TR	2.0	40	7.0	75	54	4	82	51	3	60
265	70S	-	60S	30MS	20MS	40MS	0.0	20	7.0	73	85	4	72	72	3	60
266	30S	-	10S	99S	80S	50S	0.0	20	7.0	75	64	4	83	53	3	20
267	20S	-	30S	60S	40MS	50S	0.0	20	7.0	64	11	4	84	71	4	40
268	-	-	60R	90S	50MS	5R	0.0	30	7.0	65	54	3	84	51	3	50
269	20MRMS	-	TR	50MS	40MS	5R	0.0	20	7.0	65	43	3	83	52	3	70
270	10MSS	20MS	60S	60S	40MS	10R	3.0	20	7.0	64	54	4	72	72	2	70
271	20MSS	40S	20S	99S	70S	30MS	2.0	40	7.0	72	-	5	72	52	3	80
272	20S	20S	10S	5MS	10MRMS	30MR	1.0	40	7.0	72	85	3	73	52	4	30
273	60S	-	TR	60S	50MS	0	1.0	60	7.0	91	43	3	72	51	2	50
274	50MSMR	-	0	50S	50MSS	5R	1.0	40	7.0	72	54	3	72	51	2	50
275	70S	-	30S	5MS	TMR	0	6.0	60	7.0	91	64	3	83	51	2	60



(Continuación) CUADRO 12. NOTAS DE ENFERMEDADES EN LOCALIDADES CLAVES

ENT	PREC PERG	PREC YOU	PREC PAR	PST CHILL	PST HIDAN	PST ECU	OID IAN	OID IAC	OID OR	SEPT BALC	SEPT LE	SEPH GEOR	HELS CIAT	HTR PERG	HTR BELL	FUS CZA
276	10MSS	-	10S	50MS	30MRMS	20MR	2.0	60	7.0	83	85	4	83	51	2	60
277	30S	-	50S	90S	60S	60S	1.0	10	7.0	73	75	2	84	53	2	40
278	50S	-	50S	5MR	TMR	5R	2.0	40	7.0	73	32	6	84	54	3	50
279	TR	-	5S	90S	80S	60S	1.0	20	7.0	92	54	4	73	72	2	30
280	40S	20MS	60S	60S	70S	50MS	1.0	40	7.0	84	75	4	84	51	2	50
281	-	-	30S	0	TR	60S	2.0	20	7.0	91	85	5	85	51	3	50
282	-	-	30S	20MS	0TR	0	0.0	10	7.0	56	54	5	84	52	3	60
283	20RMR	-	10R	40MS	TR	20MR	0.0	40	7.0	56	64	6	83	72	3	60
284	50S	-	80S	30MS	20MS	20R	0.0	50	7.0	65	32	3	85	52	4	70
285	TMSS	-	40S	50S	30MS	20R	1.0	30	7.0	65	54	3	84	31	3	70
286	TR	-	10S	50S	10MRMS	30MS	1.0	40	7.0	56	64	5	83	51	3	80
287	70S	10S	100S	99S	80S	80S	0.0	0	1.0	65	76	3	83	52	2	60
288	70S	20MS	100S	90S	50S	20MR	1.0	0	3.0	56	64	1	85	71	3	50
289	70S	20MS	100S	99S	90S	60S	0.0	5	3.0	78	54	2	73	51	3	40
290	80S	30MS	100S	60S	70S	60S	0.0	40	7.0	74	75	5	84	72	3	80
291	-	60S	100S	90S	60S	80S	2.0	40	7.0	76	86	4	85	51	2	80
292	10S	50S	100S	99S	80S	60S	1.0	60	7.0	76	86	4	0	51	3	60
293	70S	40MS	80S	90S	70S	40MS	0.0	40	7.0	76	75	3	84	71	2	50
294	30MRMS	50S	10R	90S	30MSS	30MS	1.0	10	7.0	84	88	3	83	51	3	50
295	-	-	5S	90S	70S	60S	0.0	10	1.0	82	75	3	72	71	2	60
296	10MRR	-	5R	60S	TR	20MR	0.0	30	7.0	72	64	5	73	81	3	60
297	80S	20MS	40R	10MS	40MSS	10R	0.0	30	7.0	73	54	5	83	51	3	60
298	10MSMR	-	10S	0	10MR	TR	1.0	60	9.0	72	54	4	83	51	3	80
299	20MSS	-	40R	40MS	60S	10R	0.0	20	1.0	76	64	5	0	72	3	50
300	20MSS	-	5R	40MS	50S	5R	1.0	30	7.0	62	32	2	83	53	3	70