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ESTACION EXPERIMENTAL TROPICAL PICHILINGUE
COCOA RESEARCH AND TECHNOLOGY TRANSFER TEAM

SPECIFIC COOPERATIVE AGREEMENT INIAP-USDA (ARS): 58-6631-2-F077

PROJECT: GERMPLASM EVALUATION, BREEDING AND PHYTOPATHOLOGICAL STUDIES FOR OBTAINING IMPROVED COCOA VARIETIES

TECHNICAL PROGRESS REPORT
YEAR 7 (April 1/2010-March 30/ 2011)

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A view of a superior clonal selection growing in 100 plants plot

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INTRODUCTION

The structural Components of the project are the following: 1) Germplasm evaluation; 2) Breeding; and 3) Phytopathological studies. Project activities started on May 2002 with one main objective in mind: To obtain high yielding cocoa varieties that exhibit disease resistance and flavour quality. We are trying to accomplish this by characterizing, developing and using the genetic resources currently available at the Estación Experimental Tropical Pichilingue of INIAP.

The achievement of the proposed objective will make a significant contribution to overcome one of the major factors responsible for the low cocoa productivity in Ecuador: poor yielding cocoa varieties which are highly vulnerable to diseases. The present Report covers the project´s results for the period April 2010-March 2011. Description and explanation of the results are supported by corresponding Tables and Figures that contain relevant data. For ease of text organization these are sequentially arranged as part of the Annex and are gradually referred to as the report develops. When necessary, statements on previous results and perspectives pointing out to future activities are inserted in the text. This is to provide context and improve reader´s comprehension.

Germplasm Evaluation

CGN Collection

This Collection is currently undergoing routine maintenance. As stated in the 2009 Progress Report, four Nacional type cocoa varieties were released for commercial planting during 2009. Under intensive technological management, including irrigation, these varieties show a yield capacity similar to that of CCN 51, a high yielding clone. Two new clones, EET 559 y EET 577, have been selected from this Collection in recent years. These are currently undergoing validation testing in a farmer´s field. Plans are being made to release them as new Nacional type clonal varieties in a very near future, possibly toward the end of 2011, due to their high yielding performance. These cultivars will benefit farmers in an important cocoa growing zone, in the south eastern part of the Guayas river basin.

On the other hand, the CGN Collection genetic variability has been enriched with several new genotypes selected in farmer´s fields. Local breeding selections have also been added with the same purpose and to set up observation plots. A student was recruited to carry out a phenotypic evaluation of such new introductions. This is ongoing since February 2011. First results will be documented in the next Progress Report.

Allen Collection

Evaluation of the old Upper Amazon cocoa genotypes available in the Allen Collection started in late 2009 and continued during 2010. Dry bean weight and other parameters data are shown in **Tables 1 and 2**. Variability regarding number of plants, vigor and age, even within a same genotype row, limits the possibility of making a conclusive remark for the time being. However, as data accumulates and tendencies emerge the main results will be reported.

Chalmers Collection

In the past years, the accessions present in this Collection have been fully characterized, both morphologically and genetically. But the question about a possible presence of fine or flavor genotypes among these clones has been frequently raised. Some of them exhibit pale or even white beans as has been observed. These traits can be associated to aromatic type cocoas as pointed out by some scientific evidence. On April 2010 a student was hired to plan and execute a physical, chemical and sensorial study of the beans. Some physical and chemical results are reported here (**Table 3 and Table 4**). Though the reliability of physical data was affected for several factors, main of them human error, the clone coded as CUR 3 shows interesting values for seed and pod index. However, its shell percentage is high, as well as those for most genotypes analyzed.

From the examination of the Thebromine/Caffeine ratio, a chemical trait, we can see that most of the analyzed genotypes exhibit values ranging from 3.52 to 5.96. Only two of them show a ratio higher than 6.5. This is a good signal as low T/C ratios are usually associated with fine or flavor varieties and high T/C ratios with more basic cocoas. This promising result justifies the need to restart this research sometime in the next future.

Evaluación of old hybrid cocoa progenies

Evaluation of old coca hybrid populations

A data analysis for the period 2003-2008 and for all the hybrid populations present in the so called "Lote 7A" (1534 trees), allowed us to construct **Table 5** and **Table 6**. Table 5 shows that the hybrid population EET 95 x Silecia 1 contains a couple of trees which combine high yield and Moniliasis resistance. Yields of 6.2 and 4.2 Kg of dry bean weight per tree per year and Moniliasis incidence values as low as 8.9 % and 7.9 % in the same order, make these trees outstanding and promising for further studies and possible development as commercial clones. With this justification in mind, grafting for clonal multiplication is ongoing since last February 2011. Initially, we expect to set up 50 to 100

plant observation plots at the E.Pichilingue and E.Central Amazónica using this planting material.

Other set of three clones combining lower but not less interesting yield figures with Moniliasis incidence ranging from 15.5% to 18 % were identified within members of the family SCA 12 x Unknown. However, bean and pod indexes are quite modest as compared to those of the individuals which were described earlier. In general, disease´s pods percentage (including all diseases) does not go further than 18.2 % per year for the most affected trees in Table 5.

According to Table 6 some six trees were identified in the hybrid populations SCA 12 x Silesia 1 and SCA 6 x Silesia 5 with percentages of Moniliasis incidence as low as 0 % and as high as 2.3%; this is also a great finding. Unfortunately, yields per tree per year ranges from 0.1 to 0.5 Kg of dry bean weight for these individuals. These figures are too low to make selections for this trait. However, their breeding value as a source for Moniliasis resistance, after an uninterrupted six year evaluation, is more than evident. As a consequence of the previous results, plans are being made to clone these individuals for conservation and observation in larger plots, as an integral part of the cocoa germplasm Bank of INIAP at E. Pichilingue.

Trees coded as A 2076 and A 2078 (see **Figure 1**) were also identified as moniliasis resistant in an earlier study of another group of old hybrid populations. This happened in the so called Lote 2A also in the frame of the present project. Both trees will be cloned for the same purpose.

Another activity has to do with the organization and arrangement of historical data for another old hybrid progenies planted since 1969 in the so called "Lote La Hiler". Most of these hybrids have EET 400 and IMC 67 as the breeding parents. Planting distance is 4 x 4 m. Data are being incorporated into a computer data base format reaching so far a 70% progress. The collected data is aligned along 8 parameters and covers the period 1974 - 1979 for a total of 40 crosses that make up some 5000 trees. Ten crosses with the highest number of individuals, adding up to approximately 1500 trees, are the ones being given more priority for future selection analysis. When this work is completed an analysis will be carried out to select for yield and disease resistance, with emphasis on "Mal del machete". Other traits will be also strongly considered.

Breeding for Witches' broom resistance

First Breeding scheme

As earlier reported, planting of the first clones started by mid 2006 and were completed within the next year. So far these are developing normally in the so called Lote "Las Tecas" (698 clones, four replications, and three plants per plot). **Table 7** shows yield, sanitary and related data registered during 2010. Top five yielding clones are: AMAZ 14 x EBC 148; Gloria 17 x EB 2237; CCN 51; CCN 51 x TAP 3; and CCN 51 x TAP 3. They exhibit accumulated fresh bean weight values ranging from 3.4 to 4.8 kg per plant. CCN 51, a control clone, now ranked third within this leading group, as opposed to 2010 when it ranked 10^{th}.

In general, all these clones are affected by a low disease incidence, particularly on pods. For instance, AMAZ 14 x EBC 148 showed just 1.2 % of all harvested pods affected by Monilliasis. This counting is for the whole period this particular genotype has been out in the field. Moniliasis incidence for the next four top clone stands around the same percentage. Accumulated number of vegetative witches´ broom per plant rose significatively as compared to the previous year. This is possibly the result of a larger number of flushing points as plants grow larger. With most plants approaching five years old, the disease incidence figures, accumulated for the whole period they have been in the field, are certainly not bad at all. In fact, several visual overviews made over the whole field have shown that average disease incidence levels looks moderate to low. Nevertheless, a question is raised about the possibility that this incidence rises as cocoa plants grow older. We have to wait and see.

By mid 2009 a clone selection based on several traits of interest was made. Multiplication was gradual since not all clones were able to produce the necessary budsticks at the same time. As the planting material was made available 100 plant plots were set up for each clone. We ended up with a comparative clone trial with two replications and 16 clones. This total includes other superior selections (products of the so called IPGRI cocoa project finalized in 2009), as well as the controls EET 103 and CCN 51.

As stated in the past Progress Report the objective of this move was to gain time for the validation of the selected clones in larger plots. Based on these, planning for a cocoa field day within the next 5 years in order to release, at least a couple of new improved high yielding cocoa varieties, for the benefit of producers in the zone of Quevedo (an important cocoa producing zone), is a real possibility. **Figure 2** provides an outlook about the current situation (March 2011) of these plots today. Some plants are already bearing fruits as shown in **Figure 3** (this plant was just one year old when the picture was taken).

During 2009, in the so called Lote Ganadería, field planting of a few remaining clones (all of them from selected hybrid seedlings compounding groups 3 and 4 of the breeding populations generated by the first breeding scheme) was completed. In total there are 420 clones, four replications and three plants per plot in this trial. Plants are developing normally and **Table 8** shows yield, sanitary and other accumulated data per plant until December 2010. Top five yielding clones are: AMAZ 11 x TAP 6, CCN 51 x TIP 1; CCN 51 x 2057, TAP 6 x UNAP 2 y CCN 51 x TIP 1. These exhibit fresh bean weight values ranging from 2.8 to 3.9 kg per plant. CCN 51 stands far away from this commanding group.

In general, these clones are affected by a low disease incidence, particularly on pods. The number of witches´ brooms ranges from 2.0 to 4.5 per plant. It is notorious the high number of cushion brooms shown by the clone, AMAZ 11 x TAP 6, the highest yielding clone so far. Though yield results seem promising it is too early to draw conclusions about possible superior clones. **Figure 4** provides an outlook (March 2011) about the trial in the Lote Ganadería today.

Second Breeding scheme

Field planting of clones made from hybrid seedlings selected within the populations generated by the execution of the second breeding scheme (crosses belong to groups 5, 6 and 7), began early in 2010. This trial has three replications and is located in the so called Lote "Las Malvinas". Each replication contains 431 treatments, including several controls, three plants per plot. Progress achieved in planting was 85% until March 2011. **Table 9** shows the clone codes as well as the crosses they come from including groups 8 and 9. **Figure 5** shows the location of the Lote Las Malvinas in relation to the other fields (Lote

Las Tecas y Lote Ganaderìa) where the trials to compare the distinct clones from selected seedlings are established. **Figure 6** shows the distribution of treatments within each of the three replications for group 8.

By March 2011 first ripe pods were harvested from the hybrid clones UNAP 2 x EBC 148, AMAZ 11 x B 60, EET 387 x B 60, AMAZ 11 x D 147, TAP 6 x B 60, AMAZ 11 x D 147, AMAZ 11 x A 2748 y TAP 6 x LCT 368 (Groups 5, 6 and 7). So far, the last one has produced the highest bean fresh weight yield. Additional pods, currently in an advanced stage of development, will be collected within the next several weeks for these and other clones also bearing pods. It is too early to draw any conclusion. But these preliminary harvests look promising. Average age for these clones is less than 15 months since field planting. **Figure 7** shows a plant bearing ripe pods.

Group 8 is compounded by 445 hybrid clones which include five controls. All will be compared in a separate trial. Almost one third of the planting material is ready for transplanting a process that is ongoing since early March 2011. Progress achieved so far in planting is 40%.

Regarding group 9 this is compounded by 570 clones. Selected seedlings from original hybrid progenies have been establish in the floor of an old cocoa field where most of the trees are highly infected by witches' broom. Their growth is being stimulated by fertilizers and pruning and is closely checked to promote the development of budsticks needed for grafting.

Phytopathological studies

Following 2009 research results showing the SAI (System of automated inoculation) and Agar Drop methods as the ones with the greatest capacity to discriminate genotypes for susceptibility and resistance to Witches' broom, a new test was designed and conducted to incorporate additional genotypes in order to validate this discrimination capacity (See **Figure 8**).

Seedling progenies of SCA 6, SCA 12, and Pound 7 known for their resistance to Witches'broom, showed the lowest infection percentage. Meanwhile, infection percentage for EET 19 and EET 95 seedlings, known for their susceptibility, was the highest. Other genotypes such as A 2506, CCAT 4688 and MAN 15-2 exhibited a level of infection as high as those for EET 19 and EET 95. Only moderate susceptibility to the disease was shown by the seedlings of CCAT 11 19 and CCAT 21 54 progenies; these last genotypes are two Nacional type clones. Additional work is being planned to incorporate into this tests the new clones gradually selected in the "Lote Las Tecas".

Other activities

Climate change, in this case through increasingly dry periods (there are usually between 6 an 7 months with no rainfall in the E. Pichilingue zone), is affecting the performance of the clones derived from the ongoing cocoa breeding trials under this present project. The 2010 dry season was the one with the highest maximum temperature average in the last 40 years. March 2011 was the month with the highest average daily temperature in 60 years. This month is also among the two rainiest months during a normal year, but only 150 mm were received in 2011, a figure totally out of place.

With these antecedents, a proposal to provide irrigation to the plots and trials (Lote Las Tecas, Lote Ganadería and Lote Las Malvinas) established during the past few years to compare hundreds of clones derived from selected hybrid seedlings, in the frame of the first and second breeding schemes, was prepared. In the future, cocoa growing will depend more and more on irrigation during the dry period. In our case, the long dry season subjects the plants to an unbearable drought stress which, no doubt, is drastically limiting the expression of the yield potential for most promising genotypes.

Observed cocoa responses to irrigation in nearby commercial farms are dramatic. Just to illustrate one case; a pod counting made in last September 2010 in plants of the CCN 51 clone with and without irrigation produced the following data: plants under irrigation exhibited 30 pods per plant (2 to 4 months old) while those without irrigation just had 11 pods per plant (2 to 4 months old). Counting was made at the same day in fifty plants taken at random in each case and an average was obtained. This is why we need to find out what the real yield potential of superior clones is without the presence of factors limiting growth. We expect to get some funding to take this proposal into reality. The **Annex** 2 contains information regarding the study to provide irrigation to the different breeding trials in the frame of the present project.

ANNEX 1

Table 1. Yield and sanitary data of a group of accessions of the Allen Collection at EET-Pichilingue. Period: October 2009 – December 2010. (These accessions were planted in 2005).

Nº	Code	# of plants	Fresh weight (g)	# Healthy pods	# Diseased pods	# Wilted cherelles	# Vegetative witches' brooms
1	**LCTEEN - 6 S/3**	5	1222	11,6	5	13,2	1,8
2	**LCTEEN - 76**	5	794	10,8	1	13,4	1,6
3	**LCTEEN - 348**	5	699	4	0	1,2	1
4	**LCTEEN - 15**	5	440	3,8	1,2	9,8	1,4
5	**LCTEEN - 70**	5	435	7,4	3,2	7,2	3,6
6	**LCTEEN - 436 S/2**	4	431,25	6	0	0,75	10,5
7	**LCTEEN - 10 S/10**	5	405	5,2	2	6,2	2,4
8	**LCTEEN - 6**	5	375	3,8	0	2,2	1
9	**LCTEEN - 27**	5	365	4,2	0,4	31,8	3,6
10	**LCTEEN - 203**	5	340	4,2	0,8	6	0,4
11	**LCTEEN - 66 S/1**	5	315	6,8	0,6	6,8	0
12	**LCTEEN - 346**	5	305	8	1,4	4,6	3
13	**LCTEEN - 5**	5	300	2,4	0,4	2	1,4
14	**LCTEEN-357**	3	283,33	4,33	0,33	0	0,67
15	**LCTEEN - 90**	5	265	4,2	0	6,2	0
16	**LCTEEN - 342**	5	245	2,2	0	0	5,8
17	**LCTEEN - 6 S/10**	5	235	2,2	0,8	5	1,8
18	**LCTEEN - 92**	5	230	2,4	0	6,2	0,8
19	**LCTEEN-367**	5	230	2,8	0	0	0,4
20	**LCTEEN - 24**	2	200	1	0	0	0
21	**LCTEEN - 58**	4	200	2	2	5,5	3,5
22	**LCTEEN - 27 S/2**	10	197,5	3,1	0	6,5	1
23	**LCTEEN - 72**	4	187,5	5	1,75	19,25	1,5
24	**LCTEEN - 20**	5	150	1,2	0,2	3,2	1
25	**LCTEEN - 74 S/6**	5	150	2,2	0	2,4	1,2
26	**LCTEEN-374**	5	150	1,4	0	0,8	2,6
27	**LCTEEN-356**	5	145	0,2	2	4,6	0,6
28	**LCTEEN - 132**	5	140	1,6	0	18,6	2,8
29	**LCTEEN - 62 S/4**	5	140	2,8	0	5	2,2
30	**LCTEEN - 101**	3	133,33	1,33	0,33	3,67	0
31	**LCTEEN - 343 S/2**	3	133,33	1,67	0,33	0	0
32	**LCTEEN - 349**	5	125	1	0,2	5,2	0,4
33	**LCTEEN - 215**	8	121,88	1,75	0,13	11,75	2,2
34	**LCTEEN - 58 S/4**	5	120	1,6	0	0,8	0,8
35	**LCTEEN - 10 S/9**	4	112,5	1,25	1,5	3	0,5

36	**LCTEEN - 157**	2	112,5	0,5	0	5,5	0
37	**LCTEEN - 31**	3	100	1	0	0	2,33
38	**LCTEEN - 350**	5	100	1,2	0	0,4	0,4
39	**LCTEEN - 61**	5	100	1,8	0,2	0,4	1
40	**LCTEEN-369**	3	83,33	1,33	0	0	0,67
41	**LCTEEN-376**	5	80	2,4	0	0	4,6
42	**LCTEEN - 85**	4	75	0,75	0	0	0,5
43	**LCTEEN - 28**	5	70	0,8	0	2,8	0,6
44	**LCTEEN - 323**	5	70	0,8	0	4,4	0
45	**LCTEEN - 6 S/4**	5	70	0,8	0	0	0,75
46	**LCTEEN - 346 S/1**	3	66,67	0,33	0	0	0,33
47	**LCTEEN - 141**	2	62,5	1,5	3,5	2,5	6
48	**LCTEEN - 421**	4	62,5	0.5	0	0	0,75
49	**LCTEEN - 86**	5	60	1,2	0,6	2	5,6
50	**LCTEEN - 215 S/3**	10	55	0,5	0	0	4,33
51	**LCTEEN - 366**	5	55	1,6	0	0,8	0,4
52	**LCTEEN - 120**	5	50	1,4	0	1,2	0,4
53	**LCTEEN - 26 S/6**	5	50	0,4	0,4	0	2,2
54	**LCTEEN - 178**	5	40	1	0,2	0,2	0,33
55	**LCTEEN - 18 S/2**	5	40	0,2	0	0,8	1
56	**LCTEEN - 121**	3	33,33	0,33	0	5,33	0,33
57	**LCTEEN - 113 S/2**	2	25	0,5	0	2	0
58	**LCTEEN - 130**	4	25	0,25	0	2,5	4
59	**LCTEEN - 74**	4	25	0,5	0	2,25	1,5
60	**LCTEEN - 24 S/5**	5	20	0,2	0	0	5
61	**LCTEEN-72 S/9**	5	20	0,2	0	0	2
62	**LCTEEN - 108**	4	12,5	0,25	0,5	3,75	0,5
63	**LCTEEN - 169**	4	12,5	0,25	0	0	2
64	**LCTEEN - 11 S/2**	5	10	0,2	0	0,4	1
65	**LCTEEN - 14**	5	10	0,2	0	0,2	1
66	**LCTEEN - 4 S/1**	5	10	0,2	0	2,6	1
67	**LCTEEN-353**	5	5	0,2	0	0	0,4
68	**LCTEEN-86 S/6**	10	2,5	0,2	0	0	1,22
69	**LCTEE-67 S/3**	5	0	0	0,2	0	0,4
70	**LCTEEN -**	1	0	0	0	0	0
71	**LCTEEN - 1 S/5**	5	0	0	0	0	1
72	**LCTEEN - 11 S/5**	5	0	0	0	0,6	0
73	**LCTEEN - 11 S/7**	5	0	0	0	0	0,2
74	**LCTEEN - 127 S/7**	4	0	0	0	0	1,75
75	**LCTEEN - 130 S/2**	3	0	0	0	0	0
76	**LCTEEN - 136**	4	0	0	0	0,25	0
77	**LCTEEN - 14 S/7**	4	0	0	0	0,5	0

78	LCTEEN - 144	5	0	0	0	0	0,6
79	LCTEEN - 148	4	0	0	0	0	0,25
80	LCTEEN - 152	5	0	0	0	0	1,25
81	LCTEEN - 165	3	0	0	0	0	3
82	LCTEEN - 179 S/1	4	0	0	0	0	0,67
83	LCTEEN - 18 S/3	5	0	0	0	0,8	1
84	LCTEEN - 182	5	0	0	0	0	0,8
85	LCTEEN - 19 S/5	3	0	0	0	0	0,67
86	LCTEEN - 193	5	0	0	0	0	0
87	LCTEEN - 2	5	0	0	0,2	3,4	1,2
88	LCTEEN - 20 S/6	5	0	0	0	0	1
89	LCTEEN - 201 S/1	4	0	0	0	0	1
90	LCTEEN - 205	9	0	0	0,11	0,78	0,67
91	LCTEEN - 21 S/1	5	0	0	0	0	0,8
92	LCTEEN - 23	4	0	0	0	0	0,75
93	LCTEEN - 23 S/2	5	0	0	0	0	0
94	LCTEEN - 23 S/4	5	0	0	0	0	0
95	LCTEEN - 248 S/6	1	0	0	0	69	0
96	LCTEEN - 300	2	0	0	0	0	0,5
97	LCTEEN - 300 S/1	3	0	0	0	0	1,67
98	LCTEEN - 302	3	0	0	0	0	2,33
99	LCTEEN - 320	1	0	0	0	0	0
100	LCTEEN - 321	2	0	0	0	9,5	1
101	LCTEEN - 323 S/10	5	0	0	0	0	1
102	LCTEEN - 323 S/3	2	0	0	1	0	3
103	LCTEEN - 331 S/2	4	0	0	0	0,25	0,5
104	LCTEEN - 332	3	0	0	0	0	1,33
105	LCTEEN - 336 S/6	1	0	0	0	0	0
106	LCTEEN - 338	3	0	0	0	0	0,67
107	LCTEEN - 339	2	0	0	0	0	0
108	LCTEEN - 341	3	0	0	0,33	4,67	1
109	LCTEEN - 356 S/6	4	0	0	0	0	0
110	LCTEEN - 370	5	0	0	0	0	0,6
111	LCTEEN - 38	2	0	0	0	0	0
112	LCTEEN - 390	2	0	0	0	0	0
113	LCTEEN - 4	5	0	0	0,2	3	1,2
114	LCTEEN - 4 S/3	5	0	0	0	0	0
115	LCTEEN - 406	5	0	0	0,6	0,2	0,75
116	LCTEEN - 414	5	0	0	0	0	1
117	LCTEEN - 418 S/3	5	0	0	0,8	3	2,8
118	LCTEEN - 424 S/1	2	0	0	0	0	0
119	LCTEEN - 429	3	0	0	0	0	0

120	**LCTEEN - 431 S/2**	1	0	0	0	0	8
121	**LCTEEN - 432**	3	0	0	0	0	2
122	**LCTEEN - 437 S/1**	1	0	0	0	0	2
123	**LCTEEN - 47**	4	0	0	0	0	0,33
124	**LCTEEN - 49**	5	0	0	0	0	0,5
125	**LCTEEN - 57**	5	0	0	0	0	0,6
126	**LCTEEN - 63**	1	0	0	0	1	0
127	**LCTEEN - 68 S/1**	5	0	0	0	1,6	1,4
128	**LCTEEN - 71**	2	0	0	0	0,5	0
129	**LCTEEN - 77 S/6**	5	0	0	0	0	0,6
130	**LCTEEN - 79**	5	0	0	0	0	0,8
131	**LCTEEN - 8 S/7**	3	0	0	0	0	0,33
132	**LCTEEN - 84**	4	0	0	0	0,25	1
133	**LCTEEN - 84 S/5**	5	0	0	0	0	2,75
134	**LCTEEN - 89**	1	0	0	0	0	0
135	**LCTEEN - 93**	5	0	0	0	0	1,8
136	**LCTEEN-351**	5	0	0	0	1,4	1,4
137	**LCTEEN-352**	5	0	0	0	0	0
138	**LCTEEN-354**	1	0	0	0	0	0
139	**LCTEEN-355**	5	0	0	0	0,2	0
140	**LCTEEN-358**	5	0	0	0	0,4	5,4
141	**LCTEEN-359**	5	0	0	0	0,6	0,6
142	**LCTEEN-36**	5	0	0	0	0	0,2
143	**LCTEEN-361**	5	0	0	0	0	0,2
144	**LCTEEN-366**	5	0	0	0,8	15	0,6
145	**LCTEEN-372**	2	0	0	0	0	0
146	**LCTEEN-373**	2	0	0	0	1,5	0
147	**LCTEEN-404**	5	0	0	0	5	0,2
148	**LCTEEN-59 S/5**	5	0	0	0	0	0,67
149	**LCTEEN-67 S/8**	5	0	0	0	0	1
150	**LCTEEN-72 S/3**	4	0	0	0	0	0,5
151	**LCTEEN-79 S/10**	5	0	0	0	0	0
152	**LCTEEN-82 S/5**	5	0	0	0	0	0
153	**LCTEEN-83 S/9**	5	0	0	0	0	0
154	**LCTEEN-84 S/5**	5	0	0	0	0,4	1,2
155	**LCTEEN-86 S/5**	5	0	0	0	1,2	0,2
156	**LCTEEN-93 S/8**	5	0	0	0	0	3

Table 2. Yield and sanitary data of a group of accessions of the collection at EET-Pichilingue. Period: September 2009 – December 2010 (These accessions were planted in 1997).

Nº	Code	# of plants	Fresh Weight (g)	# Healthy pods	# Diseased pods	Wilted cherelles	# Vegetative witche's brooms
1	**EBC - 126**	1	5265	30	6	32	15
2	**LCTEEN - 326**	4	4056,25	23,25	2,75	8,75	7,75
3	**LCTEEN - 77**	3	4025	31,33	13,33	36	10
4	**EBC - 142**	5	3150	30,4	15	19,6	0
5	**LCTEEN - 258**	3	3066,67	32,33	5	16	1,67
6	**LCTEEN - 347**	5	2485	23,4	28,8	27,4	29,8
7	**LCTEEN - 81**	4	2075	11,5	1	13,5	1
8	**EBC - 138**	5	1904	20,8	3,4	14,2	0,2
9	**LCTEEN - 255**	4	1900	16,75	0,75	7,5	1,25
10	**LCTEEN-227**	2	1537,5	14,5	1,5	13	5
11	**LCTEEN - 219**	2	1522,5	3	3	8,5	7
12	**LCTEEN - 154**	3	1450	12,67	3,67	6,33	4,67
13	**EBC - 148**	5	1415	16	11,4	21	0,8
14	**LCTEEN - 253**	4	1378,75	21,25	9,75	50	6
15	**LCTEEN - 121**	5	1240	17	5,6	11,8	1,8
16	**LCTEEN - 278**	5	1215	14,2	5,6	16,8	3,6
17	**LCTEEN - 329**	5	1215	12	5,8	6,8	1,2
18	**LCTEEN - 142**	3	1091,67	9,33	4	4	23,67
19	**LCTEEN - 26**	5	1090	14,2	0,2	35,2	6,2
20	**EBC -122**	3	1075	9	13,5	8	3
21	**LCTEEN - 30**	5	1047	13,2	10,4	5,6	1
22	**LCTEEN - 73**	2	1000	8,5	5	8,5	0,5
23	**LCTEEN - 146**	5	910	15,8	2,4	43,2	0,2
24	**LCTEEN - 195**	3	89 1,67	7,67	2,67	7	1
25	**LCTENN - 57**	3	783,33	8,67	0,33	49,33	2
26	**LCTEEN - 156**	1	700	6	0	73	0
27	**LCTEEN - 312**	3	675	6,33	3	13,67	19,67
28	**LCTEEN - 232**	3	658,33	6	3	1,33	15,67
29	**LCTEEN - 223**	1	650	10	2	0	4
30	**LCTENN - 254**	4	643,75	10	12,25	19	0,75
31	**LCTEEN - 189**	2	612,5	10,5	1,5	6,5	4
32	**LCTEEN - 125**	3	583,33	3,67	1,67	0	1
33	**LCTEEN - 134**	5	520	4,2	4,2	2	11,8
34	**LCTEEN - 46**	4	500	8,5	3	36	0,75
35	**LCTEEN - 334**	4	500	4	1,75	5,75	10,75
36	**LCTEEN-36**	3	475	5,33	3	20,67	7
37	**LCTEEN - 202**	5	435	4,4	0,4	3,2	2,2

38	**LCTEEN - 180**	4	431,25	4	5,75	3	20,25
39	**LCTEEN - 325**	4	431,25	3,75	3,5	3,5	18
40	**LCTEEN-327**	2	425	5,67	0,33	2,67	3
41	**LCTEEN - 87**	2	400	3,5	3	0,5	1
42	**LCTEEN - 257**	4	390	4	4,2	4,6	13
43	**LCTEEN - 249**	2	362,5	3,5	0	3,5	2
44	**LCTEEN - 135**	2	350	6,5	0,5	2,5	1
45	**LCTEEN-434**	1	350	7,5	1	1	1
46	**LCTEEN - 368**	5	335	5,4	3,2	0	2,4
47	**LCTENN - 33**	1	300	2	3	8	0
48	**LCTEEN - 188**	2	283,33	3,67	5	12,33	0
49	**LCTEEN-403**	4	281,25	4,75	8,75	7,25	5,25
50	**LCTEEN - 264**	3	258,33	2,67	1,67	1	7,67
51	**LCTEEN - 238**	3	250	2	0	0,67	1,67
52	**LCTEEN - 250**	3	250	3	1	1,33	8,67
53	**LCTEEN - 267**	2	212,5	3	10,5	3	2
54	**LCTEEN - 333**	2	175	1	4	1,5	30
55	**LCTEEN - 409**	2	157,5	4	0	0	1,5
56	**LCTEEN - 413**	2	137,5	6,5	4	0	2,5
57	**LCTEEN - 237**	4	131,25	1,5	2,25	2,25	5,5
58	**LCTEEN - 324 S/8**	3	62,5	0,75	0	4,75	0
59	**LCTEEN - 449**	5	60	1,4	1,2	1,2	0,2
60	**LCTEEN- 107**	2	50	0,5	0	0	0
61	**LCTEEN - 411**	4	31,25	0,75	0	0	0,5
62	**LCTEEN-370**	3	16,67	0,33	0,33	0	3,33
63	**LCTEEN - 415**	5	10	0,2	0	0	0,2
64	**LCTENN - 37**	4	6,25	4	10,25	0	1,25
65	**EBC - 251**	1	0	0	0	0	0
66	**LCTEEN - 141**	1	0	0	0	0	2
67	**LCTEEN- - 259**	4	0	0	0	0,75	0,5
68	**LCTEEN - 344 S/9**	4	0	0	0	0	1
69	**LCTEEN - 38**	2	0	0	1	0,5	0,5
70	**LCTEEN - 382**	4	0	0	0	0	9,25
71	**LCTEEN - 432**	3	0	0	2	0	0
72	**LCTEEN-242 S/2**	1	0	0	0	0	0
73	**LCTENN - 215 S/1**	4	0	0	1,75	0	4
74	**LCTEEN - 234**	1	0	0	0,5	0	1
75	**LCTEEN - 307**	4	0	0	1,5	0	1,5
76	**LCTEEN - 323 S/9**	1	0	0	0	0	0
77	**LCTEEN - 358 S/6**	3	0	0	0	0	0
78	**LCTEEN - 414**	2	0	0	0	0	1
79	**LCTEEN - 52**	4	0	0	0	0	4,5

Table 3. Accumulated yield per tree and other data registered during the period January – June/2010 for some of the accessions present in the Charmer's Collection.

#	Línea	Genotipo	# de árboles	Peso fresco (g)	Indice de Mazorca	Indice de Semilla	% de testa
1	AGU-17	1	10	3366,45	20	1,26	20,80
2	AGU-5	2	1	339,45	22	1,32	17,46
3	AGU-5	3	5	1985,60	15	1,62	18,75
4	AGU-5	5	1	2662,53	21	0,78	22,66
5	AMAZ-10	17	9	3765,03	20	0,83	13,94
6	CUR-3	35	5	5101,88	15	1,31	17,71
7	NAP-25	32	3	614,33	27	0,52	20,36
8	TAP-10	12	7	2713,78	19	1,46	18,02
9	TAP-21	73	8	1457,40	15	1,08	18,07
10	TAP-5	63	8	2949,00	24	0,74	23,37
11	TIP-2	76	10	5954,70	20	0,86	23,63
12	UNAP-2	78	10	1750,15	21	0,85	16,06
13	EET-103	EET-103	15	5900,00	23	0,89	26,29
14	EET-96	EET-96	15	6727,75	22	1,15	18,90
15	EET-62	EET-62	15	2664,78	17	1,17	14,35
16	AMAZ-14	G20	4	950,50	23	0,95	17,17
17	TIP-4	G41	6	1163,25	20	1,02	18,32
18	NAP-3	G44	8	551,00	26	1,25	22,57
19	COC-3338	G34	8	750,00	25	1,26	22,72
20	VILL-2	G55	8	252,00	25	1,01	18,14
21	BOB-8	G28	7	301,50	24	1,21	21,71
22	NAP-41	G53	8	452,25	24	1,30	23,44
23	NAP-34	G51	6	312,75	25	1,25	22,52
24	NAP-23	G45	3	238,00	20	0,95	17,14
25	AMAZ-4	G11	7	246,00	26	0,98	17,71

Tabla 4. Resultados de algunas variables químicas de las almendras provenientes de genotipos de la Colección de cacao amazónico Chalmers.

Procedencia	Identificación	Polifenoles	Grasa	Teobromina (T)	Cafeína (C)	Relaciòn (T/C)
C. Chalmers	G1-18	78.59	42.58	1.72	0.34	5.06
C. Chalmers	G2-23	28.75	45.15	1.8	0.49	3.67
C. Chalmers	G5-23	56.77	50.86	1.79	0.27	6.63
C. Chalmers	G12-10	49.97	43.53	1.66	0.45	3.69
C. Chalmers	G17-2	54.74	45.88	1.97	0.35	5.63
C. Chalmers	G32-16	81.95	51.75	2.03	0.39	5.21
C. Chalmers	G35-30	72.6	45.97	1.9	0.54	3.52
C. Chalmers	G63-14	34.63	50.92	1.58	0.19	8.32
C. Chalmers	G73-6	56.36	49.76	1.95	0.35	5.57
C. Chalmers	G78-1	59.31	47.71	1.49	0.25	5.96

Tabla 5. Árboles seleccionados en dos poblaciones de híbridos (Sección A y Sección B) del lote conocido como 7 A, por combinar alto rendimiento y resistencia a enfermedades de mazorca. Los datos son acumulados durante el período 2003-2008, con excepción del peso seco/año.

Cruce	Arbol	# Mazorcas totales	# mazorcas sanas	% Sanas	% Enfermas	% Monillias	Peso seco (Kg)	Peso seco/año (Kg)	Indice de Mazorca
EET 95 x *Sil 1*	179	831	657	79,1	12	8,9	37	6,2	17,7
(Sección A)	466	483	359	74,3	18	7,7	25,3	4,2	14,2
SCA 12 x Desconocido (Sección B)	97	569	413	72,6	16,2	11,2	15,5	2,6	26,6
	30	610	408	67	18,2	14,8	17,1	2,9	23,8
	165	660	456	69,2	15,9	14,8	18	3,0	25,3

Tabla 6.- Árboles seleccionados por ausencia de Moniliasis (menos del 5% de incidencia), identificados en dos poblaciones híbridas (Sección E y Sección F) del lote conocido como 7 A. Los datos son acumulados durante el período 2003-2008, con excepción del peso seco/año.

Cruce	Arbol	# Mazorcas Total	# Mazorcas sanas	% Sanas	% Enfermas	% Monilliasis	Peso seco (kg)	Peso seco/año (kg)
SCA 12 x SIL 1 (Sección E)	86	13	11	84,6	15,4	0	0,4	0,06
	90	24	18	75	25	0	0,8	0,13
	92	35	33	94,3	5,7	0	1,5	0,25
	64	71	66	93	5,6	1,4	3,1	0,52
	154	43	40	93	4,7	2,3	1,9	0,31
SCA 6 x SIL 5 (Sección F)	17	58	51	87,9	12,1	0	2,7	0,45

Figura 1 . Fotos que ilustran la resistencia a Moniliasis de los Arboles A 2078 y A 2076.

GENEALOGIA: Nacional x Venezolano Morado
% DE MAZORCAS SANAS: 81

GENEALOGIA: Nacional x Venezolano Morado
% DE MAZORCAS SANAS: 100

Tabla 7. Resultados de la evaluación de un grupo de clones sembrados en el Lote LAS TECAS. Los datos están acumulados hasta DICIEMBRE 2010, para el rendimiento y otras variables (son datos por planta). Fecha de siembra: Agosto 2006. INIAP, EET-Pichilingue.

No.	Clon	Familia	# de mazorcas sanas	Peso fresco (g)	# de mazorcas enfermas		# de frutos		# de Escobas de Bruja		Indices		Arquitectura	Color del fruto	# Plantas evaluadas
					Con Escoba de Bruja	Con Monilia	Con Marchitez	Chirimoya	Vegetativa	Cojinete	Mazorca	Semilla			
1	INIAPT- 484	AMAZ-14 x EBC-148	35.8	4867.5	5.4	1.2	69.5	0	15.2	1	15.0	1.6	semi-erecto	amarillo	10
2	INIAPT- 632	Gloria-17 x EB-2237	40.83	4404.17	2.83	1	63.17	0.83	10.83	0.67	24.7	1.3	semi-erecto	amarillo	6
3	INIAPT- 680	CCN-51	24.09	3927.27	4.64	1	87.45	0.09	8.36	4.73	14.4	1.6	erecto	rojo	11
4	INIAPT- 405	CCN-51 x TAP-3	34.25	3589.58	5.58	0.92	63.17	0	7.83	0.67	17.6	1.3	semi-erecto	rojo	12
5	INIAPT- 384	CCN-51 x TAP-3	37	3420.83	6.5	1.33	34.92	0.25	2.75	0.17	25.0	0.9	erecto	rojo	12
6	INIAPT- 364	CCN-51 x TAP-3	27.33	3377.08	5.25	2	51	0.08	10.67	0.83	21.0	1.0	semi-erecto	amarillo	12
7	INIAPT- 374	EET-387 x A-645	33.33	3366.67	5.58	2.33	66.67	15.25	9.25	27.08	21.3	1.3	semi-erecto	amarillo	12
8	INIAPT- 462	CCN-51 x TAP-6	23.33	3249.58	2.25	0.25	27.83	1.08	2.75	1.08	19.7	1.3	erecto	amarillo	12
9	INIAPT- 533	SIL-1 x B-60	28.45	3197.73	2.82	0.73	44.91	0.09	9.18	0	25.0	1.2	semi-erecto	amarillo	11
10	INIAPT- 302	EET-387 x A-645	28.5	3139.58	2.17	0.67	30.33	0.08	3.58	0.5	24.7	1.1	semi-erecto	amarillo	12
11	INIAPT- 281	EET-387 x D-147	34.33	3108.33	1.17	0	29.5	0.5	2.25	0.33	46.0	0.9	semi-erecto	amarillo	12
12	INIAPT- 348	CCN-51 x B-60	31.5	3087.5	4.75	0.58	85.08	0.08	6.33	0.75	27.1	0.9	semi-erecto	rojo	12
13	INIAPT- 352	BRISAS-13 x EB-1013	26.5	3004.17	4.33	1.5	37.75	0.92	6.83	0.33	18.0	1.2	erecto	rojo	12
14	INIAPT- 573	TAP-3 x CUR-3	30.08	3004.17	5.25	0.58	25.08	14.75	7.25	6.75	25.9	0.9	semi-erecto	amarillo	12
15	INIAPT- 294	CCN-51 x B-60	32.42	3002.08	7.92	3.08	81.67	0	2.92	0	27.6	0.9	semi-erecto	rojo	12
16	INIAPT- 641	TAP-3 x TIP-1	32	2918.75	6.5	0.33	12.08	0	2.5	0.08	19.3	1.1	semi-erecto	amarillo	12
17	INIAPT- 527	TAP-6 x TIP-1	33.18	2888.64	1.64	0.18	30.64	0	0.09	0	28.1	1.2	erecto	amarillo	11
18	INIAPT- 561	SIL-1 x B-60	30.64	2838.64	4.73	0.55	85.91	0.82	6.91	1.27	24.4	1.2	semi-erecto	amarillo	11
19	INIAPT- 560	TAP-3 x TIP-1	43.17	2806.25	3.83	1	36	0	1.5	0	28.6	0.8	erecto	amarillo	12
20	INIAPT- 697	JHV-10	21.92	2791.67	2.92	0.33	42.92	0.5	2.83	0.5	18.0	1.1	erecto	amarillo	12
21	INIAPT- 184	CCN-51 x TAP-3	30.83	2760.42	3	1.08	38.92	0	4.5	0.17			semi-erecto	amarillo	12
22	INIAPT- 216	CCN-51 x B-60	23.75	2714.58	5.58	2.75	29.58	0.08	5.42	0.17			semi-erecto	rojo	12
23	INIAPT- 332	CCN-51 x TAP-3	27.25	2631.25	7	1.5	36.67	0.25	4.58	4.08	27.2	0.9	semi-erecto	rojo	12
24	INIAPT- 010	CCN-51 x B-60	31.33	2585.42	3.25	1.83	33.17	0	5.83	0.17			semi-erecto	rojo	12
25	INIAPT- 016	EET-58 x B-60	24.08	2577.08	5	2.17	23.75	0.42	21.92	0.17	21.0	1.4	semi-erecto	amarillo	12
26	INIAPT- 481	TAP-3 x CUR-3	25.17	2560.42	8.92	3.17	21.75	0	3.67	0.08	25.6	1.1	semi-erecto	amarillo	12
27	INIAPT- 122	AMA-11 x TIP-1	26.92	2550	2.25	0.58	25.33	0.67	3.33	0.67			semi-erecto	amarillo	12
28	INIAPT- 681	CUR-3	19	2550	6.82	2.27	22.45	0.82	7.18	0.27			semi-erecto	amarillo	11
29	INIAPT- 188	CCN-51 x TAP-3	30	2489.58	3.25	0.58	42.42	0	3.42	0.25			semi-erecto	amarillo	12
30	INIAPT- 468	SIL-1 x 2057	25.91	2434.09	3.45	2.27	31.82	0.82	7.55	0.82	22.7	1.1	semi-erecto	amarillo	11
31	INIAPT- 187	CCN-51 x TAP-3	24	2422.92	1.75	0.25	38.08	0.17	4.25	0.42	27.0	1.0	semi-erecto	amarillo	12
32	INIAPT- 321	TAP-10 x UNAP-2	21.5	2400	9.33	6.5	50.25	0.08	3.25	0.25			semi-erecto	amarillo	12
33	INIAPT- 656	TAP-6 x EBC-148	17.55	2386.36	2.91	0.82	39.18	0	2.45	0	15.1	1.5	semi-erecto	amarillo	11
34	INIAPT- 140	CCN-51 x B-60	17.55	2381.82	7.09	1	43.91	0	2.09	0	30.0	0.8	semi-erecto	rojo	11
35	INIAPT- 682	D-147	26.8	2370	4.4	5.1	40.4	0.7	9	3.7			semi-erecto	amarillo	10
36	INIAPT- 653	EET-233 x 2057	28.6	2357.5	2.2	0.8	133.2	0.2	8.4	1.8	31.2	1.1	semi-erecto	amarillo	10
37	INIAPT- 273	AMA-11 x TIP-1	26.83	2260.42	5.92	0.92	17.75	1.5	7	1.17			semi-erecto	amarillo	12
38	INIAPT- 185	CCN-51 x TAP-3	19.42	2256.25	5.17	0.75	85.17	0.25	6.75	1.17	16.1	1.3	semi-erecto	rojo	12
39	INIAPT- 678	B-60	32.27	2252.27	3.18	1.09	32.18	0	6.91	0.09	30.3	0.8	semi-erecto	amarillo	11
40	INIAPT- 038	TAP-10 x UNAP-2	26.08	2250	4.67	1.5	43.25	0.42	6.5	0.5			semi-erecto	amarillo	12
41	INIAPT- 543	TAP-3 x CUR-3	23.17	2195.83	7	1.25	16	0.08	2.83	0.08	25.9	0.9	semi-erecto	amarillo	12
42	INIAPT- 289	CCN-51 x TAP-10	16.92	2187.5	2.17	0.83	41.58	0.08	3.92	0.25			semi-erecto	amarillo	12
43	INIAPT- 183	TAP-10 x LCT-368	37.67	2181.25	3.25	0.42	16.75	0.5	3.42	0			erecto	amarillo	12
44	INIAPT- 158	AMA-11 x CUR-3	20.14	2160.71	9.71	5	15.57	0	7.29	0.14			semi-erecto	amarillo	7
45	INIAPT- 549	CCN-51 x TAP-6	22.92	2154.17	2	0.42	44.92	0	3.17	0.08			semi-erecto	amarillo	12
46	INIAPT- 603	EET-233 x B-60	27.17	2150	1.42	0	34.33	0	9.92	0			semi-erecto	amarillo	12
47	INIAPT- 178	TAP-12 x EBC-148	16	2077.08	3.08	0.75	37.92	0.08	7.17	0.42			semi-erecto	amarillo	12
48	INIAPT- 164	AMA-11 x TAP-3	20.92	2068.75	8.25	7	36.08	0.58	7	0.75			erecto	amarillo	12
49	INIAPT- 186	CCN-51 x TAP-3	19.42	2062.5	4.5	0.42	32.17	0.08	1.33	0			semi-erecto	amarillo	12
50	INIAPT- 467	TAP-6 x LCT-368	20.17	2060.42	1.33	0.08	89.33	0	3.67	0			semi-erecto	amarillo	12
51	INIAPT- 393	CCN-51 x LCT-46	22.75	2054.17	2.58	0.42	51	0	6.75	1.5					12
52	INIAPT- 072	CCN-51 x B-60	20.92	2050	2.17	0.33	28.92	0.08	4	0.17					12
53	INIAPT- 676	AMAZ-11	19.6	2030	3.4	0.7	19.9	0	10.2	0					10
54	INIAPT- 446	CCN-51 x AMAZ-11	15.33	2010.42	2.5	0.58	51.17	0	3.17	0					12
55	INIAPT- 118	AMA-14 x TIP-1	21.6	2007.5	0.5	0.3	52.3	0.4	4.6	0					10
56	INIAPT- 461	CCN-51 x TAP-6	14.5	1941.67	2.67	0.17	46.5	0	2	0.17					12
57	INIAPT- 565	CCN-51 x LCT-37	17.1	1920	1.2	0.3	9.9	0.2	7.4	1.4					10
58	INIAPT- 347	EET-387 x B-60	28.25	1902.08	2.92	0.42	23.58	0.17	9.08	0.67					12
59	INIAPT- 085	CCN-51 x A-645	16.89	1900	4.78	2.11	27.11	0.33	1.78	0					9
60	INIAPT- 137	CCN-51 x TAP-10	15.83	1883.33	2.08	0.17	32.67	0.08	3.58	0.08					12
61	INIAPT- 644	TAP-3 x LCT-368	27.27	1881.82	5.64	2.73	9.82	0.27	8.55	0.36					11
62	INIAPT- 309	TAP-3 x UNAP-2	18.25	1881.25	3	0.67	42.75	0.5	5.08	1.25					12
63	INIAPT- 525	Gloria-1 x CCAT-4688	14.09	1870.45	1.55	0.18	49.73	0	8.64	0.27					11
64	INIAPT- 005	EET-387 x B-60	21.25	1850	4.33	3.83	39.33	0	9.83	0					12
65	INIAPT- 285	EET-387 x D-147	18.09	1850	1.55	0.27	10.18	0	2.45	0					11
66	INIAPT- 696	A-2506	19.17	1845.83	3.17	1	11.25	0	3.58	0.08					12
67	INIAPT- 032	CCN-51 x AMA-11	13.73	1840.91	3.45	1.18	54.45	0.27	4.27	0.82					11
68	INIAPT- 378	AMAZ-11 x TAP-3	17.5	1837.5	3.25	2	36.5	0.25	8.67	0.83					12
69	INIAPT- 035	CCN-51 x AMA-11	14.5	1831.25	1.5	1.08	29.5	0.42	3.08	0.83					12
70	INIAPT- 056	AMA-11 x TIP-1	18.45	1818.18	4.82	2.64	29.45	0	3.45	0.18					11
71	INIAPT- 073	CCN-51 x B-60	17.18	1818.18	4.09	1.73	55.09	0	2.18	0					11
72	INIAPT- 189	CCN-51 x TAP-3	14.44	1811.11	2.67	0.67	29.22	0.11	7.11	0.89					9
73	INIAPT- 256	CCN-51 x TAP-3	17.42	1804.17	4.25	1.33	21	0	2.58	0.33					12
74	INIAPT- 215	CCN-51 x TAP-10	11.36	1797.73	3.45	1.18	22.82	0.09	3.82	0.36					11
75	INIAPT- 274	AMA-11 x TIP-1	22.08	1793.75	3	1.42	22.17	1.42	5.08	0.92					12
76	INIAPT- 045	CCN-51 x TAP-3	16.64	1793.18	6.27	1.18	35.45	0.09	3.73	0.18					11
77	INIAPT- 566	CCN-51 x LCT-37	12.63	1775	2.25	0	11.63	0	4.25	0					8
78	INIAPT- 356	CCN-51 x AMAZ-11	16.82	1759.09	2.45	2.82	38.27	0	5.64	0.45					11
79	INIAPT- 685	EET-387	18.58	1743.75	3.5	2.5	26.83	0.08	14.5	0					12
80	INIAPT- 442	CCN-51 x A-645	18.5	1733.33	1	0.58	17.83	0.08	0.75	0					12

No.	Clon	Familia	# de mazorcas sanas	Peso fresco (g)	# de mazorcas enfermas		# de frutos		# de Escobas de Bruja		Indices		Arquitectura	Color del fruto	# Plantas evaluadas
					Con Escoba de Bruja	Con Monilia	Con Marchitez	Chirimoya	Vegetativa	Cojinete	Mazorca	Semilla			
81	INIAPT-290	CCN-51 x TAP-10	11.2	1730	1.7	0.1	41	0	2.5	0.2					10
82	INIAPT-509	TAP-3 x CUR-3	18.64	1727.27	6.64	2.55	12.64	0.36	7.09	0.09					11
83	INIAPT-146	AMA-11 x EBC-148	14.7	1707.5	2.3	0.6	11.3	0.1	4.2	0					10
84	INIAPT-391	EET-387 x D-147	20.92	1695.83	3.08	0.25	12	0.17	5.58	0.33					12
85	INIAPT-487	CCN-51 x TAP-6	12.58	1695.83	2.75	0.33	77.75	0	0.83	0					12
86	INIAPT-046	TIP-1 x LCT-368	17.25	1685.42	1.25	0.42	19.25	0	5.83	0.08					12
87	INIAPT-351	EET-387 x A-645	18.64	1681.82	0.91	0.36	22.55	0.82	8.55	0.36					11
88	INIAPT-008	CCN-51 x LCT-46	16.25	1672.92	2.42	0.33	61.33	0.08	11.42	0.42					12
89	INIAPT-649	AMAZ-14 x LCT-368	20.17	1666.67	7	3.83	34.25	0.92	4.42	1.25					12
90	INIAPT-147	CCN-51 x D-147	11.45	1665.91	2.82	0.91	21	0.18	8.82	1.45					11
91	INIAPT-298	CCN-51 x D-147	14.09	1665.91	3	0.45	13.64	0	5.82	0.91					11
92	INIAPT-554	Gloria-1 x EB-2237	16	1640.63	1.13	0	25.63	0	13.88	0.38					8
93	INIAPT-648	CCN-51 x 2367	12.64	1638.64	3.09	1.36	80.91	5.55	9.73	17.73					11
94	INIAPT-077	CCN-51 x D-147	16.55	1627.27	3.55	0.18	12.82	0	4.27	0					11
95	INIAPT-445	CCN-51 x AMAZ-11	14.82	1622.73	2.36	0.64	41.91	0	4.27	0					11
96	INIAPT-025	TAP-3 x UNAP-2	14	1610	4.9	0.5	26.8	0.9	19.9	2.3					10
97	INIAPT-024	EET-387 x A-645	15.33	1608.33	3.11	0	4.67	1.44	13.11	1.78					9
98	INIAPT-553	TAP-6 x TIP-1	18	1602.5	4.4	1.4	47.7	0	3.1	0.2					10
99	INIAPT-142	CCN-51 x B-60	18.6	1590	1.6	0.6	35.8	0.3	4	0					10
100	INIAPT-094	AMA-11 x TAP-3	18	1567.5	4.8	2.5	16.1	1.8	18.4	5.2					10
101	INIAPT-233	TAP-3 x UNAP-2	15.5	1565.63	6.38	0.88	24.75	0	14.88	0.75					8
102	INIAPT-684	EET-233	16.13	1553.13	1.25	0.25	41.38	0.13	11.5	0.88					8
103	INIAPT-510	Gloria-17 x CCAT-4688	12.73	1545.45	1.82	0.27	10.73	0	5.18	0.09					11
104	INIAPT-420	CCN-51 x D-147	14.1	1542.5	1.8	0.6	21.4	0.2	3.7	0.6					10
105	INIAPT-009	CCN-51 x LCT-46	14.78	1527.78	4.33	1.44	32.44	0.11	4.11	0					9
106	INIAPT-663	CCN-51 x 2367	11.7	1507.5	1.2	0.2	16.3	0.1	11.4	0.5					10
107	INIAPT-577	AMAZ-14 x EBC-148	14.55	1500	5.82	2.55	33.18	0.55	11.91	0.36					11
108	INIAPT-689	TAP-3	21.45	1497.73	3.18	0.36	12.55	0	6.73	0.18					11
109	INIAPT-526	TAP-6 x TIP-1	20.27	1493.18	3.27	0.45	17.91	0	1	0					11
110	INIAPT-193	TIP-1 x EBC-148	12.17	1491.67	1.83	0.75	16.92	0	0.42	0					12
111	INIAPT-163	AMA-11 x TAP-3	17.33	1483.33	1.78	1.89	19.22	0	4.67	0.11					9
112	INIAPT-214	CCN-51 x TAP-10	9.6	1477.5	0.6	0.2	34.7	0	2.8	0.4					10
113	INIAPT-369	AMAZ-11 x TIP-1	15	1468.18	4	3.36	14.64	0.09	6.27	0.27					11
114	INIAPT-630	SIL-1 x 2416	15.55	1468.18	5.55	1.82	41.09	0.55	14.64	0.55					11
115	INIAPT-547	CCN-51 x 2367	12.33	1454.17	1.67	0.67	16.17	0.83	13	0.33					6
116	INIAPT-288	CCN-51 x TAP-10	13.25	1433.33	3.67	0.83	40.92	1.58	4.83	1.58					12
117	INIAPT-019	EET-58 x B-60	19.82	1429.55	1	0.45	25.45	0	9.09	0.18					11
118	INIAPT-506	CUR-3 x TIP-1	16.25	1429.17	5.67	1.58	8.58	1	5.42	1.33					12
119	INIAPT-599	Gloria-17 x SNA-0707	14.58	1410.42	4.83	1.75	17.5	0	6.58	0.08					12
120	INIAPT-125	AMA-11 x TAP-10	14.58	1404.17	2.25	0.25	14.92	0.17	3.17	0					12
121	INIAPT-301	CCN-51 x A-645	12.82	1404.09	1.27	0.73	10.27	0	1.36	0					11
122	INIAPT-488	EET-233 x B-60	17.75	1397.92	3.5	0.58	48.92	0	9.5	0					12
123	INIAPT-537	Gloria-17 x EB-2237	16.71	1396.43	1.29	0	87.29	0	10	0					7
124	INIAPT-286	EET-387 x B-60	19.83	1393.75	2.33	0.08	28	0	6.92	0.17					12
125	INIAPT-067	CCN-51 x TAP-10	10.92	1379.17	2	0.33	18.17	0	5.92	0.08					12
126	INIAPT-539	CUR-3 x TIP-1	13.42	1370.83	4.75	0.42	7.33	0	3.17	0					12
127	INIAPT-334	CCN-51 x TAP-3	13.5	1364.58	1.75	1.17	35.5	0	8.83	0.25					12
128	INIAPT-694	EET-103	12.5	1341.67	2.08	0.75	43.83	0.08	13.17	0.08					12
129	INIAPT-665	TAP-6 x TIP-1	18.27	1340.91	3.82	0.73	39.64	0	1.45	0					11
130	INIAPT-195	AMA-11 x LCT-368	16.11	1322.22	4.33	0.78	16.22	0.56	11.44	0.33					9
131	INIAPT-150	EET-387 x A-645	14.5	1320	1.2	0	35.4	0	4.5	1.2					10
132	INIAPT-051	TIP-1 x EBC-148	13.75	1314.58	3	0.92	20.92	0	11.67	0.17					12
133	INIAPT-041	EET-387 x 2057	15.45	1313.64	1.82	0.18	38.73	0	28.18	0					11
134	INIAPT-078	CCN-51 x D-147	9	1309.09	1.55	0.09	5.55	0	4.73	0.18					11
135	INIAPT-693	EET-19	10.1	1307.5	3.8	0.8	49.7	0.5	38.4	2.3					10
136	INIAPT-380	CCN-51 x AMAZ-11	9.55	1306.82	2.64	0.73	24.91	0	6.36	0.18					11
137	INIAPT-440	CCN-51 x B-60	13.08	1300	1.83	0.67	58.75	0.08	5	0.5					12
138	INIAPT-439	EET-387 x B-60	14.42	1297.92	2.17	1.5	15.42	0	9.92	0.08					12
139	INIAPT-012	CCN-51 x B-60	7.8	1295	3.1	0.7	14.3	0.7	9.5	3.7					10
140	INIAPT-564	Gloria-1 x EB-1013	10.08	1289.58	1.17	0.08	23.92	0	7.5	0					12
141	INIAPT-015	CCN-51 x D-147	11.13	1287.5	3.38	0.5	15.25	0	5.63	1					8
142	INIAPT-209	EET-387 x D-147	18.64	1281.82	3.55	1.09	20	0	5.55	0					11
143	INIAPT-611	TAP-3 x TIP-1	15.38	1281.25	2.38	1	23.5	0.38	3.75	44.75					8
144	INIAPT-638	EET-233 x A-645	10.2	1272.5	1	0.1	10.8	0	6.2	0.1					10
145	INIAPT-675	A-645	12.55	1269.09	2.55	0.36	25.64	0.55	3	0.09					11
146	INIAPT-030	TAP-12 x UNAP-2	11.25	1268.75	3.75	1.25	129.58	0.25	1.75	0.75					12
147	INIAPT-450	TAP-10 x EBC-148	12	1255	1.9	0.7	26.6	0	2.3	0					10
148	INIAPT-688	TAP-10	17.17	1254.17	1.42	0.5	59.33	0	1	0					12
149	INIAPT-614	TAP-6 x EBC-148	12.2	1247.5	2.4	0.2	46.4	0	4.4	0					10
150	INIAPT-625	EET-233 x 2057	12.45	1243.18	1.64	0.55	27.73	0	9.64	0					11
151	INIAPT-026	TAP-3 x UNAP-2	14.67	1239.58	2.33	0.42	71.25	0	6.75	0					12
152	INIAPT-579	CCN-51 x TAP-6	7.25	1237.5	0.92	0.08	14.67	0	1.33	0.33					12
153	INIAPT-666	TAP-6 x TIP-1	11.9	1222.5	5.8	0.8	20.6	0	0.8	0					10
154	INIAPT-569	CUR-3 x TIP-1	11.75	1216.67	0.75	0	4.58	0.08	4.17	0.08					12
155	INIAPT-419	CCN-51 x D-147	14	1215.91	3.45	1.09	20.45	0	3.64	0.09					11
156	INIAPT-029	CCN-51 x EBC-148	8.67	1213.89	1.11	0.11	17.22	0	5.78	0					9
157	INIAPT-172	EET-387 x 2057	14.36	1213.64	2.73	0.64	45.45	0	5.27	0					11
158	INIAPT-520	CCN-51 x TAP-6	11.1	1212.5	1.3	0.5	11.6	0	2.2	0.3					10
159	INIAPT-219	CCN-51 x B-60	17.36	1211.36	0.73	0.73	16.55	0	2.82	0.18					11
160	INIAPT-057	AMA-11 x TIP-1	10.67	1208.33	1.33	0	6.33	0	4.33	0					3

No.	Clon	Familia	# de mazorcas sanas	Peso fresco (g)	# de mazorcas enfermas		# de frutos		# de Escobas de Bruja		Indices		Arquitectura	Color del fruto	# Plantas evaluadas
					Con Escoba de Bruja	Con Monilia	Con Marchitez	Chiri-moya	Vege-tativa	Coji-nete	Ma-zorca	Se-milla			
161	INIAPT-432	CCN-51 x TAP-3	9.2	1207.5	0.4	0.1	18.4	0	2	0					10
162	INIAPT-540	CUR-3 x TIP-1	20.75	1196.88	1.5	0	11.13	0	4.25	0					8
163	INIAPT-305	EET-387 x A-645	17.58	1181.25	0.92	0.33	9.42	0	1.5	0.08					12
164	INIAPT-295	CCN-51 x B-60	12.17	1179.17	1.33	0.58	7.08	0	1.5	0					12
165	INIAPT-528	TAP-6 x TIP-1	12.25	1175	3.25	1.25	11.5	0	1.75	0					4
166	INIAPT-064	CCN-51 x TAP-10	10.33	1145.83	0.75	0	27.42	0	2.83	0.08					12
167	INIAPT-134	EET-387 x B-60	14.09	1145.45	5	3.82	13	0.09	6.18	0					11
168	INIAPT-602	CCN-51 x TAP-6	9.82	1138.64	2.64	0.45	28.18	0.18	1.18	0					11
169	INIAPT-165	CCN-51 x AMA-11	10.11	1133.33	2.22	0.67	73.44	0	3	0					9
170	INIAPT-636	CCN-51 x TAP-6	9.14	1125	3	1.14	10.86	0	1.86	0					7
171	INIAPT-456	TIP-1 x EBC-148	10	1118.75	2.67	2.08	15.08	0.42	4.33	1.92					12
172	INIAPT-563	TAP-6 x EBC-148	10.5	1117.5	2.6	0.1	18.1	0	3.6	0					10
173	INIAPT-398	TAP-12 x UNAP-2	10.25	1109.38	2.88	0.38	13.38	0.63	7.13	0.63					8
174	INIAPT-036	CCN-51 x AMA-11	10.17	1108.33	1.83	1.33	14.17	0	3.67	0.17					12
175	INIAPT-066	CCN-51 x TAP-10	11.2	1107.5	1	0.5	11.4	0	1	0					10
176	INIAPT-372	CCN-51 x B-60	10.3	1107.5	1.8	0.2	8.3	0	10.1	0					10
177	INIAPT-006	CCN-51 x TAP-10	10.3	1105	1.5	0.1	23.4	0	2.3	0.7					10
178	INIAPT-087	TAP-3 x UNAP-2	11.5	1104.9	3.7	0	12	0.1	4.9	0					10
179	INIAPT-175	TAP -10 x EBC-148	8.82	1100	2	0.64	20.55	0	3.73	0.09					11
180	INIAPT-218	CCN-51 x B-60	12.75	1093.75	1.5	0.13	11.25	0	4.13	0.25					8
181	INIAPT-221	CCN-51 x B-60	7.18	1093.18	2.27	0.27	14	0	2.55	0					11
182	INIAPT-220	CCN-51 x B-60	9	1091.67	1.33	0.08	17.67	0	1.33	0					12
183	INIAPT-512	Gloria-17 x CCAT-4688	10.67	1091.67	2	0.5	17.67	0	17.17	0					6
184	INIAPT-363	TAP-10 x LCT-368	13	1090.91	3.09	0.45	5.91	0.09	1.73	0.09					11
185	INIAPT-063	EET-387 x B-60	13.75	1081.25	3.75	1.67	28.92	0.17	8.83	0					12
186	INIAPT-643	SIL-1 x 2416	7.91	1077.27	4	1.91	55.36	0	14.82	0.36					11
187	INIAPT-043	TAP-12 x EBC-148	8.9	1075	2.4	0.4	24.6	0	3.6	0					10
188	INIAPT-145	AMA-11 x EBC-148	9.36	1065.91	2.18	1.27	8.91	1.36	8.18	1.18					11
189	INIAPT-247	TAP -10 x EBC-148	9.55	1065.91	2.64	0.73	31.73	0	6.82	0.09					11
190	INIAPT-629	CCN-51 x LCT-37	8.5	1062.5	1.9	0.7	12.2	0.2	9.7	0.3					10
191	INIAPT-022	CCN-51 x A-645	7.27	1054.55	1	0.27	4.55	0.45	3.91	0.18					11
192	INIAPT-339	TIP-1 x EBC-148	12.7	1052.5	2.7	0.8	15	0	1	0.1					10
193	INIAPT-370	EET-387 x B-60	14.92	1050	2.08	1	17	0	1.58	0.08					12
194	INIAPT-524	Brisas-13 x CCAT-1858	10.44	1044.44	1.33	0.22	13.22	0	12.78	0.11					9
195	INIAPT-627	SIL-1 x B-60	10.82	1043.18	1.91	1	11.45	0	1.73	0					11
196	INIAPT-368	GLORIA-1 x CCAT-1858	10.18	1029.55	1	1.09	51.73	0	29.64	0					11
197	INIAPT-011	CCN-51 x B-60	7.36	1025	4	0.55	9.09	0	0.55	0					11
198	INIAPT-480	Gloria-1 x SNA-0707	10.18	1018.18	1.36	0.09	108.64	0	19.82	0.09					11
199	INIAPT-159	AMA-11 x CUR-3	10.1	1017.5	2.6	0.7	12.5	0.1	6.4	0.3					10
200	INIAPT-594	CUR-3 x TIP-1	14.5	1017.5	2.1	0.3	10.6	0	2.1	0					10
201	INIAPT-595	CUR-3 x TIP-1	9.27	1009.09	3.64	1.45	8.27	0	3.82	0					11
202	INIAPT-241	CCN-51 x AMA-11	7.5	1000	2.25	0.25	10	0	7.75	0					4
203	INIAPT-224	CCN-51 x D-147	8.25	997.92	1.5	0.42	4.08	0	5.58	0					12
204	INIAPT-320	CCN-51 x AMA-11	9.6	995	3.4	0.9	61.3	0.1	3.8	0.3					10
205	INIAPT-319	AMA-11 x TAP-3	9.67	991.67	2	0.33	22.67	0	4.33	0.67					3
206	INIAPT-690	TAP-6	13.64	986.36	1.27	0	36	0	0.82	0					11
207	INIAPT-418	CCN-51 x D-147	7.9	970	2	0	8.5	0.5	3.9	3.4					10
208	INIAPT-109	TIP-1 x LCT-368	10	964.29	3.14	0	36.57	0	5.86	0					7
209	INIAPT-416	CCN-51 x B-60	7.33	962.5	2.5	1.17	9.25	0.33	4.33	3.75					12
210	INIAPT-686	LCT-368	10.83	962.5	3	0.5	12.17	0	10.5	0					6
211	INIAPT-071	CCN-51 x LCT-46	10.3	960	0.8	0	32.1	0	7.3	0.1					10
212	INIAPT-068	CCN-51 x TAP-10	7.27	959.09	0.64	0.73	26.55	0	3	0					11
213	INIAPT-283	EET-387 x D-147	9.44	955.56	0.44	0.11	11.44	0	3.22	0.11					9
214	INIAPT-479	CUR-3 x TIP-1	9.45	954.55	2.18	1.09	4	0.27	7.27	3.91					11
215	INIAPT-383	TAP-10 x LCT-368	8.5	952.08	3.08	0.42	4.67	0	2.75	0.17					12
216	INIAPT-291	CCN-51 x TAP-10	9.09	947.73	1	0	21.64	0	3.64	0.36					11
217	INIAPT-413	AMAZ-11 x TAP-12	9.55	947.73	4.73	3.18	31.27	2.45	3.55	0.64					11
218	INIAPT-100	TAP-12 x EBC-148	8.63	946.88	1.5	0.75	25	0.38	4.25	0.13					8
219	INIAPT-605	Brisas-13 x CCAT-1858	11.5	945	1.7	0.1	18.5	0.7	12.7	0.3					10
220	INIAPT-236	UNAP-2 x EBC-148	6.67	944.44	0.67	0.44	6.22	1	10.22	1.11					9
221	INIAPT-033	CCN-51 x AMA-11	6.7	942.5	0.8	0	18.1	0.1	3.8	0.2					10
222	INIAPT-282	EET-387 x D-147	10.7	940	1.3	0.1	21.5	0	3.7	0					10
223	INIAPT-592	SIL-1 x B-60	8.29	939.29	1.29	0.57	10.29	0.14	9.43	0.29					7
224	INIAPT-132	EET-387 x D-147	12.6	932.5	1.5	1.5	12	0.1	1	0.1					10
225	INIAPT-425	TAP-12 x UNAP-2	11	927.78	0.67	0.44	34.56	0	1.33	0					9
226	INIAPT-673	Gloria-3 x EB-2237	8.11	927.78	2	0.56	13.11	0	11.33	0					9
227	INIAPT-299	CCN-51 x D-147	11	927.5	3.3	0.7	20.9	0	1.5	0					10
228	INIAPT-619	Gloria-17 x SNA-0708	11	927.5	2.5	1.4	37.4	0	13.4	0.1					10
229	INIAPT-080	EET-58 x B-60	12.5	922.92	1.5	0	8.17	0	6.17	0					12
230	INIAPT-437	AMAZ-11 x TAP-12	9.5	922.92	1.5	1.5	10.5	0.5	4.92	0.08					12
231	INIAPT-034	CCN-51 x AMA-11	7	920.83	1.17	0.42	13	0.17	5.83	0					12
232	INIAPT-360	TAP-12 x EBC-148	7.78	916.67	1.33	0.22	12.44	0.11	3.56	0					9
233	INIAPT-412	AMAZ-11 x TIP-1	8.45	909.09	2.36	1.27	4.18	0	3.82	0					11
234	INIAPT-004	AMA-11 x TAP-12	9.67	908.33	1.78	0.11	14.56	0.44	3.33	0.11					9
235	INIAPT-263	TIP-1 x EBC-148	8.56	908.33	1.44	0.11	5.44	1.44	1.33	0.44					9
236	INIAPT-333	CCN-51 x TAP-3	8.5	905	2.6	0.4	6.7	0.7	3.1	1					10
237	INIAPT-230	EET-387 x A-645	10.3	897.5	3.4	0.1	14.8	0	2.5	0					10
238	INIAPT-691	TIP-1	14.67	897.22	2.67	0.33	14.67	0	0.78	0					9
239	INIAPT-001	AMA-11 x TAP-10	8.67	895.83	1	0.08	11.92	0	4.58	0.08					12
240	INIAPT-123	AMA-11 x TIP-1	10.18	895.45	2.73	0.55	9.55	0.36	2.09	1.82					11

No.	Clon	Familia	# de mazorcas sanas	Peso fresco (g)	# de mazorcas enfermas		# de frutos		# de Escobas de Bruja		Indices		Arquitectura	Color del fruto	# Plantas evaluadas
					Con Escoba de Bruja	Con Monilia	Con Marchitez	Chirimoya	Vegetativa	Cojinete	Mazorca	Semilla			
241	INIAPT-081	EET-58 x B-60	11.33	894.44	0.78	0	14	0.11	11.33	0.89					9
242	INIAPT-254	CCN-51 x TAP-3	10.67	894.44	0.67	0.22	6.89	0	1.67	0.11					9
243	INIAPT-426	CCN-51 x AMAZ-11	8.42	891.67	1.25	0.42	15.5	0.5	1.92	0.08					12
244	INIAPT-124	AMA-11 x TAP-10	10.89	888.89	2.22	0.33	20.11	0	3.56	0.11					9
245	INIAPT-059	AMA-11 x TIP-1	10.36	888.64	0.73	0.27	12.09	0	6	0.09					11
246	INIAPT-210	EET-387 x D-147	9.17	885.42	0.83	0.17	12.25	0.08	4.92	0.25					12
247	INIAPT-060	AMA-11 x UNAP-2	9.3	872.5	2.6	3.1	14	0	9.8	0.2					10
248	INIAPT-143	CCN-51 x B-60	12.64	870.45	1.18	0.45	11.91	0	2.18	0.55					11
249	INIAPT-388	AMAZ-11 x TAP-10	8.5	870	0.4	0.2	6.3	0.7	2.3	0.4					10
250	INIAPT-596	Gloria-3 x EB-2237	10.88	868.75	0.75	0.13	23.38	0	9.13	0					8
251	INIAPT-574	TAP-3 x CUR-3	9.92	866.67	2.67	0.33	7	0.08	5	0.25					12
252	INIAPT-173	EET-387 x 2057	9.2	860	1.2	0.2	33.4	0	5.8	0					10
253	INIAPT-633	CUR-3 x TIP-1	10.5	860	2.2	0.4	12	0	8.4	0.1					10
254	INIAPT-349	CCN-51 x A-645	7.63	859.38	0.75	0.25	6.63	0.25	0.38	0.13					8
255	INIAPT-586	EET-233 x A-645	8.4	852.5	1.4	1.2	27	0	5.4	1.1					10
256	INIAPT-242	CCN-51 x AMA-11	5.91	850	1.73	0.18	12.36	0	4.55	0					11
257	INIAPT-502	CCN-51 x LCT-37	6.67	841.67	1.83	0.33	9.5	0	4.08	0					12
258	INIAPT-485	CCN-51 x 2367	6.17	833.33	2.58	0.5	8.25	0.08	2.58	0.33					12
259	INIAPT-355	TAP-12 x UNAP-2	9.71	832.14	1	0.29	72.29	0	5	0					7
260	INIAPT-417	CCN-51 x B-60	11.55	831.82	2.82	0.73	17.64	0.09	6.55	0.18					11
261	INIAPT-414	EET-387 x D-147	10.6	830	1.2	0.1	17.5	0.2	3.7	0					10
262	INIAPT-127	AMA-11 x TAP-10	10.64	829.55	0.91	0.09	21.82	0.18	7.27	0.09					11
263	INIAPT-698	TESTIGO HUERTA	6	829.17	1.67	0.67	16.83	0	16.17	0					6
264	INIAPT-651	SIL-1 x 2057	11.14	821.43	1.57	0.43	41.86	0	5.57	0					7
265	INIAPT-588	TAP-3 x TIP-1	11.67	819.44	1.11	0.22	5.78	0	0.44	0					9
266	INIAPT-436	AMAZ-11 x UNAP-2	7.78	813.89	1.67	1	21.22	0	3.78	0.33					9
267	INIAPT-293	CCN-51 x B-60	9	813.64	0.91	0	6.91	0.09	3.09	0					11
268	INIAPT-657	TAP-6 x EBC-148	7.33	808.33	2.44	0.67	31.78	0	12.11	0.11					9
269	INIAPT-141	CCN-51 x B-60	7.8	807.5	0.4	0	2.7	0	1.9	0					10
270	INIAPT-379	CCN-51 x AMAZ-11	8.92	804.17	1.58	0.08	6.83	0	3.58	0.25					12
271	INIAPT-151	EET-387 x A-645	7.89	802.78	3	0.56	22.22	0.11	8.56	0.11					9
272	INIAPT-422	TAP-3 x UNAP-2	9.17	802.08	1.92	0.17	26.17	0	4.5	0					12
273	INIAPT-621	EET-233 x B-60	8.33	800	1	0.11	41.89	0	16.44	0.56					9
274	INIAPT-207	EET-387 x D-147	9.55	798.64	0.36	0.18	9.36	0	0.27	0					11
275	INIAPT-401	EET-387 x 2057	8.71	796.43	1.57	0.29	6.71	0	8.71	0					7
276	INIAPT-317	TAP-12 x UNAP-2	6.27	795.45	1.64	0.45	25.82	0	3.82	0					11
277	INIAPT-556	SIL-1 x 2057	9.38	793.75	2.88	0.63	14.25	0.13	4.5	0					8
278	INIAPT-449	TAP-10 x EBC-148	7.33	791.67	3.11	0.56	32	0	3.33	0					9
279	INIAPT-531	EET-387 x 2416	8.09	790.91	1	2.27	8.27	0	2.73	0					11
280	INIAPT-538	CUR-3 x TIP-1	8.29	789.29	3.29	0	4.71	0	3.14	0					7
281	INIAPT-276	AMA-11 x TAP-10	8.27	788.64	1.73	0	15.27	0.09	2.09	0.09					11
282	INIAPT-213	CCN-51 x TAP-10	8.33	786.11	1.11	0.22	15.44	0	1.11	0					9
283	INIAPT-503	CCN-51 x LCT-37	7	785	0.6	0	6.1	0.1	11.1	1.7					10
284	INIAPT-582	TAP-6 x LCT-368	12	782.5	4.4	0.3	8.6	0	3.2	0					10
285	INIAPT-452	TAP-12 x EBC-148	7.33	780.56	3.89	1.22	16.78	0.11	6.44	0.33					9
286	INIAPT-119	AMA-14 x TIP-1	9.83	777.08	2.58	1.33	14.92	0	2.33	0.25					12
287	INIAPT-113	AMA-11 x LCT-368	3.2	775	0	0	5.4	0	3.2	0					5
288	INIAPT-166	CCN-51 x AMA-11	6.8	775	1.1	0.1	11.1	0	1.2	0					10
289	INIAPT-237	CCN-51 x EBC-148	4.9	772.5	2.1	0.9	4.5	0	5.5	0					10
290	INIAPT-466	TAP-6 x TIP-1	9	768.18	2.36	0.27	2.36	0	0.27	0					11
291	INIAPT-048	AMA-14 x UNAP-2	6.86	767.86	0.71	0.43	44.86	0	10.29	0.29					7
292	INIAPT-366	GLORIA-1 x SNA-0708	7.57	767.86	0.71	0	17.43	0	12.14	0					7
293	INIAPT-093	TAP-12 x UNAP-2	9.91	763.64	1.73	0.64	39.18	0	14.27	0.45					11
294	INIAPT-354	UNAP-2 x EBC-148	5.6	760	2	0.6	10.6	0	7.8	0					5
295	INIAPT-162	CCN-51 x EBC-148	6.88	759.38	0.63	0.13	5.88	0.13	5.25	0.13					8
296	INIAPT-104	TAP-10 x LCT-368	10.9	757.5	1.2	0.2	5.7	0	8.8	0.3					10
297	INIAPT-337	TIP-1 x EBC-148	7.8	752.5	2.5	0.9	9.6	0	2.8	0					10
298	INIAPT-091	CCN-51 x EBC-148	6.1	745	1.6	0.4	19.1	0	11	0					10
299	INIAPT-411	GLORIA-1 x CCAT-1858	5.17	741.67	1.33	0.17	36.33	0	14.5	0					6
300	INIAPT-396	UNAP-2 x EBC-148	6.4	735	1.2	0.4	15	0	6	0.2					5
301	INIAPT-476	CCN-51 x LCT-37	5.8	735	2.8	0.8	2.6	0	2.8	0					5
302	INIAPT-198	AMA-11 x TIP-1	8.4	725	2	0.6	7.1	0.3	6.8	0					10
303	INIAPT-677	AMAZ-14	6.2	725	2.8	1.1	14.3	0.3	16.2	1.6					10
304	INIAPT-390	AMAZ-11 x TAP-12	8.5	720.83	5	4.33	17.33	0.33	4	0.17					6
305	INIAPT-329	TAP-10 x LCT-368	8.9	717.5	1.1	0.1	10.8	0	2.7	0					10
306	INIAPT-645	Gloria-3 x EB-2237	7.33	716.67	0.83	0.17	38.17	0.17	10.67	0.5					6
307	INIAPT-023	EET-387 x A-645	7.11	713.89	1.11	0	8.78	0.22	1.78	0.67					9
308	INIAPT-101	TAP-12 x EBC-148	7.67	708.33	3.67	0.5	14.5	0	2.67	0					6
309	INIAPT-223	AMA-11 x EBC-148	6	702.86	3	1.86	26.71	0.14	10.71	0					7
310	INIAPT-108	TIP-1 x LCT-368	6.5	695.83	1	0.33	14.83	0	2.33	0					6
311	INIAPT-217	CCN-51 x B-60	9.2	692.5	1.3	0	7.6	0	2.7	0.6					10
312	INIAPT-571	CUR-3 x TIP-1	6.5	687.5	0.5	0	1.5	0	2	0					2
313	INIAPT-111	TIP-1 x EBC-148	6.75	684.38	1.63	1	10.75	0	3.5	0					8
314	INIAPT-058	AMA-11 x TIP-1	5.83	675	2.83	0.83	18.67	0	8.33	0					6
315	INIAPT-389	AMAZ-11 x TAP-12	7.78	675	0.56	0.11	18.67	0	3.89	0					9
316	INIAPT-300	CCN-51 x A-645	6.17	670.83	0.17	0	4.17	0	1.17	0					6
317	INIAPT-585	EET-233 x A-645	6.11	669.44	0.44	0	7	0	1.44	0					9
318	INIAPT-040	EET-387 x 2057	7.2	667.5	2.7	0.9	1.7	0	2.3	0					10
319	INIAPT-362	EBC-148 x LCT-368	8.56	666.67	1.67	0.33	18.11	0	11.11	0					9
320	INIAPT-475	CCN-51 x LCT-37	6.75	666.67	0.83	0.17	3.33	0	2	0					12

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					Con Escoba de Bruja	Con Monilia	Con Marchitez	Chirimoya	Vegetativa	Cojinete	Mazorca	Semilla			
321	INIAPT-361	TAP-12 x EBC-148	7.3	665	1.6	0.2	6	0	2	0.1					10
322	INIAPT-131	EET-387 x D-147	7	659.38	1.5	1.63	3.75	0.13	4.88	0.38					8
323	INIAPT-550	AMAZ-14 x LCT-368	7.5	659.38	1.75	1.5	8.25	0.25	10.63	0					8
324	INIAPT-088	AMA-11 x CUR-3	5.67	658.33	1.5	1	8.5	0.17	9.83	0.67					6
325	INIAPT-196	GLORIA-1 x SNA-0708	9	650	6	0	9	0	16	5					1
326	INIAPT-205	AMA-11 x UNAP-2	7.5	650	0	0	16.5	0	3	0					2
327	INIAPT-458	AMAZ-11 x TIP-1	6.33	650	1.5	0.5	5.75	7.5	7.67	1.75					12
328	INIAPT-496	TAP-6 x TIP-1	6.75	650	1.38	0	3.13	0.25	3.63	0					8
329	INIAPT-471	EET-387 x 2416	8.22	647.22	1.89	0.44	6.56	0.11	5.44	0					9
330	INIAPT-135	EET-387 x B-60	8.88	646.88	1.25	0.13	4.25	0	2.5	0					8
331	INIAPT-536	TAP-3 x LCT-368	7.71	646.43	1.14	1.86	1.14	0.29	3.43	0.71					7
332	INIAPT-002	AMA-11 x UNAP-2	8.56	644.44	1.44	0.67	35.44	0	7.44	0.44					9
333	INIAPT-670	Brisas-13 x SNA-0708	6.29	642.86	2	0	19.43	0	27.43	0.14					7
334	INIAPT-552	TAP-6 x TIP-1	8.33	639.58	5.17	1.08	7.42	0.67	3.33	0.42					12
335	INIAPT-099	TAP -10 x EBC-148	6.57	639.29	2	1.14	32.57	0	6.43	0					7
336	INIAPT-314	UNAP-2 x EBC-148	5.5	637.5	1.5	2.5	0.5	0	3.5	0					2
337	INIAPT-330	TAP-10 x LCT-368	10.6	635	1.6	1	10.9	0.2	3.7	0.4					10
338	INIAPT-303	EET-387 x A-645	7.4	630	2.6	0.9	22.1	0.2	4.8	0					10
339	INIAPT-438	AMAZ-11 x TAP-12	8.09	629.55	0.73	0.45	14	0	4.55	0.18					11
340	INIAPT-248	TAP -10 x EBC-148	6.38	628.13	2.38	1	9	0	4.38	0.5					8
341	INIAPT-308	TAP-3 x UNAP-2	7	627.5	2.8	0.3	8.4	0.1	9.8	0.8					10
342	INIAPT-465	TAP-6 x TIP-1	8.18	622.73	2.55	1.36	10	0	2.09	0					11
343	INIAPT-472	EET-387 x 2416	7.45	622.73	1.09	0.45	5.82	0	6.18	0					11
344	INIAPT-112	TIP-1 x EBC-148	7.17	612.5	0.67	0.33	7	0	7.17	0.33					6
345	INIAPT-174	TAP-10 x CUR-3	8	612.5	3.25	0.25	13.5	0	0.5	0					4
346	INIAPT-447	TAP-10 x UNAP-2	6.3	612.5	2.2	1.4	17.1	0	4.3	0.5					10
347	INIAPT-359	TAP-10 x CUR-3	6.83	610.42	0.5	0.33	13	0.08	3.33	0					12
348	INIAPT-395	EET-387 x A-645	7.7	607.5	0.9	0	23.7	0.1	3.2	0.5					10
349	INIAPT-031	TAP-12 x UNAP-2	6.18	600	0.36	0.09	27.64	0	2.18	0.09					11
350	INIAPT-264	TIP-1 x EBC-148	6.2	597.5	0.6	0.2	10.7	0	2.7	0.1					10
351	INIAPT-622	EET-233 x 2367	5.7	597.5	0.9	0.1	4.1	0	3.9	0					10
352	INIAPT-152	BRISAS-13 x EB-1013	6.71	596.43	0.57	0	11.57	0	3.57	0.71					7
353	INIAPT-231	EET-387 x A-645	6.36	590.91	0.91	0.09	5.36	0.09	1.82	0.18					11
354	INIAPT-139	CCN-51 x B-60	4.8	580	0	0	1.6	0	1.4	0					5
355	INIAPT-428	TAP-10 x CUR-3	4.86	578.57	0.71	0.29	6.86	0	9	0					7
356	INIAPT-511	Gloria-17 x CCAT-4688	6.43	578.57	0.14	0	5.57	0	11	0.43					7
357	INIAPT-316	TAP-12 x UNAP-2	9	577.27	0.64	0.09	13.27	0	3.55	0.09					11
358	INIAPT-120	AMA-14 x TIP-1	5.25	575	2.38	0.5	8.13	0	4.75	0.13					8
359	INIAPT-227	EET-58 x B-60	8	575	0.44	0.11	6.22	0	11.78	0					9
360	INIAPT-444	CCN-51 x EBC-148	4	575	0.33	0	3.67	0	2.33	0					3
361	INIAPT-514	Gloria-3 x CCAT-4688	5.86	575	1.43	0	5.71	0	9.57	0					7
362	INIAPT-642	CCN-51 x LCT-37	7.2	575	1.1	1.3	9.1	0	8.6	0					10
363	INIAPT-660	Gloria-1 x SNA-0707	7.13	568.75	0	0.13	13.75	0.13	10.13	0					8
364	INIAPT-084	CCN-51 x A-645	5	565.63	2.25	0.63	24.88	0	1.88	0					8
365	INIAPT-279	AMA-11 x TAP-12	6.33	564.58	1.67	0.17	11.25	0.08	6.5	0.5					12
366	INIAPT-652	Brisas-13 x SNA-0707	7.43	564.29	1.71	0.71	4.29	0	9.86	0.14					7
367	INIAPT-171	EET-387 x 2057	6.71	560.71	1.71	0	24.43	0	8.14	0.29					7
368	INIAPT-679	Brisas-13	5.86	560.71	1	0	15.14	0	8.14	0.86					7
369	INIAPT-637	Gloria-1 x EB-2237	6.5	559.38	0.88	0.13	11.25	0	13.25	0.38					8
370	INIAPT-392	EET-387 x D-147	7.33	558.33	1	0	9.5	0	1.83	0					6
371	INIAPT-500	TAP-6 x EBC-148	4.5	553.13	1	0	7.5	0	5.75	0					8
372	INIAPT-658	Gloria-1 x EB-1013	4.75	550	1	0.5	14.75	0	21.75	0.25					4
373	INIAPT-007	CCN-51 x TAP-10	5.11	547.22	0	0.11	6.89	0.11	3.56	0					9
374	INIAPT-096	BRISAS-3 x CCAT-1858	4.8	545	0.6	0.2	2.8	0	4.6	0					5
375	INIAPT-534	CCN-51 x LCT-37	4.3	542.5	2.2	0.7	3.2	0	3.5	0					10
376	INIAPT-662	TAP-3 x CUR-3	6	536.11	3	0.44	9.67	0	23.33	0					9
377	INIAPT-589	TAP-3 x TIP-1	7.18	531.82	2.18	0	6.73	0	3.73	0					11
378	INIAPT-069	CCN-51 x TAP-10	4.75	531.25	0.38	0	25.5	0	3.75	0					8
379	INIAPT-257	CCN-51 x TAP-3	3.9	530	0.6	0.2	2.9	0	1.3	0.1					10
380	INIAPT-464	TAP-6 x TIP-1	6	528.13	0.63	0.13	4.25	0	1	0					8
381	INIAPT-409	AMAZ-14 x TIP-1	6.22	527.78	1	0.78	4.33	0	5.44	0.22					9
382	INIAPT-258	AMA-14 x UNAP-2	5	525	0	0	5	0	4	0					1
383	INIAPT-278	AMA-11 x UNAP-2	5	525	2.33	0.17	27	0	5	0					6
384	INIAPT-593	SIL-1 x 2416	4.11	522.22	0.89	0.56	17.67	0	4.56	0					9
385	INIAPT-086	EET-387 x A-645	7	521.43	0.43	0.43	9	1.71	17.86	2.29					7
386	INIAPT-307	TAP-3 x UNAP-2	5.14	521.43	0.86	0.29	8.14	0	2.57	0.14					7
387	INIAPT-304	EET-387 x A-645	4.75	518.75	2	0	5.5	0.25	3.5	2.75					4
388	INIAPT-324	GLORIA-3 x SNA-0707	6	516.67	1.33	0	30.92	0	14.92	0					12
389	INIAPT-555	SIL-1 x 2057	6.44	516.67	1.33	0.11	60.22	0.44	11.22	0.22					9
390	INIAPT-284	EET-387 x D-147	6.57	514.29	0.29	0	17.71	0.14	11	0					7
391	INIAPT-235	UNAP-2 x EBC-148	4.38	512.5	0.75	0.25	10	0	5.75	0.5					8
392	INIAPT-513	Gloria-17 x SNA-0708	4.5	512.5	2	0	11	0	6	0					2
393	INIAPT-518	AMAZ-14 x EBC-148	5.5	512.5	1.13	0.25	5.88	0.38	6.63	0.13					8
394	INIAPT-092	CCN-51 x EBC-148	4.57	507.14	1.71	0.14	27.71	0	5.71	0					7
395	INIAPT-049	TIP-1 x EBC-148	5.38	506.25	1.5	0.38	6.13	0.25	3	0					8
396	INIAPT-272	GLORIA-1 x CCAT-1858	5.13	506.25	0.25	0	12.75	0	9.88	0.13					8
397	INIAPT-408	AMAZ-11 x LCT-368	6.29	503.57	2.57	1.29	3.14	0	4.57	0					7
398	INIAPT-062	AMA-11 x TAP-12	7	497.22	1.33	0.33	17.44	2.89	4.22	0.67					9
399	INIAPT-598	Gloria-17 x CCAT-4688	5.67	491.67	2	0	4	0	11.67	0.33					3
400	INIAPT-687	SIL-1	5.4	485	1.6	0.8	10.6	0	1.6	0					5

No.	Clon	Familia	# de mazorcas sanas	Peso fresco (g)	# de mazorcas enfermas		# de frutos		# de Escobas de Bruja		Indices		Arquitectura	Color del fruto	# Plantas evaluadas
					Con Escoba de Bruja	Con Monilia	Con Marchitez	Chirimoya	Vegetativa	Cojinete	Mazorca	Semilla			
401	INIAPT-597	TAP-3 x CUR-3	6.89	480.56	5.11	0.22	22.44	0.33	9.33	0.33					9
402	INIAPT-654	EET-233 x A-645	4.92	477.08	0.92	0.08	11.83	0	2.75	0					12
403	INIAPT-075	AMA-11 x EBC-148	4.25	475	2.13	0.5	18.75	0.13	3.63	0					8
404	INIAPT-311	AMA-11 x CUR-3	5.33	475	2	0	5.33	0.33	3	0					3
405	INIAPT-590	SIL-1 x B-60	5.89	463.89	1.78	0.22	15.67	0	4.33	0					9
406	INIAPT-326	GLORIA-3 x SNA-0707	4.4	460	1	0	9.9	0	20.7	0.3					10
407	INIAPT-507	CUR-3 x TIP-1	5.73	459.09	4.18	0.64	2.73	0.09	0.91	0					11
408	INIAPT-699	Gloria-17 x EB-2237	5.33	458.33	0	0	19.67	0	11.67	0					3
409	INIAPT-634	CUR-3 x TIP-1	4.8	457.5	6	0.4	3.7	0	2.2	0					10
410	INIAPT-292	CCN-51 x LCT-46	6.7	452.5	0.8	0.1	22.5	0.2	10.4	0.4					10
411	INIAPT-042	TAP -10 x EBC-148	4.6	450	0.9	0.4	9.7	0	4.8	0.2					10
412	INIAPT-482	Gloria-17 x SNA-0707	5	450	2	1	6	0	12	0					1
413	INIAPT-486	CCN-51 x TAP-6	2.67	450	0.33	0.33	2.33	0	1	0					3
414	INIAPT-394	CCN-51 x A-645	5.14	446.43	0.86	0.29	5.29	0	1.57	0					7
415	INIAPT-521	EET-233 x B-60	5.2	445	0.4	0	36.4	0	5.6	0					5
416	INIAPT-129	AMA-11 x UNAP-2	5.11	441.67	0.44	0.33	24.44	0	4.67	0					9
417	INIAPT-377	CCN-51 x EBC-148	6	440	0	0	4.8	0.2	14.2	0					5
418	INIAPT-385	AMAZ-14 x TIP-1	4.57	439.29	0.71	0.14	5.29	0	4.29	0.43					7
419	INIAPT-397	UNAP-2 x EBC-148	3.83	433.33	0.33	0	5	0.17	7.67	0					6
420	INIAPT-331	TAP-10 x LCT-368	6.14	432.14	1.57	0.14	4.71	0	0.71	0					7
421	INIAPT-028	CCN-51 x EBC-148	3.45	431.82	1	0	9	0.18	6.82	0.09					11
422	INIAPT-246	TAP-10 x CUR-3	4.5	428.13	2	0.5	15.88	0	1.88	0					8
423	INIAPT-604	EET-233 x B-60	7.89	427.78	1.11	0	37.11	0	5.89	0.22					9
424	INIAPT-275	AMA-11 x TIP-1	6.17	425	0.83	0.5	15.33	0	2.17	0					6
425	INIAPT-353	BRISAS-13 x EB-1013	7	425	0	0	12.6	0.8	6.2	0					5
426	INIAPT-617	Gloria-1 x SNA-0707	5.2	425	1.2	0.2	11.4	0	5.6	2.8					5
427	INIAPT-297	AMA-11 x EBC-148	3.33	420.83	2.83	0.67	12.83	0	13	0.67					6
428	INIAPT-402	TAP-10 x CUR-3	6.67	420.83	0.67	0	22.5	0	0.83	0					6
429	INIAPT-448	EET-387 x 2057	5.67	420.83	0.5	0	7.83	0	3.67	0.17					6
430	INIAPT-076	AMA-11 x EBC-148	4.33	419.44	1.33	0.33	4.44	0.11	5.44	0.11					9
431	INIAPT-105	CCN-51 x TAP-3	3.63	418.75	0.5	0	23.13	0	9.63	0.13					8
432	INIAPT-410	AMAZ-14 x TIP-1	4.5	418.75	3.88	0.63	9	0.25	7	0.13					8
433	INIAPT-618	Gloria-17 x SNA-0707	5.14	417.86	0.14	0.14	26.71	0	9	0					7
434	INIAPT-144	CCN-51 x B-60	5.13	415.63	1.13	0	2.63	0	4.25	0.13					8
435	INIAPT-253	TAP-10 x LCT-368	4.75	415.63	0.88	0.13	3.63	0.13	6	0					8
436	INIAPT-460	AMAZ-14 x EBC-148	3.88	415.63	2.5	0.38	19.38	0	13.25	0.25					8
437	INIAPT-567	CCN-51 x LCT-37	3	414.29	2.57	0.43	13.29	0	4	0					7
438	INIAPT-250	EBC-148 x LCT-368	6.09	413.64	1.64	0.55	8.64	0	18.64	0.09					11
439	INIAPT-126	AMA-11 x TAP-10	2.67	408.33	0.67	0.67	9.67	0.33	2	0.33					3
440	INIAPT-474	SIL-1 x B-60	4.29	407.14	0.29	0	4.71	0	3.29	0					7
441	INIAPT-053	AMA-11 x LCT-368	6.27	406.82	1.45	0.36	2.64	0.09	8.27	0					11
442	INIAPT-098	TAP-10 x CUR-3	5.4	405	0.4	0	2.8	0.2	8	0.2					5
443	INIAPT-523	Brisas-13 x CCAT-1858	4	405	0.2	0	7.6	0	7.2	0					5
444	INIAPT-082	EET-58 x B-60	5.13	403.13	1.75	1.13	4.13	0	5.38	0.38					8
445	INIAPT-457	AMAZ-14 x TIP-1	5.45	402.27	1.91	0.91	4.91	0	1.82	0					11
446	INIAPT-168	TAP-10 x UNAP-2	4	400	0	0	2	3	3	1					1
447	INIAPT-202	AMA-11 x UNAP-2	2.5	400	0	0	8.5	0	5.5	0					2
448	INIAPT-403	TAP-10 x CUR-3	4.89	400	0.78	0.22	13.67	0	1.33	0					9
449	INIAPT-407	AMAZ-11 x LCT-368	5.14	400	2.14	0.57	3	0	10.29	0					7
450	INIAPT-453	EBC-148 x LCT-368	4.6	400	2.2	2	8.6	1.2	43	1.4					5
451	INIAPT-562	TAP-6 x EBC-148	4.75	400	0.88	0.25	5.13	0.25	6	0.13					8
452	INIAPT-346	AMA-11 x TIP-1	4	393.75	0.25	0.75	3.75	0	6.5	0.25					4
453	INIAPT-463	AMAZ-14 x LCT-368	4.1	392.5	2.2	0.5	1.3	1.7	8.1	0.1					10
454	INIAPT-519	CCN-51 x TAP-6	3	387.5	1	0	4.5	0	4.5	1					2
455	INIAPT-498	EET-233 x 2057	4.78	383.33	0.44	0.22	6.56	0.11	6.78	0					9
456	INIAPT-551	CCN-51 x AMAZ-14	4	383.33	0.33	0	9	0	7.67	0					3
457	INIAPT-672	SIL-1 x 2416	5.14	382.14	1.43	0.14	9.29	0	8.14	0.14					7
458	INIAPT-478	CUR-3 x TIP-1	4	381.25	0.5	0	0.38	0	0.75	0					8
459	INIAPT-228	CCN-51 x A-645	4	379.17	0.5	0	2.33	0	3.67	0					6
460	INIAPT-083	CCN-51 x A-645	3.5	375	1.13	0.63	2.88	0	1.63	0					8
461	INIAPT-650	CCN-51 x AMAZ-14	2.71	371.43	0.14	0	3.86	0	1.57	0					7
462	INIAPT-271	AMA-14 x TIP-1	4.25	368.75	0.38	0	3.38	0	0.63	0					8
463	INIAPT-328	EBC-148 x LCT-368	4	366.67	4.33	1.33	12.33	0.33	18.67	0					3
464	INIAPT-557	Brisas-13 x SNA-0707	5.2	365	0.8	0	13.4	0	18.8	2.2					5
465	INIAPT-443	AMAZ-11 x CUR-3	4.27	363.64	0.73	0.09	3.55	0	10.91	0.27					11
466	INIAPT-287	EET-387 x B-60	5.25	362.5	1	1	6.38	0.13	4.13	0					8
467	INIAPT-315	UNAP-2 x EBC-148	2.5	362.5	0.25	0.25	8.25	0	8.75	0					4
468	INIAPT-341	AMA-11 x LCT-368	4.67	361.11	1.44	0.33	2.89	0.56	7.78	0.11					9
469	INIAPT-382	EBC-148 x LCT-368	4	358.33	2.67	0.33	2.67	0.67	22.33	2.67					3
470	INIAPT-591	SIL-1 x B-60	5	358.33	3.11	0.22	6.22	0.11	2.22	0.11					9
471	INIAPT-176	TAP -10 x EBC-148	3.6	357.5	0.3	0.1	12.2	0	1.4	0.2					10
472	INIAPT-548	CCN-51 x TAP-6	3.3	357.5	1.7	0.1	1.2	0	2.2	0					10
473	INIAPT-529	Gloria-1 x EB-2237	3.4	355	1	0	5.6	0	7.4	0					5
474	INIAPT-683	EBC-148	3.2	355	1.2	0	4.8	0	5	0					5
475	INIAPT-494	Gloria-1 x CCAT-4688	3.67	354.17	1.5	0	13	0	6.17	0					6
476	INIAPT-325	GLORIA-3 x SNA-0707	4.75	350	0	0	6.25	0	6.25	0					4
477	INIAPT-373	CCN-51 x A-645	3.27	350	1.55	0.55	3.82	0	3	0					11
478	INIAPT-631	SIL-1 x 2416	4.4	350	1.2	0	10.6	0	7.4	0					5
479	INIAPT-313	UNAP-2 x EBC-148	4.13	346.88	0.25	0	17.25	0	4	0					8
480	INIAPT-244	BRISAS-3 x CCAT-1858	3.33	341.67	1	0	15.33	0	16	1					3

No.	Clon	Familia	# de mazor-cas sanas	Peso fresco (g)	# de mazorcas enfermas		# de frutos		# de Escobas de Bruja		Indices		Arquitectura	Color del fruto	# Plantas evaluadas
					Con Escoba de Bruja	Con Monilla	Con Marchitez	Chiri-moya	Vege-tativa	Coji-nete	Ma-zorca	Se-milla			
481	INIAPT- 097	GLORIA-3 x SNA-0707	5.43	339.29	0.57	0	13.29	0.14	7.29	0.29					7
482	INIAPT- 674	Gloria-17 x SNA-0707	3.33	338.89	0.22	0	4.89	0	9.11	0.56					9
483	INIAPT- 499	TAP-6 x EBC-148	2.5	337.5	0.83	0	9.33	0	9.33	0.17					6
484	INIAPT- 613	SIL-1 x B-60	5	337.5	1.17	0	7.17	0	5.83	0.17					6
485	INIAPT- 600	Gloria-17 x SNA-0708	3.2	335	0.8	0.2	8.2	0	10	0.6					5
486	INIAPT- 155	TAP-3 x UNAP-2	3.67	333.33	0.56	0	2.78	0	2.33	0					9
487	INIAPT- 387	CCN-51 x A-645	3.43	332.14	1.29	0.86	3.14	0	3.43	0					7
488	INIAPT- 020	EET-58 x B-60	3.86	328.57	1	0.29	2.14	0	6.29	0					7
489	INIAPT- 136	EET-387 x B-60	5.43	328.57	0.57	0	6	0	7.43	0					7
490	INIAPT- 421	EET-387 x A-645	5.14	328.57	0.71	0.29	13.14	0	3.86	0					7
491	INIAPT- 268	AMA-14 x TIP-1	4.33	325	0.67	0.33	3.67	0	2.56	0.22					9
492	INIAPT- 350	EET-387 x A-645	4.91	325	1.27	0.27	4.36	0.09	6.09	0.27					11
493	INIAPT- 375	UNAP-2 x EBC-148	3	325	0	0	0	0	5	0					1
494	INIAPT- 671	Brisas-13 x SNA-0708	3.44	322.22	1.11	0	20	0	17.89	0.22					9
495	INIAPT- 102	TAP-12 x EBC-148	3.6	320	0.6	0	25.8	0	11	0.2					5
496	INIAPT- 371	CCN-51 x LCT-46	5.29	317.86	0.14	0	18.86	0	5	0					7
497	INIAPT- 470	EET-233 x 2057	4.33	316.67	0.33	0	30.33	0	6.33	0.33					3
498	INIAPT- 381	TAP-10 x UNAP-2	3	314.29	0.14	2.43	2	0.43	5	0.86					7
499	INIAPT- 018	EET-58 x B-60	3.13	309.38	0.75	0.25	4.13	0	4.63	1.13					8
500	INIAPT- 149	CCN-51 x A-645	2.33	308.33	0	0	1	0	0	0					3
501	INIAPT- 357	Brisasa30 x CCAT-1858	2.75	306.25	0	0.25	10	0	16.75	0					4
502	INIAPT- 532	EET-233 x A-645	3.5	306.25	0.75	0	1.75	0	4.5	0.75					4
503	INIAPT- 497	SIL-1 x 2057	2.56	305.56	1	0.78	8.11	0	3.22	0.22					9
504	INIAPT- 608	TAP-6 x LCT-368	3.56	305.56	0.89	0.22	3.56	0	3.11	0					9
505	INIAPT- 039	GLORIA-3 x SNA-0707	2.67	304.17	0.33	0.17	10.67	0.17	21.5	0.33					6
506	INIAPT- 404	TAP-10 x EBC-148	2.5	300	1.5	2.5	7	0	5.5	2.5					2
507	INIAPT- 415	EET-387 x B-60	3.89	300	0.78	0.11	10.22	0	5.22	0					9
508	INIAPT- 433	AMAZ-11 x LCT-368	4	300	0.25	0	3.25	0	4.25	0					4
509	INIAPT- 469	EET-233 x 2057	5	300	0.33	0.33	8.67	0	4.67	0					3
510	INIAPT- 477	Gloria-17 x EB-2237	4	300	0	0	3	0	3	0					1
511	INIAPT- 079	CCN-51 x D-147	3.44	297.22	0.44	0.44	2.22	0	2.89	0.33					9
512	INIAPT- 306	BRISAS-13 x EB-1013	2.88	296.88	0.38	0	7.38	0	9.75	0					8
513	INIAPT- 501	Gloria-1 x EB-1013	3.14	296.43	0.71	0	3.86	0	9.57	0					7
514	INIAPT- 055	GLORIA-1 x CCAT-1858	2.33	295.83	0.5	0	12.83	0.17	25.33	0.17					6
515	INIAPT- 037	TAP-10 x UNAP-2	2.6	295	0	0	2.2	0	2.6	0					5
516	INIAPT- 130	AMA-11 x UNAP-2	3.86	292.86	1.57	0.14	25.14	0	3.43	0					7
517	INIAPT- 454	TAP-10 x LCT-368	4.1	292.5	0.5	0.3	0.9	0.3	3	0.3					10
518	INIAPT- 107	TIP-1 x LCT-368	3.33	291.67	1.5	0	1.17	0	1.83	0					6
519	INIAPT- 154	TAP-3 x UNAP-2	3	289.29	1	0.14	5.86	0	3	0					7
520	INIAPT- 050	TIP-1 x EBC-148	3	287.5	0.25	0	3	0	7.25	0					4
521	INIAPT- 121	GLORIA-1 x CCAT-1858	2.5	287.5	1	0	2	0.5	17	0					2
522	INIAPT- 200	AMA-11 x TAP-10	3	287.5	0.5	0	23	0	2.5	0					4
523	INIAPT- 095	TAP-10 x UNAP-2	3.57	282.14	0.86	0.14	4.86	0	1.14	0					7
524	INIAPT- 535	SIL-1 x 2416	3.6	280	0.6	0	13.8	0	5	0					5
525	INIAPT- 128	AMA-11 x TAP-10	2.5	279.17	0.17	0	1.67	0	5.5	0					6
526	INIAPT- 615	TAP-6 x EBC-148	3	278.13	0.5	0	16.88	0.13	3.88	0.25					8
527	INIAPT- 090	UNAP-2 x EBC-148	2.5	275	0.5	0	0.5	0	10.5	4.5					2
528	INIAPT- 177	TAP -10 x EBC-148	2.33	275	0.33	0	1	0.33	4.67	0					3
529	INIAPT- 240	CCN-51 x AMA-11	2	275	0.4	0.2	9.2	0	2.8	0.2					5
530	INIAPT- 318	AMA-11 x TAP-3	3.5	275	0.5	0	0	0	4.75	0.75					4
531	INIAPT- 504	CCN-51 x LCT-37	2.5	270.83	0	0.33	3.83	0	2.5	0					6
532	INIAPT- 647	Gloria-17 x SNA-0707	2.75	268.75	0	0	2.5	0	12	0					4
533	INIAPT- 017	EET-58 x B-60	3.33	266.67	0.33	0	10	0	5	0					3
534	INIAPT- 148	CCN-51 x A-645	3	262.5	0.5	0.25	0.75	0	0.5	0					4
535	INIAPT- 014	AMA-11 x EBC-148	2.2	260	0.7	0.6	4.9	0	3.9	0					10
536	INIAPT- 635	Gloria-1 x SNA-0707	3.29	257.14	0.43	0	7.29	0	9	0.29					7
537	INIAPT- 027	UNAP-2 x EBC-148	2.38	256.25	0.88	0.38	17.13	0	16.25	0					8
538	INIAPT- 576	Gloria-17 x SNA-0708	3.4	255	0.4	0	10	0	3.6	0					5
539	INIAPT- 190	TIP-1 x LCT-368	3.4	250	0.6	1.4	3.8	0.2	5.8	0.6					5
540	INIAPT- 365	AMAZ-14 x UNAP-2	2.57	250	1	0.43	7.71	0	4.43	0					7
541	INIAPT- 542	Gloria-3 x EB-2237	2.33	250	0.67	0	1.67	0	2.33	0					3
542	INIAPT- 616	Brisas-13 x SNA-0708	3	250	1	0	12	0	15	0					1
543	INIAPT- 661	Gloria-3 x EB-2237	3	250	0	1	33	0	16	0					1
544	INIAPT- 322	TAP-10 x UNAP-2	2.63	243.75	0.13	0	2.88	0	0.38	0.13					8
545	INIAPT- 044	EBC-148 x LCT-368	2.57	242.86	0.14	0	2.29	0	3.43	0.29					7
546	INIAPT- 570	CUR-3 x TIP-1	2.7	242.5	0.7	0.1	2.5	0	3.5	0.3					10
547	INIAPT- 116	AMA-11 x LCT-368	4	241.67	0.33	0	4.33	0.33	6	0.33					3
548	INIAPT- 367	AMAZ-14 x TIP-1	3.4	240	0.2	0	11.2	0	2.2	0					5
549	INIAPT- 133	EET-387 x D-147	3	237.5	0	0	1.5	0	10	0					2
550	INIAPT- 191	TIP-1 x LCT-368	3	237.5	0	0	3.5	0	1	0					4
551	INIAPT- 580	Brisas-13 x CCAT-1858	3	237.5	0	0	0	0	5	0					2
552	INIAPT- 451	TAP-12 x EBC-148	2.89	233.33	1.33	0.11	14.56	0.11	9.11	0.44					9
553	INIAPT- 115	AMA-11 x LCT-368	3.33	229.17	0.17	0.17	2.5	0	10	0.17					6
554	INIAPT- 431	TAP-10 x LCT-368	3.13	228.13	0.5	0.38	2.5	0	4.13	0					8
555	INIAPT- 310	AMA-11 x CUR-3	1.75	225	0.5	0	4.75	0	8.75	0					4
556	INIAPT- 312	AMA-11 x CUR-3	2	225	0	0	0.5	0	4.5	0					2
557	INIAPT- 345	GLORIA-1 x CCAT-1858	2	225	0	0	0	0	3.5	0					2
558	INIAPT- 376	UNAP-2 x EBC-148	2	225	0	0	1.5	0	8.5	0					2
559	INIAPT- 338	TIP-1 x EBC-148	3.17	220.83	1.17	0.33	4.67	0	1.17	0					6
560	INIAPT- 161	CCN-51 x EBC-148	1.6	220	0.2	0.6	4.8	0	2.4	0					5

No.	Clon	Familia	# de mazorcas sanas	Peso fresco (g)	# de mazorcas enfermas		# de frutos		# de Escobas de Bruja		Indices		Arquitectura	Color del fruto	# Plantas evaluadas
					Con Escoba de Bruja	Con Monilia	Con Marchitez	Chiri-moya	Vege-tativa	Coji-nete	Mu-zorca	Se-milla			
561	INIAPT- 261	TIP-1 x EBC-148	2.67	216.67	1.67	0	2	0	3	0					3
562	INIAPT- 343	AMA-14 x TIP-1	2.67	212.5	0	0	4.17	0	1	0					6
563	INIAPT- 234	TAP-3 x UNAP-2	2.6	210	1.8	0.4	3.8	0	9	0					5
564	INIAPT- 296	AMA-11 x EBC-148	2.4	210	1	0	1	0	4.6	0					5
565	INIAPT- 473	EET-233 x A-645	2.8	210	0	0	6.4	0	2	0					5
566	INIAPT- 624	TAP-6 x LCT-368	2.6	210	0.6	0	9.2	0	3.6	0					5
567	INIAPT- 434	AMAZ-11 x TIP-1	2	208.33	1.56	0.11	2.67	0.11	2.56	0					9
568	INIAPT- 601	Gloria-3 x SNA-0708	2.29	207.14	0.43	0	5.57	0	4.57	0					7
569	INIAPT- 491	Brisas-13 x CCAT-1858	1.63	206.25	0	0.13	5.88	0	4.88	0					8
570	INIAPT- 492	Brisas-13 x CCAT-1858	2.25	206.25	0.5	0	2.25	0	12	0					4
571	INIAPT- 575	Gloria-17 x SNA-0707	2.2	205	0.2	0	5.6	0	8	0					5
572	INIAPT- 169	TAP-10 x UNAP-2	1	200	5	0	24	0	5	0					1
573	INIAPT- 266	GLORIA-1 x SNA-0708	2	200	1	0	4	0	4	0					2
574	INIAPT- 336	AMA-14 x UNAP-2	1.33	200	0	0	3.33	0	6.67	0.33					3
575	INIAPT- 423	UNAP-2 x EBC-148	2	200	1.5	0	7.5	0	4	0					2
576	INIAPT- 459	AMAZ-14 x EBC-148	2	200	0.5	0	3	0	5.5	0					2
577	INIAPT- 013	CCN-51 x B-60	3	195.83	0.33	0	4.17	0	2.67	0					6
578	INIAPT- 610	Brisas-13 x SNA-0707	3	193.75	0.75	0	12.5	0	11.75	0					4
579	INIAPT- 212	EET-387 x B-60	2.67	187.5	0.17	0.17	2.17	0	2.5	0					6
580	INIAPT- 199	AMA-11 x TIP-1	1.67	183.33	0	0	2.67	0	1	0					3
581	INIAPT- 157	AMA-11 x CUR-3	1.5	175	0	0	0.5	0	4	0					2
582	INIAPT- 203	AMA-11 x UNAP-2	2.33	175	0	0.33	6.33	0	2.67	0					3
583	INIAPT- 204	AMA-11 x UNAP-2	1.5	175	0	0	2.5	0	10	0					2
584	INIAPT- 327	TAP-12 x EBC-148	2	175	0	0	15	0	1	0					2
585	INIAPT- 386	AMAZ-14 x TIP-1	2	175	0.25	0	5.25	0	2.25	0					4
586	INIAPT- 424	UNAP-2 x EBC-148	1.5	175	0.5	0.5	7	0	2.5	0					2
587	INIAPT- 612	SIL-1 x B-60	3.33	175	0.17	0	21.67	0	3.33	0					6
588	INIAPT- 626	EET-233 x A-645	2.75	175	0.5	0	12	0	0.5	0					4
589	INIAPT- 692	UNAP-2	1.75	175	0.25	0	13.5	0	8.75	0					4
590	INIAPT- 695	SCA-6	3.75	168.75	1	0	6	0.25	1.75	0					4
591	INIAPT- 070	CCN-51 x LCT-46	1.5	166.67	0.17	0	1	0	15.17	0					6
592	INIAPT- 568	CUR-3 x TIP-1	1.33	166.67	0.33	0	1	0	3.33	0					3
593	INIAPT- 668	Brisas-13 x SNA-0707	2.67	166.67	1.33	0	2	0	11.67	1.67					3
594	INIAPT- 114	AMA-11 x LCT-368	5	162.5	0	0	4.5	0	3	0					2
595	INIAPT- 620	AMAZ-14 x EBC-148	1.5	162.5	0	0	4.5	0	13	0					2
596	INIAPT- 508	Gloria-3 x EB-2237	2.33	158.33	0	0	13.33	0	8.33	0.67					3
597	INIAPT- 609	Brisas-13 x SNA-0707	2.25	156.25	0	0	3	0	8.5	0.25					4
598	INIAPT- 628	TAP-6 x EBC-148	2	156.25	0.25	0	0.5	0	2.25	0.25					4
599	INIAPT- 584	EET-233 x A-645	2.8	155	0	0	8	0	15.6	0					5
600	INIAPT- 180	EBC-148 x LCT-368	1.33	154.17	0.5	0	5.17	0.17	5.33	0					6
601	INIAPT- 255	CCN-51 x TAP-3	2	153.57	0.71	0	1.14	0	0.57	0					7
602	INIAPT- 267	AMA-14 x TIP-1	2	150	0	0	1	0	6.5	0					2
603	INIAPT- 483	Gloria-3 x CCAT-4688	2	150	0.5	0	2	0	2.5	0					2
604	INIAPT- 558	EET-387 x 2416	1	150	0	0	0	0	12.5	0					2
605	INIAPT- 607	EET-233 x 2367	2.5	150	1	0.5	7	0	6	0					2
606	INIAPT- 260	TIP-1 x EBC-148	2	145.83	0	0	2.5	0	3.83	0.17					6
607	INIAPT- 544	Gloria-17 x SNA-0708	1.6	145	0.6	0	0.8	0	4.6	0					5
608	INIAPT- 669	EET-233 x A-645	2.2	145	0.8	0.2	5.2	0	6.8	0					5
609	INIAPT- 110	AMA-14 x UNAP-2	2.5	143.75	1	0	8.25	0	5.75	0					4
610	INIAPT- 179	EBC-148 x LCT-368	2	141.67	1	0	3.5	0	2.5	0					6
611	INIAPT- 455	AMAZ-14 x UNAP-2	1	141.67	0.33	0	19	0	5.67	0					3
612	INIAPT- 583	Brisas-13 x SNA-0707	2	141.67	1	0	0.33	0	5	0					3
613	INIAPT- 667	Brisas-13 x SNA-0707	1.33	141.67	0.33	0	0.33	0	2	0					3
614	INIAPT- 441	CCN-51 x A-645	1.2	140	0.6	0	0.4	0	1.4	0					5
615	INIAPT- 522	AMAZ-14 x LCT-368	1.8	140	0.2	0.2	2.4	0	6.4	0.2					5
616	INIAPT- 578	AMAZ-14 x EBC-148	1.4	140	0.6	0.2	1.4	0	10.8	0					5
617	INIAPT- 117	AMA-11 x LCT-368	1.75	137.5	0.25	0	0	0	2.75	0					4
618	INIAPT- 623	EET-233 x 2367	3	137.5	0	0	9	0	6	0.5					2
619	INIAPT- 003	AMA-11 x UNAP-2	1	133.33	0	0	3.33	0	2	0					3
620	INIAPT- 054	AMA-14 x TIP-1	1.67	129.17	0.5	0.33	5	0	1.83	0					6
621	INIAPT- 061	AMA-11 x TAP-12	1	125	1	0	1	0	18	0					1
622	INIAPT- 323	BRISAS-3 x CCAT-1858	1.5	125	0	0	1	0	2	0					2
623	INIAPT- 515	AMAZ-14 x EBC-148	1.5	125	0	0	3.5	0	7	0					2
624	INIAPT- 545	Gloria-17 x SNA-0708	3	112.5	1	0	4	0	4.25	0					4
625	INIAPT- 226	EET-58 x B-60	2.17	108.33	0.33	0	12.17	0	12.83	0.33					6
626	INIAPT- 277	AMA-11 x TAP-10	1.33	108.33	0	0	1	0	0.67	0					3
627	INIAPT- 103	EBC-148 x LCT-368	1	100	0	0	0	0	16	0					1
628	INIAPT- 192	AMA-14 x UNAP-2	2	100	0.5	0	3	0	9	0					2
629	INIAPT- 206	AMA-11 x TAP-12	2	100	0.5	0	6.5	0	1	0					2
630	INIAPT- 222	AMA-11 x EBC-148	1	100	0	0	0	0	2	0					1
631	INIAPT- 262	TIP-1 x EBC-148	2	100	0	0	4.4	0	4	0.2					5
632	INIAPT- 335	AMA-14 x UNAP-2	1	100	1	0	0	0	16	0					1
633	INIAPT- 358	EET-387 x 2057	1	100	0	0	0	0	5	0					1
634	INIAPT- 430	EBC-148 x LCT-368	2	100	0	0	0	0	3	0					1
635	INIAPT- 495	TAP-6 x TIP-1	1	100	0	0	0	0	0	0					1
636	INIAPT- 517	AMAZ-14 x EBC-148	1	100	0	0	4	0	2	0					1
637	INIAPT- 559	EET-233 x A-645	1	100	0	0	0	0	0	0					1
638	INIAPT- 640	EET-233 x A-645	1	100	2	0	0	0	0	0					1
639	INIAPT- 646	Gloria-17 x CCAT-4688	1	100	0	0	0	0	3	0					1
640	INIAPT- 655	TAP-6 x EBC-148	1	100	0	0	4.33	0	6.33	0					3

No.	Clon	Familia	# de mazorcas sanas	Peso fresco (g)	# de mazorcas enfermas		# de frutos		# de Escobas de Bruja		Indices		Arquitectura	Color del fruto	# Plantas evaluadas
					Con Escoba de Bruja	Con Monilia	Con Marchitez	Chiri-moya	Vege-tativa	Coji-nete	Ma-zorca	Se-milla			
641	INIAPT-344	AMA-14 x TIP-1	1.5	93.75	0	0	2	0	1.5	0					4
642	INIAPT-541	Gloria-3 x EB-2237	1.67	83.33	0.67	0	11	0	8	0					3
643	INIAPT-052	AMA-11 x LCT-368	1	75	0	0	1	0	4	0					1
644	INIAPT-181	TAP-10 x LCT-368	1.5	75	0	0	1.5	0	0.5	0					2
645	INIAPT-251	TAP-10 x LCT-368	1.67	75	0.67	0	3	0	10.67	0					3
646	INIAPT-340	AMA-11 x LCT-368	1	75	0	0	0.5	0	4.5	0					2
647	INIAPT-516	AMAZ-14 x EBC-148	1.5	75	0	0	2.5	0	10	0					2
648	INIAPT-530	Brisas-13 x SNA-0707	1	75	0	0	2.5	0	6	0					2
649	INIAPT-606	Brisas-13 x CCAT-1858	1	75	0	0	4	0	9	0					2
650	INIAPT-194	AMA-11 x LCT-368	2	50	0	0	0	0	13	0					1
651	INIAPT-243	TAP-10 x UNAP-2	1	50	0	0	1	0	0.5	0					2
652	INIAPT-259	AMA-14 x UNAP-2	1	50	0	0	0	0	1	0					1
653	INIAPT-270	AMA-14 x TIP-1	2	50	0	0	2	0	0	0					1
654	INIAPT-342	AMA-11 x LCT-368	1.5	50	0	0	1	0	5	0					2
655	INIAPT-587	ELT-233 x A-645	1.5	50	1	0	7.5	0	9.5	1					2
656	INIAPT-047	TIP-1 x LCT-368	1	37.5	0	0	0.5	0	5	0					2
657	INIAPT-089	UNAP-2 x EBC-148	1	25	0	0	0	0	2	0					1
658	INIAPT-249	EBC-148 x LCT-368	1	25	0	0	4	0	2	0					1

Figure 2. An overview of a group of selected clones planted as large plots to validate their performance.

Figure 3. Early bearing of a plant (1 year old) within a selected clone growing in large plots.

Table 8. Resultados de la evaluación de un grupo de clones sembrados en el Lote Ganadería. Los datos están acumulados hasta DICIEMBRE 2010, para el rendimiento y otras variables (son datos por planta). Fecha de siembra MARZO 2008. EET-Pichilingue, INIAP.

No.	Clon	Familia	# Mazorcas sanas	Peso fresco (g)	# Mazorcas enfermas		# de Frutos		# de Escoba de bruja		Plantas evaluadas
					Con escoba de bruja	Con Monillia	Con Marchitez	Chiri-moya	Vege-tativa	Coji-nete	
1	INIAPG 069	AMA-11 x TAP-6	16.75	1812.5	0.25	0.08	35.25	2.33	4.58	6.67	12
2	INIAPG 006	CCN-51 x TIP-1	7.92	1316.67	0.67	1.08	16.5	0.09	3.27	0	11
3	INIAPG 149	CCN-51 x 2057	9.58	1300	1	1.25	16.17	0.33	4.83	0.08	12
4	INIAPG 026	TAP-6 x UNAP-2	9	1156.25	0.83	0.08	61.83	0	2.92	0	12
5	INIAPG 276	CCN-51 x LCT-368	10	990	0.33	0.08	88.08	0.33	5	0	12
6	INIAPG 118	CCN-51 x TIP-1	13.5	962.5	0.92	1	38.75	0	2.33	0	12
7	INIAPG 085	TAP-10 x TIP-1	9.67	891.67	1	1	18.33	0	1.67	0	12
8	INIAPG 268	EET-233 x D.147	10.42	870.83	0.33	0.08	20.17	0.25	4.25	0	12
9	INIAPG 051	TAP-6 x CUR-3	7.5	745	0.2	0.1	7.8	0.5	3	0.88	8
10	INIAPG 353	SIL-1 x D.147	8.42	708.33	0.5	0	39.25	0	2.17	0.08	12
11	INIAPG 030	TAP-3 x EBC-148	6.58	689.58	0.5	0.42	8.17	0.82	3.45	0	11
12	INIAPG 093	TAP-10 x TAP-3	6.17	675	0.92	0.08	9	0.08	2.08	0	12
13	INIAPG 213	LCT-46 x TAP-10	6.91	622.73	0.55	0.64	45.09	0.36	4.45	0	11
14	INIAPG 004	TAP-6 x CUR-3	5.7	622.5	1.1	0.5	7.1	0.38	4.25	1.75	8
15	INIAPG 292	LCT-46 x TAP-10	7.5	620.83	0.5	0.08	56.17	0	2.18	0	11
16	INIAPG 178	AMA-14 x CUR-3	6.25	614.58	0.5	0.67	27.5	0.42	5.5	0.25	12
17	INIAPG 308	EET-58 x 2416	5.33	589.58	0.08	0.33	16.42	0.58	4.67	0.83	12
18	INIAPG 036	TAP-3 x EBC-148	5.33	585.42	0.33	0.33	5.08	0	4.83	0	12
19	INIAPG 029	CCN-51 x TAP-12	3.92	572.92	0.08	0.08	11.58	0.83	3.67	0.33	12
20	INIAPG 091	TAP-6 x CUR-3	4.58	568.75	1	0.25	11.33	0.08	3.83	0.17	12
21	INIAPG 351	SIL-1 x D.147	3.5	543.75	0.33	0.17	11.67	0	4.33	0.75	12
22	INIAPG 197	TAP-6 x CUR-3	5.25	522.92	0.08	0	28	0.27	4.55	0	11
23	INIAPG 377	LCT-37 x TAP-3	4.92	508.33	0.17	0.17	5.33	0.92	4.92	0	12
24	INIAPG 344	LCT-46 x TAP-12	6	483.33	0.33	0.08	52.42	0	3.58	0	12
25	INIAPG 288	LCT-37 x TAP-3	3.33	479.17	1	0.58	7.67	0	3.92	0	12
26	INIAPG 185	CCN-51 x CUR-3	4.42	458.33	0.08	0.08	7.58	0.08	2.5	0	12
27	INIAPG 264	LCT-37 x TAP-3	3.75	445.83	0.92	0.08	3.75	0	3.18	0	11
28	INIAPG 097	CCN-51 x TIP-1	5	439.58	0.17	0	14.08	0	3.17	0	12
29	INIAPG 310	LCT-46 x TAP-12	4.58	435.42	0.08	0.17	32.67	0	2.82	0.36	11
30	INIAPG 257	Brisas-30 x EB-2237	4.17	431.25	0.67	0.42	7.17	1.18	6.73	0.73	11
31	INIAPG 216	LCT-46 x TAP-12	5.4	420	1.3	0.8	59.3	0.9	3.8	0.2	10
32	INIAPG 101	TAP-12 x TIP-1	5.5	410.42	0	0.08	8.17	0	1.67	0.08	12
33	INIAPG 072	CCN-51 x UNAP-2	2.92	408.33	0.08	0.17	26.25	0	4.67	0.42	12
34	INIAPG 317	LCT-46 x LCT-37	4.08	385.42	0.25	0.25	11.92	0.27	3.73	0.09	11
35	INIAPG 226	LCT-46 x CUR-3	3.67	377.08	0.08	0.08	45.75	1.58	7.5	0.17	12
36	INIAPG 152	CCN-51 x CUR-3	2.92	375	0.67	0	6.83	0.09	6.91	0	11
37	INIAPG 094	TAP-3 x TAP-6	4.33	370.83	0.83	0.25	6.67	0.08	3.67	0	12
38	INIAPG 148	CCN-51 x TIP-1	2.42	368.75	0.42	0.08	6.58	0	2.67	0	12
39	INIAPG 394	LCT-37 x TAP-3	3.33	358.33	1.83	2.33	8.5	0.64	3.73	0.36	11
40	INIAPG 081	TAP-6 x CUR-3	2.42	325	0.17	0.08	3.58	0	3.08	0	12
41	INIAPG 267	LCT-37 x CUR-3	3.08	320.83	0	0.25	5.5	1.75	4.08	1.17	12
42	INIAPG 021	CCN-51 x 2057	2.92	308.33	0	0.17	7.58	1.55	4.55	0	11
43	INIAPG 354	LCT-37 x UNAP-2	3.25	308.33	0.25	0.08	6	0	3.36	0	11
44	INIAPG 281	SIL-1 x D.147	2.82	304.55	0	0.09	6.18	0	8.45	0	11
45	INIAPG 302	LCT-46 x TAP-10	2.75	304.17	0.25	0	17.75	0	4	0	12
46	INIAPG 380	EET-58 x 2416	2.5	304.17	0.58	0.08	10.33	0	7	0	12
47	INIAPG 083	TAP-3 x EBC-148	2.42	300	0	0.17	10.08	0	5.5	0	12
48	INIAPG 112	TAP-6 x CUR-3	2.92	300	0.75	0.17	8.75	0	3.08	0	12
49	INIAPG 134	TAP-3 x EBC-148	2.25	277.08	0.08	0.5	5.33	0.45	6.45	0	11
50	INIAPG 173	TAP-12 x CUR-3	1.83	258.33	0.08	0.08	7.42	1	5.33	0	12
51	INIAPG 062	TAP-3 x TAP-6	2.5	254.5	0.7	0.3	6.4	0	1.78	0	9
52	INIAPG 131	AMA-11 x TAP-6	2.67	254.17	0.25	0.17	11.25	0.25	3.58	0.17	12
53	INIAPG 181	LCT-46 x UNAP-2	2.83	243.75	0.17	0	48.42	1.75	8.5	0.17	12

No.	Clon	Familia	# Mazorcas sanas	Peso fresco (g)	# Mazorcas enfermas		# de Frutos		# de Escoba de bruja		Plantas evaluadas
					Con escoba de bruja	Con Monillia	Con Marchitez	Chiri-moya	Vege-tativa	Coji-nete	
54	INIAPG 018	AMA-11 x TAP-6	2	241.67	0.25	0.08	9.58	0.18	3.55	0	11
55	INIAPG 234	Brisas-30 x EB-2237	2.42	239.58	0.17	0.08	8.58	0	4.58	0	12
56	INIAPG 040	TAP-12 x TIP-1	3	234.09	0	0	3.18	0.09	1.91	0	11
57	INIAPG 084	CCN-51 x TAP-12	1.25	222.92	0	0	7.67	0.25	5.63	0	8
58	INIAPG 045	CUR-3 x UNAP-2	2.25	220.83	0.17	0.08	3.5	0	3.91	0	11
59	INIAPG 092	TAP-3 x EBC-148	2	218.75	0.33	0.33	3.75	0.25	7.5	0	12
60	INIAPG 227	EET-58 x 2057	1.83	208.33	0.25	1	13.67	0.67	7.83	0.33	12
61	INIAPG 020	TAP-3 x EBC-148	2.08	206.25	0.08	0.25	5.33	0	6.64	0	11
62	INIAPG 340	LCT-46 x TIP-1	2.42	206.25	0	0.17	9.42	0.17	5.08	0	12
63	INIAPG 355	LCT-46 x TIP-1	2.08	200.08	0	0	6	0	4.08	0	12
64	INIAPG 198	CCN-51 x TAP-12	1.82	197.73	0	0.18	4.09	0.91	5	0.27	11
65	INIAPG 303	LCT-37 x AMAZ-14	2	191.67	0	0	10.58	0.08	3	0.08	12
66	INIAPG 328	LCT-37 x AMAZ-14	1.33	191.67	0.5	0.17	4.92	0.67	6.33	0.17	12
67	INIAPG 311	LCT-46 x TAP-12	2.25	185.42	0	0.08	9.83	0.75	6.33	0	12
68	INIAPG 249	LCT-37 x EBC-148	1.58	181.25	0.08	0.08	4.58	0	3.45	0	11
69	INIAPG 035	CCN-51 x 2057	1.67	179.17	0	0.08	5.92	0.82	4	0	11
70	INIAPG 059	UNAP-2 x TIP-1	1.92	179.17	0.25	0	10.08	0.25	2.83	0.08	12
71	INIAPG 365	EET-58 x 2057	1.67	177.08	0.17	0.08	5.58	0.67	8.25	0.17	12
72	INIAPG 171	TAP-6 x CUR-3	2.11	175	0.22	0	28.11	0	2.78	0	9
73	INIAPG 359	Gloria-3 x EB-10-13	1.83	175	0.08	0	6.83	0	4.08	0.08	12
74	INIAPG 167	TAP-10 x TIP-1	1.42	172.92	0.08	0	2.58	0	1.55	0	11
75	INIAPG 378	LCT-37 x LCT-368	1.67	168.75	0.5	0.17	3.33	0	3.17	0.08	12
76	INIAPG 189	TAP-3 x EBC-148	1.33	166.67	1	0.58	4.92	2	6.55	0.73	11
77	INIAPG 265	LCT-37 x TAP-3	1.67	164.58	0.75	0	5.67	0	5.33	0	12
78	INIAPG 075	CCN-51 x TIP-1	1.67	158.33	0.08	0.08	3.83	0	1.75	0	12
79	INIAPG 124	TAP-12 x TIP-1	2.17	156.25	0.25	0.08	8.92	0	2.82	0	11
80	INIAPG 247	LCT-37 x TAP-3	1.92	156.25	1	0.58	4	0	2.83	0	12
81	INIAPG 031	TAP-6 x CUR-3	1.18	152.27	0	0.36	2	0	3	0	9
82	INIAPG 110	TAP-3 x EBC-148	1.33	150	0	0.17	7.17	0.08	5	0	12
83	INIAPG 193	TAP-10 x TAP-3	1.67	141.67	0.17	0.42	3.75	0	5.58	0.17	12
84	INIAPG 384	LCT-37 x UNAP-2	1.25	137.5	0.42	0.08	3.92	0	3.33	0	12
85	INIAPG 086	TAP-6 x UNAP-2	1.27	136.36	0.18	0	8.45	0	2.67	0	9
86	INIAPG 337	EET-58 x 2057	1.17	135.42	0.17	0.17	5.92	0	4.75	0	12
87	INIAPG 164	TAP-6 x CUR-3	1.36	134.09	0.09	0.09	3.18	0	2.3	0.1	10
88	INIAPG 169	TAP-6 x UNAP-2	1.33	133.33	0.25	0.5	11.83	0	2.92	0	12
89	INIAPG 307	CCN-51 x LCT-368	1.5	129.17	0	0	2.58	0.33	4.83	0	12
90	INIAPG 316	LCT-37 x AMAZ-14	1	129.17	0.17	0.33	6.92	0	6.25	0	12
91	INIAPG 108	TAP-10 x TAP-3	1	127.78	0	0.11	4.56	0	2.5	0	4
92	INIAPG 012	AMA-14 x TAP-12	1.08	122.92	0.42	0.08	6.75	0	2.73	0	11
93	INIAPG 269	EET-233 x D.147	1.25	120.83	0.17	0.25	5.42	0	2.5	0	12
94	INIAPG 096	CCN-51 x TAP-12	0.83	118.75	0.08	0	2.5	0	2.92	0	12
95	INIAPG 153	AMA-14 x TAP-12	1.17	118.75	0.33	0.25	8.5	0.5	2.58	0.08	12
96	INIAPG 175	TAP-3 x TAP-12	0.92	116.67	0	0	2.58	0	4.17	0	12
97	INIAPG 242	CCN-51 x LCT-368	1.25	116.67	0	0	3.58	0	4.55	0	11
98	INIAPG 120	CCN-51 x CUR-3	0.75	114.58	0	0.08	0.67	2.83	7.5	0	6
99	INIAPG 348	LCT-46 x CUR-3	1.08	112.5	0.17	0	2.92	0	3.64	0	11
100	INIAPG 266	LCT-37 x CUR-3	1.08	110.42	0.5	0	2.67	0.09	2.82	0	11
101	INIAPG 382	Brisas-16 x CCAT-4688	0.92	110.42	0	0.17	9.42	0.42	5.58	0.17	12
102	INIAPG 252	LCT-37-TIP-1	1.25	106.25	0.17	0	1.33	0	3.33	0	12
103	INIAPG 318	LCT-37 x UNAP-2	0.67	104.17	0	0.17	4.08	0.92	6.25	0.33	12
104	INIAPG 111	LCT-46 x UNAP-2	1.17	102.08	0.08	0	12.67	0.08	4.58	0	12
105	INIAPG 038	CCN-51 x TAP-12	0.6	100	0	0	1	0	3	0	5
106	INIAPG 199	UNAP-2 x TIP-1	0.75	100	0.08	0	3	0	4.91	0	11
107	INIAPG 223	EET-233 x D.147	1.25	95.83	0.17	0	15.58	2.17	6.5	0	12
108	INIAPG 261	CCN-51 x LCT-368	0.83	95.83	0	0.08	2.92	0	2.83	0	12
109	INIAPG 327	Gloria-3 x EB-10-13	1.08	95.83	0.08	0.17	6.5	0	4.75	0	12
110	INIAPG 215	LCT-46 x AMAZ-14	1	93.75	0	0.5	34.67	0	6.5	0	12

No.	Clon	Familia	# Mazorcas sanas	Peso fresco (g)	# Mazorcas enfermas		# de Frutos		# de Escoba de bruja		Plantas evaluadas
					Con escoba de bruja	Con Monilia	Con Marchitez	Chiri-moya	Vege-tativa	Coji-nete	
111	INIAPG 095	AMA-11 x TAP-6	0.92	91.67	0.08	0	4.67	0	3.67	0	12
112	INIAPG 389	LCT-46 x LCT-37	0.92	91.67	0	0	3	0.25	6.75	0	12
113	INIAPG 179	TAP-10 x TIP-1	1.55	90.91	0	0	1.91	0	0.91	0	11
114	INIAPG 360	LCT-37 x AMAZ-14	1	89.58	0.25	0.08	3.67	0	3.83	0	12
115	INIAPG 190	TAP-3 x EBC-148	0.75	87.5	0.42	0	4.17	0	7.18	0	11
116	INIAPG 049	TAP-10 x TAP-3	0.67	85.42	0.08	0	3.25	0	3.5	0	12
117	INIAPG 350	LCT-37 x AMAZ-11	0.73	81.82	0	0	3.64	0	5.67	0	9
118	INIAPG 387	LCT-37 x UNAP-2	0.64	79.55	0.09	0.09	5.64	0	3.27	0	11
119	INIAPG 102	TAP-12 x TIP-1	0.83	79.17	0.08	0	1.75	0	1.45	0	11
120	INIAPG 275	Gloria-3 x EB-10-13	0.5	79.17	0	0	5.25	0.92	4.75	0	12
121	INIAPG 315	LCT-37 x AMAZ-14	0.92	79.17	0.08	0.08	5.58	0	4.42	0	12
122	INIAPG 379	LCT-46 x TIP-1	1.25	79.17	0	0.08	11.33	0	4.08	0.08	12
123	INIAPG 163	TAP-12 x CUR-3	0.82	77.27	0.09	0	6	0	2.27	0	11
124	INIAPG 200	TAP-6 x UNAP-2	1.08	77.08	0	0	4.25	0	2.91	0	11
125	INIAPG 330	LCT-37-TIP-1	0.83	77.08	0.08	0.08	3.67	0	2.92	0	12
126	INIAPG 220	LCT-46 x TIP-1	1	75	0.17	0	2.92	0.42	3.25	0	12
127	INIAPG 326	Gloria-3 x EB-10-13	0.83	75	0.33	0.33	5	2.33	5.75	0.58	12
128	INIAPG 363	Brisas-30 x EB-2237	0.58	72.92	0.08	0	5.33	0.42	7.67	0	12
129	INIAPG 016	TAP-6 x UNAP-2	0.75	70.83	0.25	0	4.08	0.25	3.58	0	12
130	INIAPG 113	CUR-3 x UNAP-2	0.75	70.83	0	0.08	5.08	0.17	4.67	0.33	12
131	INIAPG 126	TAP-3 x LCT-368	0.92	70.83	0.08	0	1.67	0	4.83	0	12
132	INIAPG 186	TAP-6 x UNAP-2	0.75	70.83	0.08	0	4.5	0	2.17	0	12
133	INIAPG 207	EET-58 x 2057	0.92	70.83	0	0	8.5	0.17	5.17	0.17	12
134	INIAPG 212	EET-58 x 2057	0.67	70.83	0	0	4.5	1.67	8.58	0	12
135	INIAPG 238	LCT-37 x AMAZ-11	0.5	70.83	0	0.08	3	0	4	0	12
136	INIAPG 305	LCT-46 x CUR-3	0.67	70.83	0.08	0	3.83	0	4.33	0	12
137	INIAPG 160	TAP-6 x UNAP-2	0.4	70	0.1	0.1	5.4	0	2.78	0	9
138	INIAPG 228	Gloria-3 x EB-10-13	0.83	68.75	0	0	4.17	0	3.33	0.08	12
139	INIAPG 306	Brisas-30 x EB-2237	0.45	68.18	0	0.18	3.36	0.36	7.18	0	11
140	INIAPG 246	CCN-51 x LCT-368	0.5	66.67	0	0	1.33	0	4	0	12
141	INIAPG 352	SIL-1 x D.147	0.58	66.67	0.17	0	2.58	0	5.55	0	11
142	INIAPG 161	LCT-46 x UNAP-2	0.73	65.91	0	0.09	3.73	0.17	9	0	6
143	INIAPG 048	TAP-3 x TAP-6	0.6	65	0	0.1	3.6	0	3.11	0	9
144	INIAPG 183	CUR-3 x LCT-368	0.83	64.58	0.08	0	2.92	0	4	0	12
145	INIAPG 395	CCN-51 x LCT-368	0.64	63.64	0	0	2.55	0.33	2.89	0	9
146	INIAPG 136	UNAP-2 x TIP-1	0.5	60.42	0	0.17	4.33	0	2.92	0	12
147	INIAPG 043	AMA-14 x CUR-3	0.8	57.5	0.3	0.2	4.8	0.89	2.22	0.33	9
148	INIAPG 345	Gloria-3 x EB-10-13	0.45	54.55	0	0.09	2.36	0	2.09	0	11
149	INIAPG 258	EET-233 x D.147	0.42	54.17	0	0	3.33	0.08	3.25	0	12
150	INIAPG 349	LCT-46 x TAP-12	0.5	54.17	0	0	3.83	0.25	3	0	12
151	INIAPG 370	LCT-46 x TIP-1	0.83	54.17	0	0	3.92	0	2.75	0	12
152	INIAPG 071	AMA-14 x TAP-12	0.44	50	0	0.11	4.33	0	3.57	0	7
153	INIAPG 170	CUR-3 x UNAP-2	0.42	50	0.08	0	2.33	0	2.75	0	12
154	INIAPG 191	TAP-6 x CUR-3	0.64	50	0	0	6.36	0	5.18	0	11
155	INIAPG 334	LCT-46 x TAP-12	0.58	50	0	0	16.08	0.18	4.18	0.45	11
156	INIAPG 388	Brisas-30 x EB-2237	0.64	50	0	0.09	8.64	1.09	9.91	0.18	11
157	INIAPG 419	JHVH-10	0.25	50	0	0	2.67	0	2.22	0	9
158	INIAPG 025	UNAP-2 x TIP-1	0.5	45.83	0	0	2	0	3.2	0	10
159	INIAPG 117	LCT-46 x UNAP-2	0.5	45.83	0	0	3.33	1.08	5.83	0.08	12
160	INIAPG 235	SIL-1 x D.147	0.42	45.83	0	0	3.08	0.55	4.45	0	11
161	INIAPG 376	LCT-46 x TAP-10	0.64	45.45	0	0.09	7.73	0	4.13	0	8
162	INIAPG 077	CUR-3 x LCT-368	0.67	44.44	0.11	0	2.89	0	5.38	0	8
163	INIAPG 218	LCT-37 x AMAZ-14	0.33	41.67	0	0.17	4.25	0	3.92	0	12
164	INIAPG 284	LCT-37-TIP-1	0.5	41.67	0	0	6.67	2.09	4	0.55	11
165	INIAPG 331	LCT-46 x AMAZ-14	0.42	41.67	0	0	3.33	0.08	2	0	12
166	INIAPG 373	EET-58 x 2416	0.33	39.58	0	0	2.5	0	6.33	0	12
167	INIAPG 144	LCT-46 x UNAP-2	0.42	37.5	0	0	3.25	0	4.4	0	10

No.	Clon	Familia	# Mazorcas sanas	Peso fresco (g)	# Mazorcas enfermas		# de Frutos		# de Escoba de bruja		Plantas evaluadas
					Con escoba de bruja	Con Monillia	Con Marchitez	Chiri-moya	Vege-tativa	Coji-nete	
168	INIAPG 150	UNAP-2 x TIP-1	0.42	37.5	0	0	5.42	0	2.75	0	12
169	INIAPG 188	CCN-51 x TIP-1	0.25	37.5	0.08	0	1.67	0	4.33	0	12
170	INIAPG 320	Gloria-3 x EB-10-13	0.42	37.5	0.17	0	3.25	0	5	0	12
171	INIAPG 060	TAP-6 x CUR-3	0.27	36.36	0.09	0	2.55	0	3.33	0	9
172	INIAPG 285	EET-58 x 2057	0.33	35.42	0	0	3.75	0	5.75	0	12
173	INIAPG 047	LCT-46 x UNAP-2	0.45	34.09	0	0	4.27	0.09	6.64	0	11
174	INIAPG 116	CUR-3 x UNAP-2	0.25	33.33	0	0	2.83	0	5	0	12
175	INIAPG 229	LCT-46 x TIP-1	0.42	33.33	0	0	2.58	0	2.27	0	11
176	INIAPG 240	LCT-46 x TIP-1	0.42	33.33	0	0	1	0	3	0	9
177	INIAPG 346	Gloria-3 x CCAT-1858	0.33	33.33	0	0	3.08	0.09	3.36	0.27	11
178	INIAPG 371	LCT-37 x EBC-148	0.17	33.33	0.08	0	5.83	0.92	10.25	0	12
179	INIAPG 080	LCT-46 x UNAP-2	0.27	31.82	0	0	3.55	0	7	0	11
180	INIAPG 279	EET-58 x 2416	0.27	31.82	0.09	0	1.09	0	3.18	0	11
181	INIAPG 054	TAP-12 x TIP-1	0.33	31.25	0	0	2.67	1.5	6	0	12
182	INIAPG 155	CUR-3 x UNAP-2	0.3	30	0	0	1.1	0	7.33	0	3
183	INIAPG 239	LCT-37 x AMAZ-11	0.25	29.17	0	0	3.42	0.18	6.45	0	11
184	INIAPG 248	LCT-37 x TAP-3	0.33	29.17	0	0	2.08	0	2	0	12
185	INIAPG 338	LCT-37-TIP-1	0.17	29.17	0.25	0	2.25	0	4.17	0	12
186	INIAPG 011	TAP-3 x LCT-368	0.33	27.08	0	0	2.75	0.33	8.58	0	12
187	INIAPG 202	LCT-46 x LCT-37	0.25	27.08	0.33	0.08	3.58	0	6.1	0	10
188	INIAPG 057	CCN-51 x 2057	0.33	25	0	0.08	3.33	0.58	6	0.08	12
189	INIAPG 123	TAP-10 x TIP-1	0.25	25	0	0	1.42	0	4.33	0	6
190	INIAPG 232	EET-233 x D.147	0.2	25	0	0	4.7	0	4.67	0	9
191	INIAPG 358	EET-58 x 2416	0.17	25	0	0	3.33	0	3.25	0	12
192	INIAPG 390	LCT-37 x AMAZ-11	0.25	25	0	0	2.42	0.18	2.64	0	11
193	INIAPG 042	TAP-12 x LCT-368	0.25	22.92	0	0	2.33	0	4.45	0	11
194	INIAPG 105	AMA-14 x CUR-3	0.25	22.92	0	0	3.58	0	5.33	0	12
195	INIAPG 138	UNAP-2 x TIP-1	0.33	22.92	0	0	6.83	0	3.25	0	12
196	INIAPG 141	TAP-3 x EBC-148	0.18	22.73	0	0.09	4.45	0.27	4.64	0	11
197	INIAPG 374	EET-233 x D.147	0.27	22.73	0	0	4.45	0	1.91	0	11
198	INIAPG 129	TAP-6 x UNAP-2	0.2	22.5	0	0	3.2	0	5.14	0	7
199	INIAPG 046	LCT-46 x UNAP-2	0.25	20.83	0	0	2.92	0	4.45	0	11
200	INIAPG 058	UNAP-2 x TIP-1	0.17	20.83	0	0	1.67	0	3	0	12
201	INIAPG 076	CUR-3 x LCT-368	0.25	20.83	0	0	1.33	0	3.11	0	9
202	INIAPG 140	TAP-10 x TIP-1	0.25	20.83	0	0	1.75	0	3.6	0	10
203	INIAPG 162	CCN-51 x TIP-1	0.25	20.83	0	0	1.5	0	4.33	0	12
204	INIAPG 201	TAP-6 x UNAP-2	0.25	20.83	0.08	0.17	1	0.2	5.6	0	10
205	INIAPG 260	Brisas-16 x CCAT-4688	0.25	20.83	0.25	0.08	3.42	0	3.67	0	12
206	INIAPG 270	EET-58 x 2416	0.25	20.83	0	0	2	0.25	3.58	0	12
207	INIAPG 283	LCT-37 x LCT-368	0.17	20.83	0	0	3.67	0.08	6.25	0.25	12
208	INIAPG 335	LCT-37 x LCT-368	0.25	20.83	0.08	0.08	2.42	0.08	5.42	0	12
209	INIAPG 368	CCN-51 x LCT-368	0.33	20.83	0	0	1.92	0	5.3	0	10
210	INIAPG 406	CUR-3	0.08	20.83	0	0	4.08	0.2	2.6	0	5
211	INIAPG 087	TAP-6 x UNAP-2	0.2	20	0	0	1.1	0	3.25	0	4
212	INIAPG 297	EET-233 x D.147	0.2	20	0	0	3.9	0	3.38	0	8
213	INIAPG 067	LCT-46 x UNAP-2	0.25	18.75	0	0.58	1.33	0	4.91	0	11
214	INIAPG 251	LCT-37 x AMAZ-11	0.25	18.75	0.08	0	2.92	0	4.5	0	12
215	INIAPG 287	LCT-37 x AMAZ-14	0.17	18.75	0	0	1.67	0	3.08	0	12
216	INIAPG 158	TAP-10 x TIP-1	0.09	18.18	0	0	1.45	0	3.14	0	7
217	INIAPG 225	LCT-37 x CUR-3	0.09	18.18	0	0	1	1.2	5.2	1.2	5
218	INIAPG 290	LCT-37 x UNAP-2	0.18	18.18	0	0	3.18	0	3.5	0	10
219	INIAPG 300	LCT-37 x TAP-3	0	18.18	0.27	0.09	1.27	0	4.33	0	6
220	INIAPG 008	CUR-3 x EBC-148	0.17	16.67	0	0	2.58	0	5.91	0	11
221	INIAPG 109	CCN-51 x TIP-1	0.17	16.67	0	0	1.25	0.08	4.5	0	12
222	INIAPG 135	TAP-12 x TIP-1	0.17	16.67	0	0	2.83	0	1.42	0	12
223	INIAPG 217	LCT-46 x TAP-12	0.17	16.67	0	0	10.92	0.64	6.64	0	11
224	INIAPG 309	LCT-46 x LCT-37	0.17	16.67	0.25	0.08	4.17	0	4.27	0	11

No.	Clon	Familia	# Mazorcas sanas	Peso fresco (g)	# Mazorcas enfermas		# de Frutos		# de Escoba de bruja		Plantas evaluadas
					Con escoba de bruja	Con Monillia	Con Marchitez	Chiri-moya	Vege-tativa	Coji-nete	
225	INIAPG 341	LCT-37 x AMAZ-14	0.17	16.67	0	0	2	0	3.27	0	11
226	INIAPG 375	LCT-37 x CUR-3	0.17	16.67	0	0	1.75	0	3.42	0	12
227	INIAPG 383	Brisas-13 x EB-2237	0.17	16.67	0	0	3.58	0	3.91	0	11
228	INIAPG 392	LCT-46 x TIP-1	0.17	16.67	0	0.08	3.75	0.08	4.83	0.08	12
229	INIAPG 398	LCT-37 x AMAZ-11	0.17	16.67	0.08	0.17	1.75	0	2.1	0	10
230	INIAPG 245	Brisas-16 x CCAT-4688	0.1	15	0	0	4.2	0	3.75	0	8
231	INIAPG 342	LCT-37 x AMAZ-14	0.17	14.58	0	0	3.42	0.25	4.75	0.08	12
232	INIAPG 286	LCT-37 x AMAZ-14	0.09	13.64	0	0	0.45	0	4.5	0	2
233	INIAPG 364	Brisas-30 x EB-2237	0.09	13.64	0	0	1.82	0	3.89	0	9
234	INIAPG 024	UNAP-2 x TIP-1	0.08	12.5	0.08	0	3	0.17	5.25	0	12
235	INIAPG 068	AMA-14 x CUR-3	0.17	12.5	0	0	3.33	0	3.5	0	10
236	INIAPG 107	CCN-51 x UNAP-2	0.08	12.5	0	0	2.75	0	3.18	0	11
237	INIAPG 130	TAP-12 x LCT-368	0.17	12.5	0	0	2.17	0	3.11	0	9
238	INIAPG 151	TAP-3 x TAP-12	0.08	12.5	0	0.17	2.25	0.08	1.58	0	12
239	INIAPG 221	EET-58 x 2416	0.08	12.5	0	0	4.25	0	4.73	0	11
240	INIAPG 259	Brisas-13 x EB-2237	0.13	12.5	0	0	1.13	0	1.25	0	8
241	INIAPG 293	CCN-51 x LCT-368	0.08	12.5	0	0	3.17	0	3.91	0	11
242	INIAPG 393	LCT-37 x TAP-3	0.17	12.5	0	0.08	0.5	0	2.55	0	11
243	INIAPG 070	TAP-3 x TAP-6	0.18	11.36	0	0	1.91	0	1.8	0	5
244	INIAPG 032	UNAP-2 x LCT-368	0.08	10.42	0	0	4.25	0	4	0	12
245	INIAPG 323	LCT-46 x TAP-10	0.17	10.42	0.08	0	1.58	0	4	0.08	12
246	INIAPG 366	EET-58 x 2057	0.17	10.42	0	0	1.42	0.33	9	0.17	12
247	INIAPG 386	LCT-37 x UNAP-2	0.08	10.42	0	0	2.75	0	3.33	0	12
248	INIAPG 023	UNAP-2 x TIP-1	0.1	10	0	0	4.4	0	2	0	9
249	INIAPG 412	TAP-3	0.1	10	0	0	0.3	0	3.14	0	7
250	INIAPG 139	AMA-14 x TAP-12	0.09	9.09	0	0.18	1.18	0	1.33	0	6
251	INIAPG 301	EET-233 x D.147	0.09	9.09	0	0	3.82	0	4.6	0	10
252	INIAPG 313	LCT-46 x AMAZ-14	0.09	9.09	0	0	0.36	0	4.5	0	2
253	INIAPG 324	Gloria-3 x EB-10-13	0.09	9.09	0	0	2	0	6.5	0	8
254	INIAPG 027	AMA-14 x TAP-12	0.08	8.33	0.08	0.17	3.17	0	1.67	0	9
255	INIAPG 065	TAP-6 x UNAP-2	0.08	8.33	0.08	0	4.17	0	2.6	0	10
256	INIAPG 098	AMA-14 x CUR-3	0.08	8.33	0	0	3.25	0.33	6.22	0	9
257	INIAPG 099	TAP-3 x TAP-12	0.08	8.33	0	0	1.83	0	1.43	0	7
258	INIAPG 133	TAP-3 x EBC-148	0.08	8.33	0	0	2.83	0	3.25	0	12
259	INIAPG 142	TAP-3 x EBC-148	0.08	8.33	0	0	2.58	0.09	5.27	0	11
260	INIAPG 157	LCT-46 x UNAP-2	0.08	8.33	0	0	10.33	0.08	5.42	0	12
261	INIAPG 165	UNAP-2 x TIP-1	0.08	8.33	0	0	4.17	0	2.42	0	12
262	INIAPG 172	AMA-11 x TAP-6	0.08	8.33	0	0	2.67	0.25	7.92	0	12
263	INIAPG 182	CUR-3 x EBC-148	0.08	8.33	0	0	2.67	0	4.82	0	11
264	INIAPG 194	AMA-14 x TAP-12	0.08	8.33	0	0	3.67	0	3.64	0	11
265	INIAPG 203	LCT-37 x UNAP-2	0.08	8.33	0	0.08	2.83	0	3.36	0	11
266	INIAPG 230	LCT-37 x AMAZ-14	0.08	8.33	0	0	4.92	0	4.08	0	12
267	INIAPG 244	CCN-51 x LCT-368	0.08	8.33	0	0	1.33	0	4	0	12
268	INIAPG 304	LCT-46 x TIP-1	0.17	8.33	0	0	7.75	0.17	4.75	0	12
269	INIAPG 336	LCT-37 x UNAP-2	0.08	8.33	0	0.08	1.83	0	1.92	0	12
270	INIAPG 385	LCT-37 x UNAP-2	0.08	8.33	0	0	4.75	0	2.58	0	12
271	INIAPG 409	EET-387	0.08	8.33	0	0	1.17	0	3	0	6
272	INIAPG 416	EET-103	0.08	8.33	0	0	2.42	0	5	0	12
273	INIAPG 052	TAP-3 x LCT-368	0.09	6.82	0	0.09	2.73	0	3.38	0	8
274	INIAPG 231	Brisas-13 x EB-2237	0.1	5	0	0	1.7	0	3.13	0	8
275	INIAPG 014	AMA-11 x TAP-6	0.09	4.55	0	0	3.27	0	2.56	0	9
276	INIAPG 357	LCT-37 x LCT-368	0.09	4.55	0	0	2.64	0.22	6.11	0	9
277	INIAPG 243	CCN-51 x LCT-368	0.08	4.17	0	0	0.42	0	4	0	7
278	INIAPG 253	LCT-37-TIP-1	0	4.17	0.17	0	2.33	0	2.36	0	11
279	INIAPG 312	LCT-46 x AMAZ-14	0.08	4.17	0	0	3.92	0	3.42	0	12
280	INIAPG 321	Gloria-3 x CCAT-1858	0.08	4.17	0	0	3.42	0.42	16.17	0.25	12
281	INIAPG 343	EET-233 x D.147	0.08	4.17	0	0	4	0	4.08	0	12

No.	Clon	Familia	# Mazorcas sanas	Peso fresco (g)	# Mazorcas enfermas		# de Frutos		# de Escoba de bruja		Plantas evaluadas
					Con escoba de bruja	Con Monillia	Con Marchitez	Chiri-moya	Vege-tativa	Coji-nete	
282	INIAPG 362	LCT-37 x LCT-368	0.08	4.17	0	0	2.08	0	3.08	0	12
283	INIAPG 146	CUR-3 x UNAP-2	0.08	2.08	0	0	7.42	0	4.25	0	12
284	INIAPG 001	CUR-3 x UNAP-2	0	0	0	0	2.83	0	2.9	0	10
285	INIAPG 002	CUR-3 x UNAP-2	0	0	0	0	2.33	0	2.82	0	11
286	INIAPG 005	LCT-46 x UNAP-2	0	0	0	0	1.58	0	2.86	0	7
287	INIAPG 007	TAP-10 x TAP-3	0	0	0	0	2	0.11	1.11	0	9
288	INIAPG 009	UNAP-2 x TIP-1	0	0	0.08	0	1.67	0	2.5	0	12
289	INIAPG 010	UNAP-2 x TIP-1	0	0	0	0	0.29	0	0.5	0	2
290	INIAPG 013	TAP-12 x TIP-1	0	0	0	0	3.14	0	1.33	0	6
291	INIAPG 015	TAP-10 x TIP-1	0	0	0	0	1.36	0	1.4	0	5
292	INIAPG 017	CUR-3 x LCT-368	0	0	0	0	2.83	0	5.42	0	12
293	INIAPG 019	UNAP-2 x LCT-368	0	0	0	0	2.92	0	5.09	0	11
294	INIAPG 022	TAP-12 x TIP-1	0	0	0	0	0.8	0	0.8	0	5
295	INIAPG 028	TAP-10 x TIP-1	0	0	0	0	1.36	0	1	0	6
296	INIAPG 033	UNAP-2 x LCT-368	0	0	0.08	0	1.92	0	2.92	0	12
297	INIAPG 034	CUR-3 x UNAP-2	0	0	0	0	4.27	0.27	5.18	0	11
298	INIAPG 037	UNAP-2 x TIP-1	0	0	0	0	3.09	0	3.64	0	11
299	INIAPG 039	CCN-51 x UNAP-2	0	0	0	0	0.27	0	3.33	0	3
300	INIAPG 041	AMA-11 x TAP-6	0	0	0	0	1.92	0	6.6	0	5
301	INIAPG 044	LCT-46 x UNAP-2	0	0	0	0	3.25	0	7.89	0	9
302	INIAPG 050	UNAP-2 x LCT-368	0	0	0	0	0.36	0	2.38	0	8
303	INIAPG 053	CCN-51 x UNAP-2	0	0	0	0	1.25	0	2.33	0	6
304	INIAPG 055	GLORIA-1 x EB-10-13	0	0	0	0	0.36	0	5.5	0	2
305	INIAPG 056	CCN-51 x CUR-3	0	0	0	0	1.25	0	2.82	0	11
306	INIAPG 061	UNAP-2 x LCT-368	0	0	0	0	1.83	0	3.33	0	12
307	INIAPG 063	AMA-14 x CUR-3	0	0	0	0	1.18	0	3.29	0	7
308	INIAPG 064	CUR-3 x EBC-148	0	0	0	0	2.33	0	5.38	0	8
309	INIAPG 066	TAP-10 x TIP-1	0	0	0	0	1.55	0	1.3	0	10
310	INIAPG 073	TAP-3 x TAP-12	0	0	0	0	0	0	3	0	1
311	INIAPG 074	UNAP-2 x TIP-1	0	0	0	0	2.58	0	3.45	0	11
312	INIAPG 078	CUR-3 x UNAP-2	0	0	0	0	1.58	0	8.17	0	12
313	INIAPG 079	CCN-51 x UNAP-2	0	0	0	0	0	0	4	0	1
314	INIAPG 088	GLORIA-1 x EB-22-37	0	0	0	0	0	0	0	0	1
315	INIAPG 089	UNAP-2 x TIP-1	0	0	0	0	2.75	0	2.9	0	10
316	INIAPG 090	GLORIA-1 x EB-10-13	0	0	0	0	1.17	0	2.64	0	11
317	INIAPG 100	TAP-3 x LCT-368	0	0	0	0	0	0	5	0	2
318	INIAPG 103	CCN-51 x CCAT-4998	0	0	0	0	0	0	0	0	0
319	INIAPG 104	AMA-14 x CUR-3	0	0	0	0	0.18	0.4	5.8	0.2	5
320	INIAPG 106	UNAP-2 x TIP-1	0	0	0	0.08	1.92	0	4.33	0	6
321	INIAPG 114	UNAP-2 x TIP-1	0	0	0	0	1.75	0	3.5	0	6
322	INIAPG 115	CUR-3 x UNAP-2	0	0	0	0	4.08	0	4.83	0	12
323	INIAPG 119	TAP-12 x LCT-368	0	0	0	0	0.33	0	3.33	0	3
324	INIAPG 121	LCT-46 x UNAP-2	0	0	0	0	3.22	0	1.67	0	6
325	INIAPG 122	AMA-14 x CUR-3	0	0	0	0	0	0	0	0	0
326	INIAPG 125	TAP-12 x TIP-1	0	0	0	0	2.44	0.67	2.71	0.33	6
327	INIAPG 127	AMA-14 x CUR-3	0	0	0	0	1.6	0	4.67	0	6
328	INIAPG 128	AMA-14 x CUR-3	0	0	0	0	0	0	5	0	1
329	INIAPG 132	TAP-3 x TAP-6	0	0	0	0	1.6	0	3.5	0	6
330	INIAPG 137	UNAP-2 x TIP-1	0	0	0	0	1.33	0	2.67	0	3
331	INIAPG 143	AMA-14 x CUR-3	0	0	0	0	0.4	0.17	3.67	0	6
332	INIAPG 145	UNAP-2 x LCT-368	0	0	0	0	3.5	0	4.27	0	11
333	INIAPG 147	TAP-12 x LCT-368	0	0	0	0	0.3	0	3.33	0	3
334	INIAPG 154	UNAP-2 x LCT-368	0	0	0	0	1.5	0	3.33	0	9
335	INIAPG 156	AMA-14 x CUR-3	0	0	0	0	2.25	0	5.22	0	9
336	INIAPG 159	TAP-6 x UNAP-2	0	0	0	0	5.83	0	4.92	0	12
337	INIAPG 166	CCN-51 x UNAP-2	0	0	0	0	2.25	0.09	4.55	0	11
338	INIAPG 168	CCN-51 x CUR-3	0	0	0	0	4	0	1.91	0	11

No.	Clon	Familia	# Mazorcas sanas	Peso fresco (g)	# Mazorcas enfermas		# de Frutos		# de Escoba de bruja		Plantas evaluadas
					Con escoba de bruja	Con Monillia	Con Marchitez	Chiri-moya	Vege-tativa	Coji-nete	
339	INIAPG 174	TAP-3 x TAP-12	0	0	0	0.17	2.5	0.17	3.58	0.08	12
340	INIAPG 176	TAP-3 x TAP-12	0	0	0	0	1.5	0	2.67	0	3
341	INIAPG 177	TAP-3 x EBC-148	0	0	0	0	0	0	6	0	3
342	INIAPG 180	CCN-51 x UNAP-2	0	0	0	0.09	2.36	0.13	3.63	0	8
343	INIAPG 184	TAP-3 x TAP-12	0	0	0	0	2.5	0	4.83	0	12
344	INIAPG 187	CUR-3 x EBC-148	0	0	0	0	2.25	0.17	7.75	0	12
345	INIAPG 192	CUR-3 x LCT-368	0	0	0	0	1	0	2	0	6
346	INIAPG 195	AMA-14 x CUR-3	0	0	0	0	2.27	0.13	1.5	0	8
347	INIAPG 196	CUR-3 x LCT-368	0	0	0	0	0	0	0	0	1
348	INIAPG 204	LCT-37-TIP-1	0	0	0	0	2.08	0	1.67	0	9
349	INIAPG 205	LCT-37 x TAP-3	0	0	0	0	0.7	0.8	5.6	0	5
350	INIAPG 206	Gloria-3 x EB-10-13	0	0	0	0	2	0.13	2.88	0	8
351	INIAPG 208	LCT-37-TIP-1	0	0	0	0	0.29	0	0	0	2
352	INIAPG 209	LCT-37-TIP-1	0	0	0	0	1.2	0	2.6	0	5
353	INIAPG 210	LCT-37-TIP-1	0	0	0.08	0	3.58	0	2.83	0	12
354	INIAPG 211	SIL-1 x D.147	0	0	0	0	3.75	0.08	5.67	0	12
355	INIAPG 214	LCT-37 x UNAP-2	0	0	0	0	4	0	4.75	0	12
356	INIAPG 219	LCT-37 x CUR-3	0	0	0	0	0.25	0	4.14	0	7
357	INIAPG 222	SNA 0512 x CCN-51	0	0	0	0	0	0	0	0	0
358	INIAPG 224	LCT-37 x CUR-3	0	0	0	0.17	3	0.09	3.45	0	11
359	INIAPG 233	LCT-37 x UNAP-2	0	0	0	0	2.27	0.09	5.18	0	11
360	INIAPG 236	SIL-1 x D.147	0	0	0	0	2.33	0.09	4.09	0	11
361	INIAPG 237	LCT-37-TIP-1	0	0	0	0	1.5	0	6.33	0	12
362	INIAPG 241	CCAT-4668 x CCN-51	0	0	0	0	0	0	0	0	0
363	INIAPG 250	LCT-46 x TIP-1	0	0	0	0	0.42	0	2.9	0	10
364	INIAPG 254	LCT-46 x LCT-37	0	0	0	0	3.33	0	4.8	0	10
365	INIAPG 255	Gloria-3 x CCAT-1858	0	0	0	0	1.36	0	0.88	0	8
366	INIAPG 256	LCT-37 x UNAP-2	0	0	0	0	2.08	0	3.09	0	11
367	INIAPG 262	Gloria-3 x CCAT-1858	0	0	0	0	1.82	0	5.4	0	5
368	INIAPG 263	LCT-46 x TIP-1	0.17	0	0	0	3.5	0	3.1	0	10
369	INIAPG 271	LCT-37 x EBC-148	0	0	0	0	2.75	0	5.17	0	12
370	INIAPG 272	LCT-37 x EBC-148	0	0	0	0.08	2.08	0.1	4.9	0	10
371	INIAPG 273	LCT-37 x CUR-3	0	0	0	0	0	0	5.33	0	3
372	INIAPG 274	LCT-37 x AMAZ-14	0	0	0	0	2	0	4.82	0	11
373	INIAPG 277	LCT-46 x AMAZ-14	0	0	0	0	0.83	0	5.67	0	3
374	INIAPG 278	LCT-46 x AMAZ-14	0	0	0	0	4.5	0	2.75	0	12
375	INIAPG 280	EET-58 x 2057	0	0	0	0	4.75	0.92	12.5	0	12
376	INIAPG 282	Brisas-30 x EB-2237	0	0	0	0	2.92	0	3.08	0	12
377	INIAPG 289	LCT-37 x CUR-3	0	0	0	0	0.92	0	4	0	6
378	INIAPG 291	LCT-37 x UNAP-2	0	0	0	0	2.25	0.09	2.18	0	11
379	INIAPG 294	CCN-51 x LCT-368	0	0	0	0	3.5	0	4.67	0	12
380	INIAPG 295	LCT-37 x AMAZ-11	0	0	0	0	1.42	0	1.5	0	12
381	INIAPG 296	LCT-37 x AMAZ-11	0	0	0	0	0	0	5	0	1
382	INIAPG 298	Gloria-3 x CCAT-1858	0	0	0	0	3.25	0	0.57	0	7
383	INIAPG 299	Brisas-30 x EB-2237	0	0	0	0	4.9	0	2.13	0	8
384	INIAPG 314	LCT-46 x CUR-3	0	0	0	0.08	4.58	0	2.75	0	12
385	INIAPG 319	Gloria-3 x EB-10-13	0	0	0	0	1.33	0	3	0	7
386	INIAPG 322	LCT-37 x TAP-3	0	0	0	0	4.42	0	3.92	0	12
387	INIAPG 325	Gloria-3 x EB-10-13	0	0	0	0	1.2	0	3.5	0	10
388	INIAPG 329	LCT-37 x AMAZ-14	0	0	0	0	2.92	0.36	8.64	0	11
389	INIAPG 332	CCAT-4668 x CCN-51	0	0	0	0	0	0	0	0	0
390	INIAPG 333	Brisas-16 x CCAT-4688	0	0	0	0	2.09	0.2	1.8	0	5
391	INIAPG 339	LCT-46 x TIP-1	0	0	0	0	2	0.08	2.75	0	12
392	INIAPG 347	Brisas-30 x EB-2237	0	0	0	0	0	0	1	0	1
393	INIAPG 356	LCT-37-TIP-1	0	0	0	0	3.33	0	2.82	0	11
394	INIAPG 361	EET-58 x 2057	0	0	0	0	0	0	0	0	0
395	INIAPG 367	LCT-46 x AMAZ-14	0	0	0	0	3.58	0.5	6.42	0	12

No.	Clon	Familia	# Mazorcas sanas	Peso fresco (g)	# Mazorcas enfermas		# de Frutos		# de Escoba de bruja		Plantas evaluadas
					Con escoba de bruja	Con Monillia	Con Marchitez	Chiri-moya	Vege-tativa	Coji-nete	
396	INIAPG 369	LCT-37 x CUR-3	0	0	0	0	3.8	0	2.3	0	10
397	INIAPG 372	EET-58 x 2416	0	0	0	0	0	0	3	0	1
398	INIAPG 381	LCT-37 x AMAZ-14	0	0	0	0	2.67	0.91	5.91	0	11
399	INIAPG 391	LCT-37 x AMAZ-11	0	0	0	0	3.5	0	4.91	0	11
400	INIAPG 396	EET-58 x 2416	0	0	0	0	2.5	0	3	0	11
401	INIAPG 397	EET-233 x D.147	0	0	0	0	0	0	8	0	1
402	INIAPG 399	CCN-51 x LCT-368	0	0	0	0	0	0	6	0	1
403	INIAPG 400	A-645	0	0	0	0	0	0	0	0	0
404	INIAPG 401	Amaz-11	0	0	0	0	1.42	0	4.8	0	5
405	INIAPG 402	Amaz-14	0	0	0	0	2.5	0	2.67	0	6
406	INIAPG 403	B-60	0	0	0	0	0	0	0	0	0
407	INIAPG 404	Brisas-13	0	0	0	0	0	0	0	0	0
408	INIAPG 405	CCN-51	0	0	0	0	0.27	0	2	0	1
409	INIAPG 407	D-147	0	0	0	0	0	0	0	0	0
410	INIAPG 408	EBC-148	0	0	0	0	1.08	0	1.67	0	6
411	INIAPG 410	LCT-368	0	0	0	0	0.5	0	1.6	0	5
412	INIAPG 411	SIL-1	0	0	0	0	0	0	0	0	0
413	INIAPG 413	TIP-1	0	0	0	0	0.91	0	0.2	0	5
414	INIAPG 414	UNAP-2	0	0	0	0	2.92	0	1.83	0	6
415	INIAPG 415	EET-19	0	0	0	0	0.58	0	11.17	0	6
416	INIAPG 417	SCA-6	0	0	0	0	0	0	0	0	0
417	INIAPG 418	A-2506	0	0	0	0	0.09	0	1	0	2
418	INIAPG 420	Testigo Huerta	0	0	0	0	0	0	0	0	0

Figure 4. An overview of a group of cocoa clones growing (derived from breeding populations 3 and 4) in the Lote Ganaderìa.

Tabla 9. Identificación de todos los clones (derivados de los grupos de progenies 5, 6 y 7) que están sembrándose en el Lote Las Malvinas.

Tratamiento	Cruce	Grupo
M 001	UNAP 2 x EBC-148	5
M 002	UNAP 2 x EBC-148	5
M 003	UNAP 2 x EBC-148	5
M 004	UNAP 2 x EBC-148	5
M 005	UNAP 2 x EBC-148	5
M 006	TIP 1 x A 2126	5
M 007	TIP 1 x A 2126	5
M 008	TIP 1 x A 2126	5
M 009	TIP 1 x A 2126	5
M 010	TIP 1 x A 2126	5
M 011	TIP 1 x EET-95	5
M 012	TIP 1 x EET-95	5
M 013	TIP 1 x EET-95	5
M 014	TIP 1 x EET-95	5
M 015	TIP 1 x EET-95	5
M 016	SNA 0405 x CCN 51	5
M 017	CUR 3 x LCT-368	5
M 018	CUR 3 x LCT-368	5
M 019	CUR 3 x LCT-368	5
M 020	CUR 3 x LCT-368	5
M 021	UNAP 2 x B 60	5
M 022	UNAP 2 x B 60	5
M 023	UNAP 2 x B 60	5
M 024	UNAP 2 x B 60	5
M 025	UNAP 2 x B 60	5
M 026	AMAZ 11 x B 60	5
M 027	AMAZ 11 x B 60	5
M 028	AMAZ 11 x B 60	5
M 029	AMAZ 11 x B 60	5
M 030	AMAZ 11 x B 60	5
M 031	AMAZ 11 x A 2699	5
M 032	AMAZ 11 x A 2699	5
M 033	AMAZ 11 x A 2699	5
M 034	AMAZ 11 x A 2699	5
M 035	AMAZ 11 x A 2699	5
M 036	TIP 1 x B 60	5
M 037	SNA 0405 x CCN 51	5
M 038	TIP 1 x B 60	5
M 039	TIP 1 x B 60	5
M 040	TIP 1 x B 60	5
M 041	AMAZ 11 x EET-95	6
M 042	AMAZ 11 x EET-95	6
M 043	AMAZ 11 x EET-95	6
M 044	AMAZ 11 x EET-95	6
M 045	AMAZ 11 x EET-95	6
M 046	TAP 3 x EBC 148	6
M 047	TAP 3 x EBC 148	6
M 048	TAP 3 x EBC 148	6
M 049	TAP 3 x EBC 148	6
M 050	TAP 3 x EBC 148	6

Tratamiento	Cruce	Grupo
M 051	TAP 3 x A 645	6
M 052	TAP 3 x A 645	6
M 053	TAP 3 x A 645	6
M 054	TAP 3 x A 645	6
M 055	TAP 3 x A 645	6
M 056	AMAZ 14 x D 147	6
M 057	AMAZ 14 x D 147	6
M 058	AMAZ 14 x D 147	6
M 059	AMAZ 14 x D 147	6
M 060	AMAZ 14 x D 147	6
M 061	UNAP 2 x EET-95	6
M 062	UNAP 2 x EET-95	6
M 063	UNAP 2 x EET-95	6
M 064	UNAP 2 x EET-95	6
M 065	UNAP 2 x EET-95	6
M 066	AMAZ 11 x LCT 368	5
M 067	AMAZ 11 x LCT 368	5
M 068	AMAZ 11 x LCT 368	5
M 069	AMAZ 11 x LCT 368	5
M 070	AMAZ 11 x LCT 368	5
M 071	AMAZ 14 x PA 107	5
M 072	AMAZ 14 x PA 107	5
M 073	AMAZ 14 x PA 107	5
M 074	AMAZ 14 x PA 107	5
M 075	AMAZ 14 x PA 107	5
M 076	UNAP 2 x A 645	5
M 077	UNAP 2 x A 645	5
M 078	UNAP 2 x A 645	5
M 079	UNAP 2 x A 645	5
M 080	UNAP 2 x A 645	5
M 081	TAP 6 x A 645	5
M 082	TAP 6 x A 645	5
M 083	TAP 6 x A 645	5
M 084	TAP 6 x A 645	5
M 085	TAP 6 x A 645	5
M 086	TAP-3 x D-147	5
M 087	TAP-3 x D-147	5
M 088	TAP-3 x D-147	5
M 089	TAP-3 x D-147	5
M 090	TAP-3 x D-147	5
M 091	TAP-6 x B 60	5
M 092	TAP-6 x B 60	5
M 093	TAP-6 x B 60	5
M 094	TAP-6 x B 60	5
M 095	TAP-6 x B 60	5
M 096	UNAP 2 x LCT-368	5
M 097	UNAP 2 x LCT-368	5
M 098	UNAP 2 x LCT-368	5
M 099	UNAP 2 x LCT-368	5
M 100	UNAP 2 x LCT-368	5

Tratamiento	Cruce	Grupo
M 101	AMAZ 11 x A 2748	5
M 102	AMAZ 11 x A 2748	5
M 103	AMAZ 11 x A 2748	5
M 104	AMAZ 11 x A 2748	5
M 105	AMAZ 11 x A 2748	5
M 106	CCAT 4998 x A 2699	5
M 107	CCAT 4998 x A 2699	5
M 108	CCAT 4998 x A 2699	5
M 109	CCAT 4998 x A 2699	5
M 110	CCAT 4998 x A 2699	5
M 111	TIP 1 x PA 107	5
M 112	TIP 1 x PA 107	5
M 113	TIP 1 x PA 107	5
M 114	TIP 1 x PA 107	5
M 115	TIP 1 x PA 107	5
M 116	TIP 1 x A 2748	5
M 117	TIP 1 x A 2748	5
M 118	TIP 1 x A 2748	5
M 119	TIP 1 x A 2748	5
M 120	TIP 1 x A 2748	5
M 121	TIP 1 x LCT-368	5
M 122	TIP 1 x LCT-368	5
M 123	TIP 1 x LCT-368	5
M 124	TIP 1 x LCT-368	5
M 125	TIP 1 x LCT-368	5
M 126	AMAZ 11 x A 2126	5
M 127	AMAZ 11 x A 2126	5
M 128	AMAZ 11 x A 2126	5
M 129	AMAZ 11 x A 2126	5
M 130	AMAZ 11 x A 2126	5
M 131	AMAZ 11 x EBC 148	5
M 132	AMAZ 11 x EBC 148	5
M 133	AMAZ 11 x EBC 148	5
M 134	AMAZ 11 x EBC 148	5
M 135	AMAZ 11 x EBC 148	5
M 136	AMAZ 14 x A 645	6
M 137	AMAZ 14 x A 645	6
M 138	AMAZ 14 x A 645	6
M 139	AMAZ 14 x A 645	6
M 140	AMAZ 14 x A 645	6
M 141	TAP 3 x B 60	6
M 142	TAP 3 x B 60	6
M 143	SNA 0405 x CCN 51	6
M 144	TAP 3 x B 60	6
M 145	TAP 3 x B 60	6
M 146	CUR 3 x D 147	6
M 147	CUR 3 x D 147	6
M 148	CUR 3 x D 147	6
M 149	CUR 3 x D 147	6
M 150	CUR 3 x D 147	6

Tratamiento	Cruce	Grupo
M 151	AMAZ 14 x B 60	6
M 152	AMAZ 14 x B 60	6
M 153	AMAZ 14 x B 60	6
M 154	AMAZ 14 x B 60	6
M 155	AMAZ 14 x B 60	6
M 156	TAP 3 x A 2634	6
M 157	TAP 3 x A 2634	6
M 158	TAP 3 x A 2634	6
M 159	TAP 3 x A 2634	6
M 160	TAP 3 x A 2634	6
M 161	UNAP 2 x PA 107	6
M 162	UNAP 2 x PA 107	6
M 163	UNAP 2 x PA 107	6
M 164	UNAP 2 x PA 107	6
M 165	UNAP 2 x PA 107	6
M 166	CCN 51 x LCT 368	6
M 167	CCN 51 x LCT 368	6
M 168	CCN 51 x LCT 368	6
M 169	CCN 51 x LCT 368	6
M 170	CCN 51 x LCT 368	6
M 171	CCN 51 x D 147	6
M 172	CCN 51 x D 147	6
M 173	CCN 51 x D 147	6
M 174	CCN 51 x D 147	6
M 175	SNA 0405 x CCN 51	6
M 176	CCN 51 x PA 107	6
M 177	CCN 51 x PA 107	6
M 178	CCN 51 x PA 107	6
M 179	CCN 51 x CCAT 4998	6
M 180	CCN 51 x PA 107	6
M 181	EET 233 x A 645	6
M 182	EET 233 x A 645	6
M 183	EET 233 x A 645	6
M 184	EET 233 x A 645	6
M 185	EET 233 x A 645	6
M 186	EET 387 x EET 416	6
M 187	EET 387 x EET 416	6
M 188	EET 387 x EET 416	6
M 189	EET 387 x EET 416	6
M 190	EET 387 x EET 416	6
M 191	CCN 51 x A 645	6
M 192	CCN 51 x A 645	6
M 193	CCN 51 x A 645	6
M 194	CCN 51 x A 645	6
M 195	CCN 51 x A 645	6
M 196	AMAZ 14 x EBC 148	6
M 197	AMAZ 14 x EBC 148	6
M 198	AMAZ 14 x EBC 148	6
M 199	AMAZ 14 x EBC 148	6
M 200	AMAZ 14 x EBC 148	6

Tratamiento	Cruce	Grupo
M 201	EET 233 x PA 150	6
M 202	EET 233 x PA 150	6
M 203	CCN 51 x CCAT 4998	6
M 204	EET 233 x PA 150	6
M 205	EET 233 x PA 150	6
M 206	EET 387 x B 60	6
M 207	EET 387 x B 60	6
M 208	EET 387 x B 60	6
M 209	EET 387 x B 60	6
M 210	EET 387 x B 60	6
M 211	SNA 0708 x B 60	6
M 212	SNA 0708 x B 60	6
M 213	SNA 0708 x B 60	6
M 214	SNA 0708 x B 60	6
M 215	SNA 0708 x B 60	6
M 216	CCN 51 x B 60	6
M 217	CCN 51 x B 60	6
M 218	CCN 51 x B 60	6
M 219	CCN 51 x B 60	6
M 220	CCN 51 x B 60	6
M 221	CCN 51 x EBC 148	6
M 222	CCN 51 x EBC 148	6
M 223	CCN 51 x EBC 148	6
M 224	CCN 51 x EBC 148	6
M 225	CCN 51 x EBC 148	6
M 226	CCN 51 x A 2076	6
M 227	CCN 51 x CCAT 4998	6
M 228	CCN 51 x CCAT 4998	6
M 229	CCN 51 x A 2076	6
M 230	CCN 51 x A 2076	6
M 231	TAP 6 x EBC 148	6
M 232	TAP 6 x EBC 148	6
M 233	TAP 6 x EBC 148	6
M 234	TAP 6 x EBC 148	6
M 235	TAP 6 x EBC 148	6
M 236	AMAZ 14 x A 2076	6
M 237	AMAZ 14 x A 2076	6
M 238	AMAZ 14 x A 2076	6
M 239	AMAZ 14 x A 2076	6
M 240	AMAZ 14 x A 2076	6
M 241	CUR 3 x EBC 148	6
M 242	CUR 3 x EBC 148	6
M 243	CUR 3 x EBC 148	6
M 244	CUR 3 x EBC 148	6
M 245	CUR 3 x EBC 148	6
M 246	AMAZ 14 x A 2748	6
M 247	CCAT 4668 x CCN 51	6
M 248	AMAZ 14 x A 2748	6
M 249	AMAZ 14 x A 2748	6
M 250	AMAZ 14 x A 2748	6

Tratamiento	Cruce	Grupo
M 301	SNA 0707 x A 645	6
M 302	SNA 0707 x A 645	6
M 303	SNA 0707 x A 645	6
M 304	SNA 0707 x A 645	6
M 305	SNA 0707 x A 645	6
M 306	SNA 0708 x A 2076	6
M 307	SNA 0708 x A 2076	6
M 308	SNA 0708 x A 2076	6
M 309	SNA 0708 x A 2076	6
M 310	SNA 0708 x A 2076	6
M 311	SNA 0512 x CCN 51	6
M 312	TAP 6 x EET 446	6
M 313	TAP 6 x EET 446	6
M 314	TAP 6 x EET 446	6
M 315	TAP 6 x EET 446	6
M 316	SNA 0512 x CCN 51	6
M 317	TAP 6 x A 2699	6
M 318	TAP 6 x A 2699	6
M 319	TAP 6 x A 2699	6
M 320	TAP 6 x A 2699	6
M 321	AMAZ 11 x A 2462	6
M 322	AMAZ 11 x A 2462	6
M 323	AMAZ 11 x A 2462	6
M 324	AMAZ 11 x A 2462	6
M 325	AMAZ 11 x A 2462	6
M 326	EET 387 x EBC 148	6
M 327	EET 387 x EBC 148	6
M 328	EET 387 x EBC 148	6
M 329	EET 387 x EBC 148	6
M 330	EET 387 x EBC 148	6
M 331	CCAT 1858 x D 147	6
M 332	CCAT 1858 x D 147	6
M 333	CCAT 1858 x D 147	6
M 334	CCAT 1858 x D 147	6
M 335	CCAT 1858 x D 147	6
M 336	CCAT 1858 x EET 95	6
M 337	SNA 0512 x CCN 51	6
M 338	CCAT 1858 x EET 95	6
M 339	SNA 0512 x CCN 51	6
M 340	CCAT 1858 x EET 95	6
M 341	CCN 51 x IMC 57	6
M 342	CCN 51 x IMC 57	6
M 343	CCN 51 x IMC 57	6
M 344	CCN 51 x IMC 57	6
M 345	CCN 51 x IMC 57	6
M 346	CCN 51 x EET 446	7
M 347	CCN 51 x EET 446	7
M 348	CCN 51 x EET 446	7
M 349	CCN 51 x EET 446	7
M 350	CCN 51 x EET 446	7

Tratamiento	Cruce	Grupo
M 351	EET 387 x B 60	7
M 352	EET 387 x B 60	7
M 353	EET 387 x B 60	7
M 354	EET 387 x B 60	7
M 355	EET 387 x B 60	7
M 356	TAP 6 x D 147	7
M 357	TAP 6 x D 147	7
M 358	TAP 6 x D 147	7
M 359	TAP 6 x D 147	7
M 360	TAP 6 x D 147	7
M 361	SIL 1 x A 2126	7
M 362	SIL 1 x A 2126	7
M 363	SIL 1 x A 2126	7
M 364	SIL 1 x A 2126	7
M 365	SIL 1 x A 2126	7
M 366	CCN 51 x A 2462	7
M 367	CCN 51 x A 2462	7
M 368	CCN 51 x A 2462	7
M 369	CCN 51 x A 2462	7
M 370	CCN 51 x A 2462	7
M 371	CCN 51 x CCAT 1119	7
M 372	CCN 51 x CCAT 1119	7
M 373	CCN 51 x CCAT 1119	7
M 374	CCN 51 x CCAT 1119	7
M 375	CCN 51 x CCAT 1119	7
M 376	EET 387 x PA 107	7
M 377	EET 387 x PA 107	7
M 378	EET 387 x PA 107	7
M 379	EET 387 x PA 107	7
M 380	EET 387 x PA 107	7
M 381	CCAT 1858 x EET 544	7
M 382	CCAT 1858 x EET 544	7
M 383	CCAT 1858 x EET 544	7
M 384	CCAT 1858 x EET 544	7
M 385	CCAT 1858 x EET 544	7
M 386	UNAP 2 x A 2634	7
M 387	UNAP 2 x A 2634	7
M 388	UNAP 2 x A 2634	7
M 389	UNAP 2 x A 2634	7
M 390	UNAP 2 x A 2634	7
M 391	AMAZ 11 x PA 107	7
M 392	AMAZ 11 x PA 107	7
M 393	AMAZ 11 x PA 107	7
M 394	AMAZ 11 x PA 107	7
M 395	AMAZ 11 x PA 107	7
M 396	UNAP 2 x EET 544	7
M 397	UNAP 2 x EET 544	7
M 398	UNAP 2 x EET 544	7
M 399	UNAP 2 x EET 544	7
M 400	UNAP 2 x EET 544	7

Tratamiento	Cruce	Grupo
M 401	CCN 51 x SNA 0405	7
M 402	EET 233 x A 2076	7
M 403	EET 233 x A 2076	7
M 404	EET 233 x A 2076	7
M 405	EET 233 x A 2076	7
M 406	CCAT 1858 x A 2076	7
M 407	CCAT 1858 x A 2076	7
M 408	CCAT 1858 x A 2076	7
M 409	CCAT 1858 x A 2076	7
M 410	CCAT 1858 x A 2076	7
M 411	CCN 51 x EET 450	7
M 412	CCN 51 x EET 450	7
M 413	CCN 51 x EET 450	7
M 414	CCN 51 x EET 450	7
M 415	CCN 51 x EET 450	7
M 416	CCN 51 x A 2126	7
M 417	CCN 51 x A 2126	7
M 418	CCN 51 x A 2126	7
M 419	CCN 51 x A 2126	7
M 420	CCN 51 x A 2126	7
M 421		
M 422		
M 423		
M 424		
M 425		
M 426	EET-103	T
M 427	CCN-51	T
M 428	EET-95	T
M 429	NAVES 8	T
M 430	NAVES 6	T
M 431	GRISCAR	T
M 432	EET 400 X A 2699	8
M 433	EET 400 X A 2699	8
M 434	EET 400 X A 2699	8
M 435	EET 400 X A 2699	8
M 436	EET 400 X A 2699	8
M 437	EET 400 X A 645	8
M 438	EET 400 X A 645	8
M 439	EET 400 X A 645	8
M 440	EET 400 X A 645	8
M 441	EET 400 X A 645	8
M 442	EET 233 X EET 95	8
M 443	EET 233 X EET 95	8
M 444	EET 233 X EET 95	8
M 445	EET 233 X EET 95	8
M 446	EET 233 X EET 95	8
M 447	AMAZ 11 X EET 450	8
M 448	AMAZ 11 X EET 450	8
M 449	AMAZ 11 X EET 450	8
M 450	AMAZ 11 X EET 450	8

Tratamiento	Cruce	Grupo
M 451	AMAZ 11 X EET 450	8
M 452	AMAZ 11 X EET 446	8
M 453	AMAZ 11 X EET 446	8
M 454	AMAZ 11 X EET 446	8
M 455	AMAZ 11 X EET 446	8
M 456	AMAZ 11 X EET 446	8
M 457	SIL 1 X B 60	8
M 458	SIL 1 X B 60	8
M 459	SIL 1 X B 60	8
M 460	SIL 1 X B 60	8
M 461	SIL 1 X B 60	8
M 462	AMAZ 11 X EET 416	8
M 463	AMAZ 11 X EET 416	8
M 464	AMAZ 11 X EET 416	8
M 465	AMAZ 11 X EET 416	8
M 466	SNA 0707 X EET 446	8
M 467	SNA 0707 X EET 446	8
M 468	SNA 0707 X EET 446	8
M 469	SNA 0707 X EET 446	8
M 470	SNA 0707 X EET 446	8
M 471	EET 233 X EET 450	8
M 472	EET 233 X EET 450	8
M 473	EET 233 X EET 450	8
M 474	EET 233 X EET 450	8
M 475	EET 233 X EET 450	8
M 476	AMAZ 14 X EET 450	8
M 477	AMAZ 14 X EET 450	8
M 478	AMAZ 14 X EET 450	8
M 479	AMAZ 14 X EET 450	8
M 480	AMAZ 14 X EET 450	8
M 481	EET 387 X EET 544	8
M 482	EET 387 X EET 544	8
M 483	EET 387 X EET 544	8
M 484	EET 387 X EET 544	8
M 485	EET 387 X EET 544	8
M 486	EET 400 X A 2634	8
M 487	EET 400 X A 2634	8
M 488	EET 400 X A 2634	8
M 489	EET 400 X A 2634	8
M 490	EET 400 X A 2634	8
M 491	EET 233 X EET 446	8
M 492	EET 233 X EET 446	8
M 493	EET 233 X EET 446	8
M 494	EET 233 X EET 446	8
M 495	CCAT 1858 X EET 450	8
M 496	CCAT 1858 X EET 450	8
M 497	CCAT 1858 X EET 450	8
M 498	CCAT 1858 X EET 450	8
M 499	CCAT 1858 X EET 450	8
M 500	EET 544 X B 60	8

Tratamiento	Cruce	Grupo
M 551	AMAZ 11 X EET 462	8
M 552	UNAP 2 X EET 450	8
M 553	UNAP 2 X EET 450	8
M 554	UNAP 2 X EET 450	8
M 555	CCN 51 X EET 446	8
M 556	CCN 51 X EET 446	8
M 557	CCN 51 X EET 446	8
M 558	CCN 51 X EET 446	8
M 559	CCN 51 X EET 446	8
M 560	CCAT 1858 X D 147	8
M 561	CCAT 1858 X D 147	8
M 562	CCAT 1858 X D 147	8
M 563	CCAT 1858 X D 147	8
M 564	CUR 3 X A 2076	8
M 565	CUR 3 X A 2076	8
M 566	CUR 3 X A 2076	8
M 567	CUR 3 X A 2076	8
M 568	CUR 3 X A 2076	8
M 569	AMAZ 14 X EET 446	8
M 570	AMAZ 14 X EET 446	8
M 571	AMAZ 14 X EET 446	8
M 572	AMAZ 14 X EET 446	8
M 573	AMAZ 14 X EET 446	8
M 574	EET 233 X D 147	8
M 575	EET 233 X D 147	8
M 576	EET 233 X D 147	8
M 577	EET 233 X D 147	8
M 578	EET 233 X D 147	8
M 579	EET 233 X B 60	8
M 580	EET 233 X B 60	8
M 581	EET 233 X B 60	8
M 582	EET 233 X B 60	8
M 583	EET 233 X B 60	8
M 584	SNA 0707 X EET 416	8
M 585	SNA 0707 X EET 416	8
M 586	SNA 0707 X EET 416	8
M 587	SNA 0707 X EET 416	8
M 588	SNA 0707 X EET 416	8
M 589	EET 233 X EET 416	8
M 590	EET 233 X EET 416	8
M 591	EET 233 X EET 416	8
M 592	EET 233 X EET 416	8
M 593	EET 233 X EET 416	8
M 594	EET 387 X PA 107	8
M 595	EET 387 X PA 107	8
M 596	EET 387 X PA 107	8
M 597	EET 387 X PA 107	8
M 598	EET 387 X PA 107	8
M 599	SNA 0707 X B 60	8
M 600	SNA 0707 X B 60	8

Tratamiento	Cruce	Grupo
M 601	SNA 0707 X B 60	8
M 602	SNA 0707 X B 60	8
M 603	SNA 0707 X B 60	8
M 604	SNA 0707 X EET 450	8
M 605	SNA 0707 X EET 450	8
M 606	SNA 0707 X EET 450	8
M 607	SNA 0707 X EET 450	8
M 608	SNA 0707 X EET 450	8
M 609	EET 544 X EET 450	8
M 610	EET 544 X EET 450	8
M 611	EET 544 X EET 450	8
M 612	EET 544 X EET 450	8
M 613	EET 544 X EET 450	8
M 614	UNAP 2 X D 147	8
M 615	UNAP 2 X D 147	8
M 616	UNAP 2 X D 147	8
M 617	UNAP 2 X D 147	8
M 618	UNAP 2 X D 147	8
M 619	CCAT 1858 X B 60	8
M 620	CCAT 1858 X B 60	8
M 621	CCAT 1858 X B 60	8
M 622	CCAT 1858 X B 60	8
M 623	CCAT 1858 X B 60	8
M 624	TIP 1 X EET 462	8
M 625	TIP 1 X EET 462	8
M 626	TIP 1 X EET 462	8
M 627	TIP 1 X EET 462	8
M 628	EET 387 X PA 150	8
M 629	EET 387 X PA 150	8
M 630	EET 387 X PA 150	8
M 631	EET 387 X PA 150	8
M 632	EET 387 X PA 150	8
M 633	CCAT 1858 X EBC 148	8
M 634	CCAT 1858 X EBC 148	8
M 635	CCAT 1858 X EBC 148	8
M 636	CCAT 1858 X EBC 148	8
M 637	CCAT 1858 X EBC 148	8
M 638	CUR 3 X EET 416	8
M 639	CUR 3 X EET 416	8
M 640	CUR 3 X EET 416	8
M 641	CUR 3 X EET 416	8
M 642	CUR 3 X EET 416	8
M 643	UNAP 2 X EET 446	8
M 644	UNAP 2 X EET 446	8
M 645	UNAP 2 X EET 446	8
M 646	UNAP 2 X EET 446	8
M 647	UNAP 2 X EET 446	8
M 648	CCAT 1858 X D 147	8
M 649	EET 400 X EET 416	8
M 650	EET 400 X EET 416	8

Tratamiento	Cruce	Grupo
M 651	EET 400 X EET 416	8
M 652	EET 400 X EET 416	8
M 653	TIP 1 X EET 450	8
M 654	TIP 1 X EET 450	8
M 655	TIP 1 X EET 450	8
M 656	TIP 1 X EET 450	8
M 657	AMAZ 11 X IMC 57	8
M 658	AMAZ 11 X IMC 57	8
M 659	AMAZ 11 X IMC 57	8
M 660	AMAZ 11 X IMC 57	8
M 661	AMAZ 11 X IMC 57	8
M 662	AMAZ 14 X EET 554	8
M 663	AMAZ 14 X EET 554	8
M 664	AMAZ 14 X EET 554	8
M 665	AMAZ 14 X EET 554	8
M 666	AMAZ 14 X EET 554	8
M 667	EET 400 X LCT 368	8
M 668	EET 400 X LCT 368	8
M 669	EET 400 X LCT 368	8
M 670	EET 400 X LCT 368	8
M 671	EET 400 X LCT 368	8
M 672	EET 400 X D 147	8
M 673	EET 400 X D 147	8
M 674	EET 400 X D 147	8
M 675	EET 400 X D 147	8
M 676	EET 400 X D 147	8
M 677	EET 400 X A 2076	8
M 678	EET 400 X A 2076	8
M 679	EET 400 X A 2076	8
M 680	EET 400 X A 2076	8
M 681	EET 400 X A 2076	8
M 682	EET 544 X EET 416	8
M 683	EET 544 X EET 416	8
M 684	EET 544 X EET 416	8
M 685	EET 544 X EET 416	8
M 686	EET 544 X EET 416	8
M 687	CCAT 1858 X EET 95	8
M 688	CCAT 1858 X EET 95	8
M 689	CCAT 1858 X EET 95	8
M 690	CCAT 1858 X EET 95	8
M 691	CCAT 1858 X EET 95	8
M 692	SIL 1 X EET 95	8
M 693	SIL 1 X EET 95	8
M 694	SIL 1 X EET 95	8
M 695	SIL 1 X EET 95	8
M 696	SIL 1 X EET 95	8
M 697	CUR 3 X B 60	8
M 698	CUR 3 X B 60	8
M 699	CUR 3 X B 60	8
M 700	CUR 3 X B 60	8

Tratamiento	Cruce	Grupo
M 701	CUR 3 X B 60	8
M 702	TIP 1 X EET 416	8
M 703	TIP 1 X EET 416	8
M 704	TIP 1 X EET 416	8
M 705	TIP 1 X EET 416	8
M 706	TIP 1 X EET 416	8
M 707	EET 387 X EBC 148	8
M 708	EET 387 X EBC 148	8
M 709	EET 387 X EBC 148	8
M 710	EET 387 X EBC 148	8
M 711	EET 387 X EBC 148	8
M 712	EET 387 X D 147	8
M 713	EET 387 X D 147	8
M 714	EET 387 X D 147	8
M 715	EET 387 X D 147	8
M 716	EET 387 X D 147	8
M 717	TAP 6 X EET 462	8
M 718	TAP 6 X EET 462	8
M 719	TAP 6 X EET 462	8
M 720	TAP 6 X EET 462	8
M 721	TAP 6 X EET 462	8
M 722	TAP 6 X PA 107	8
M 723	TAP 6 X PA 107	8
M 724	TAP 6 X PA 107	8
M 725	TAP 6 X PA 107	8
M 726	TAP 6 X PA 107	8
M 727	UNAP 2 X EET 416	8
M 728	UNAP 2 X EET 416	8
M 729	UNAP 2 X EET 416	8
M 730	UNAP 2 X EET 416	8
M 731	UNAP 2 X EET 416	8
M 732	AMAZ 14 X EET 416	8
M 733	AMAZ 14 X EET 416	8
M 734	AMAZ 14 X EET 416	8
M 735	AMAZ 14 X EET 416	8
M 736	AMAZ 14 X EET 416	8
M 737	CUR 3 X A 2634	8
M 738	CUR 3 X A 2634	8
M 739	CUR 3 X A 2634	8
M 740	CUR 3 X A 2634	8
M 741	CUR 3 X A 2634	8
M 742	CCAT 1858 X LCT 368	8
M 743	CCAT 1858 X LCT 368	8
M 744	CCAT 1858 X LCT 368	8
M 745	CCAT 1858 X LCT 368	8
M 746	CCAT 1858 X LCT 368	8
M 747	EET 400 X EET 450	8
M 748	EET 400 X EET 450	8
M 749	EET 400 X EET 450	8
M 750	EET 400 X EET 450	8

Tratamiento	Cruce	Grupo
M 801	UNAP 2 X PA 150	8
M 802	CUR 3 X EET 450	8
M 803	CUR 3 X EET 450	8
M 804	CUR 3 X EET 450	8
M 805	CUR 3 X EET 450	8
M 806	CUR 3 X EET 450	8
M 807	AMAZ 11 X PA 150	8
M 808	AMAZ 11 X PA 150	8
M 809	AMAZ 11 X PA 150	8
M 810	AMAZ 11 X PA 150	8
M 811	AMAZ 11 X PA 150	8
M 812	EET 400 X EET 544	8
M 813	EET 400 X EET 544	8
M 814	EET 400 X EET 544	8
M 815	EET 400 X EET 544	8
M 816	EET 400 X EET 544	8
M 817	EET 400 X EBC 148	8
M 818	EET 400 X EBC 148	8
M 819	EET 400 X EBC 148	8
M 820	EET 400 X EBC 148	8
M 821	EET 400 X EBC 148	8
M 822	CCAT 1858 X PA 107	8
M 823	CCAT 1858 X PA 107	8
M 824	CCAT 1858 X PA 107	8
M 825	CCAT 1858 X PA 107	8
M 826	CCAT 1858 X PA 107	8
M 827	EET 387 X EET 462	8
M 828	EET 387 X EET 462	8
M 829	EET 387 X EET 462	8
M 830	EET 387 X EET 462	8
M 831	EET 387 X EET 462	8
M 832	CCN 51 X EET 462	8
M 833	CCN 51 X EET 462	8
M 834	CCN 51 X EET 462	8
M 835	CCN 51 X EET 462	8
M 836	CCN 51 X EET 462	8
M 837	EET 233 X EET 462	8
M 838	EET 233 X EET 462	8
M 839	EET 233 X EET 462	8
M 840	EET 233 X EET 462	8
M 841	EET 233 X EET 462	8
M 842	EET 387 X A 2076	8
M 843	EET 387 X A 2076	8
M 844	EET 387 X A 2076	8
M 845	EET 387 X A 2076	8
M 846	EET 387 X A 2076	8
M 847	CCAT 1858 X EET 416	8
M 848	CCAT 1858 X EET 416	8
M 849	CCAT 1858 X EET 416	8
M 850	CCAT 1858 X EET 416	8

Tratamiento	Cruce	Grupo
M 851	CCAT 1858 X EET 416	8
M 852	EET 387 X EET 446	8
M 853	EET 387 X EET 446	8
M 854	EET 387 X EET 446	8
M 855	EET 387 X EET 446	8
M 856	EET 387 X EET 446	8
M 857	EET 400 X A 2126	8
M 858	EET 400 X A 2126	8
M 859	EET 400 X A 2126	8
M 860	EET 400 X A 2126	8
M 861	EET 400 X A 2126	8
M 862	EET 544 X EET 446	8
M 863	EET 544 X EET 446	8
M 864	EET 544 X EET 446	8
M 865	EET 544 X EET 446	8
M 866	EET 544 X EET 446	8
M 867	AMAZ 11 X EET 544	8
M 868	AMAZ 11 X EET 544	8
M 869	AMAZ 11 X EET 544	8
M 870	AMAZ 11 X EET 544	8
M 871	AMAZ 11 X EET 544	8
M 872	CCN 51	T
M 873	EET 103	T
M 874	EET 95	T
M 875	JHVH 10	T
M 876	NAVES 8	T
No asignado	AMAZ-11 X 2076	9
No asignado	AMAZ-14 X 2634	9
No asignado	AMAZ-14 X 2699	9
No asignado	AMAZ-14 X IMC-57	9
No asignado	CCAT-1858 X 2076	9
No asignado	CCAT-1858 X 2748	9
No asignado	CCAT-1858 X A-2126	9
No asignado	CCAT-1858 X A-2462	9
No asignado	CCAT-1858 X A-2634	9
No asignado	CCAT-1858 X A-2699	9
No asignado	CCAT-1858 X EET-462	9
No asignado	CCAT-1858 X IMC-57	9
No asignado	CCAT-1858 X PA-150	9
No asignado	CCN-51 X A-2634	9
No asignado	CUR-3 X 2699	9
No asignado	CUR-3 X 2748	9
No asignado	CUR-3 X A645	9
No asignado	CUR-3 x EET-446	9
No asignado	CUR-3 X EET-462	9
No asignado	CUR-3 X EET-544	9
No asignado	CUR-3 X EET-95	9
No asignado	CUR-3 X IMC-57	9
No asignado	CUR-3 X PA-107	9
No asignado	CUR-3 X PA-150	9

Tratamiento	Cruce	Grupo
No asignado	EET-233 X 2126	9
No asignado	EET-233 X 2634	9
No asignado	EET-233 X 2699	9
No asignado	EET-233 X A-2076	9
No asignado	EET-233 X EBC-148	9
No asignado	EET-233 X EET-544	9
No asignado	EET-233 X IMC-57	9
No asignado	EET-233 X LCT-368	9
No asignado	EET-387 X 2462	9
No asignado	EET-387 X 2634	9
No asignado	EET-387 X 2748	9
No asignado	EET-387 X A-2699	9
No asignado	EET-387 X A-645	9
No asignado	EET-387 X D-147	9
No asignado	EET-387 X EET-95	9
No asignado	EET-387 X LCT-368	9
No asignado	EET-400 X 2462	9
No asignado	EET-400 X 2748	9
No asignado	EET-400 X IMC-57	9
No asignado	EET-544 X 2126	9
No asignado	EET-544 X 2634	9
No asignado	EET-544 X A-2076	9
No asignado	EET-544 X A-2462	9
No asignado	EET-544 X A-2699	9
No asignado	EET-544 X A-645	9
No asignado	EET-544 X D-147	9
No asignado	EET-544 X EBC-148	9
No asignado	EET-544 X EET-462	9
No asignado	EET-544 X EET-95	9
No asignado	EET-544 X IMC-57	9
No asignado	EET-544 X LCT-368	9
No asignado	SIL-1 X 2076	9
No asignado	SIL-1 X 2126	9
No asignado	SIL-1 X 2634	9
No asignado	SIL-1 X EBC-148	9
No asignado	SIL-1 X EET-416	9
No asignado	SIL-1 X EET-450	9
No asignado	SIL-1 X EET-462	9
No asignado	SIL-1 X IMC-57	9
No asignado	SIL-1 X PA-107	9
No asignado	SIL-1 X PA-150	9
No asignado	SNA-0707 X 2126	9
No asignado	SNA-0707 X 2634	9
No asignado	SNA-0707 X 2699	9
No asignado	SNA-0707 X 2748	9
No asignado	SNA-0707 X A-2076	9
No asignado	SNA-0707 X D-147	9
No asignado	SNA-0707 X EBC-148	9
No asignado	SNA-0707 X EET-462	9
No asignado	SNA-0707 X EET-544	9

Tratamiento	Cruce	Grupo
No asignado	SNA-0708 X 2126	9
No asignado	SNA-0708 X A-2699	9
No asignado	SNA-0708 X A-2748	9
No asignado	SNA-0708 X D-147	9
No asignado	SNA-0708 X EET-416	9
No asignado	SNA-0708 X EET-446	9
No asignado	SNA-0708 X EET-450	9
No asignado	SNA-0708 X IMC-57	9
No asignado	TAP-3 X 2076	9
No asignado	TAP-3 X 2126	9
No asignado	TAP-3 X 2699	9
No asignado	TAP-3 X 2748	9
No asignado	TAP-3 X EET-446	9
No asignado	TAP-3 X EET-462	9
No asignado	TAP-3 X EET-95	9
No asignado	TAP-3 X LCT-368	9
No asignado	TAP-3 X PA-107	9
No asignado	TAP-6 X 2126	9
No asignado	TAP-6 X 2634	9
No asignado	TAP-6 X 2748	9
No asignado	TAP-6 X EET-416	9
No asignado	TAP-6 X EET-450	9
No asignado	TAP-6 X EET-544	9
No asignado	TAP-6 X EET-95	9
No asignado	TAP-6 X IMC-57	9
No asignado	TAP-6 X PA-150	9
No asignado	TIP-1 X 2076	9
No asignado	TIP-1 X 2634	9
No asignado	TIP-1 X 2699	9
No asignado	TIP-1 X A645	9
No asignado	TIP-1 X D-147	9
No asignado	TIP-1 X EBC-148	9
No asignado	TIP-1 X EET-446	9
No asignado	TIP-1 X EET-544	9
No asignado	TIP-1 X IMC-57	9
No asignado	TIP-1 X PA-150	9
No asignado	UNAP-2 X 2076	9
No asignado	UNAP-2 X 2699	9
No asignado	UNAP-2 X 2748	9
No asignado	UNAP-2 X IMC-57	9

Figura 5. Relación integral de la ubicación del Lote LAS TECAS, Lote GANADERIA y Lote LAS MALVINAS, en relación con las oficinas centrales de la EET-Pichilingue.

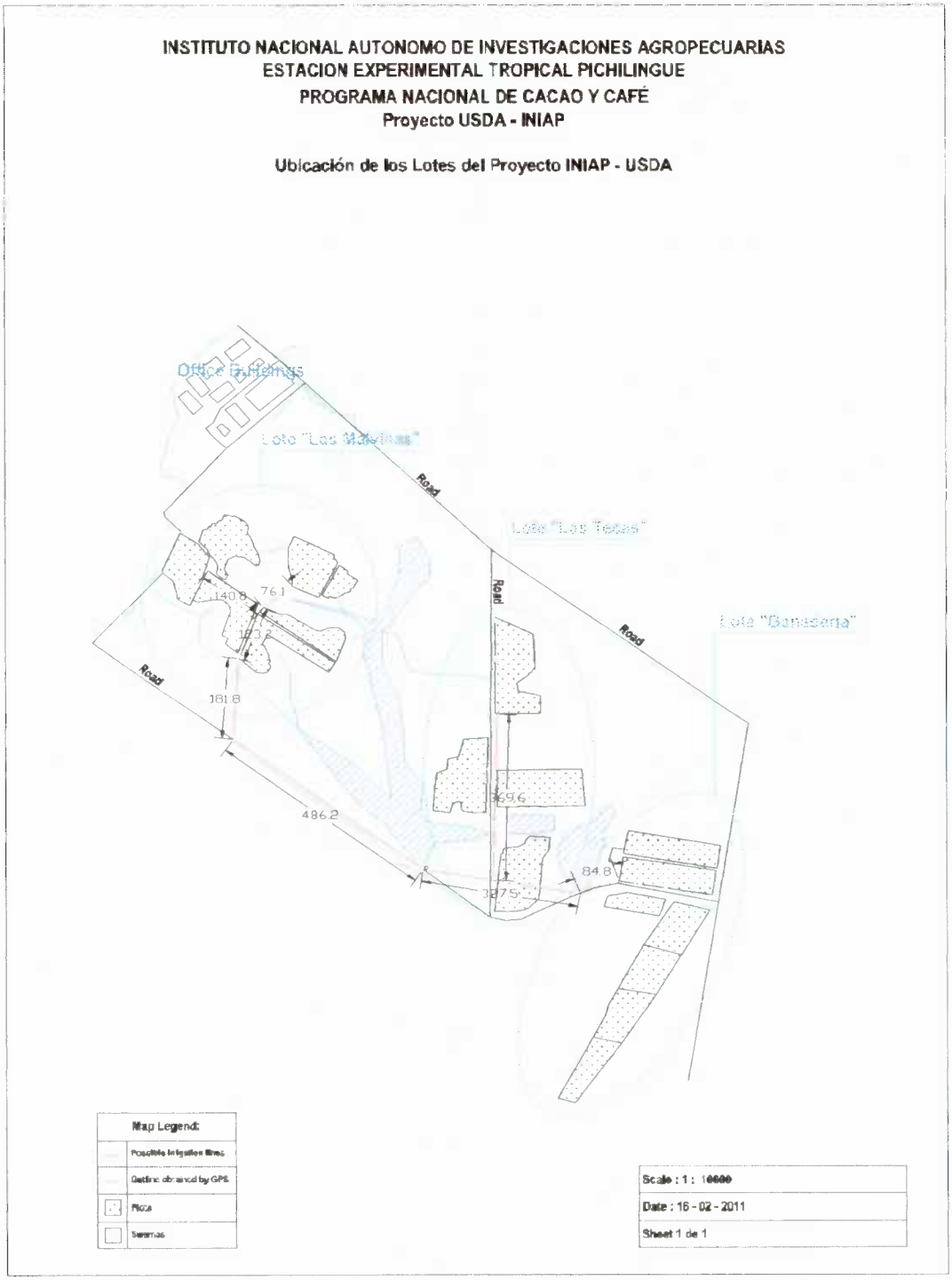
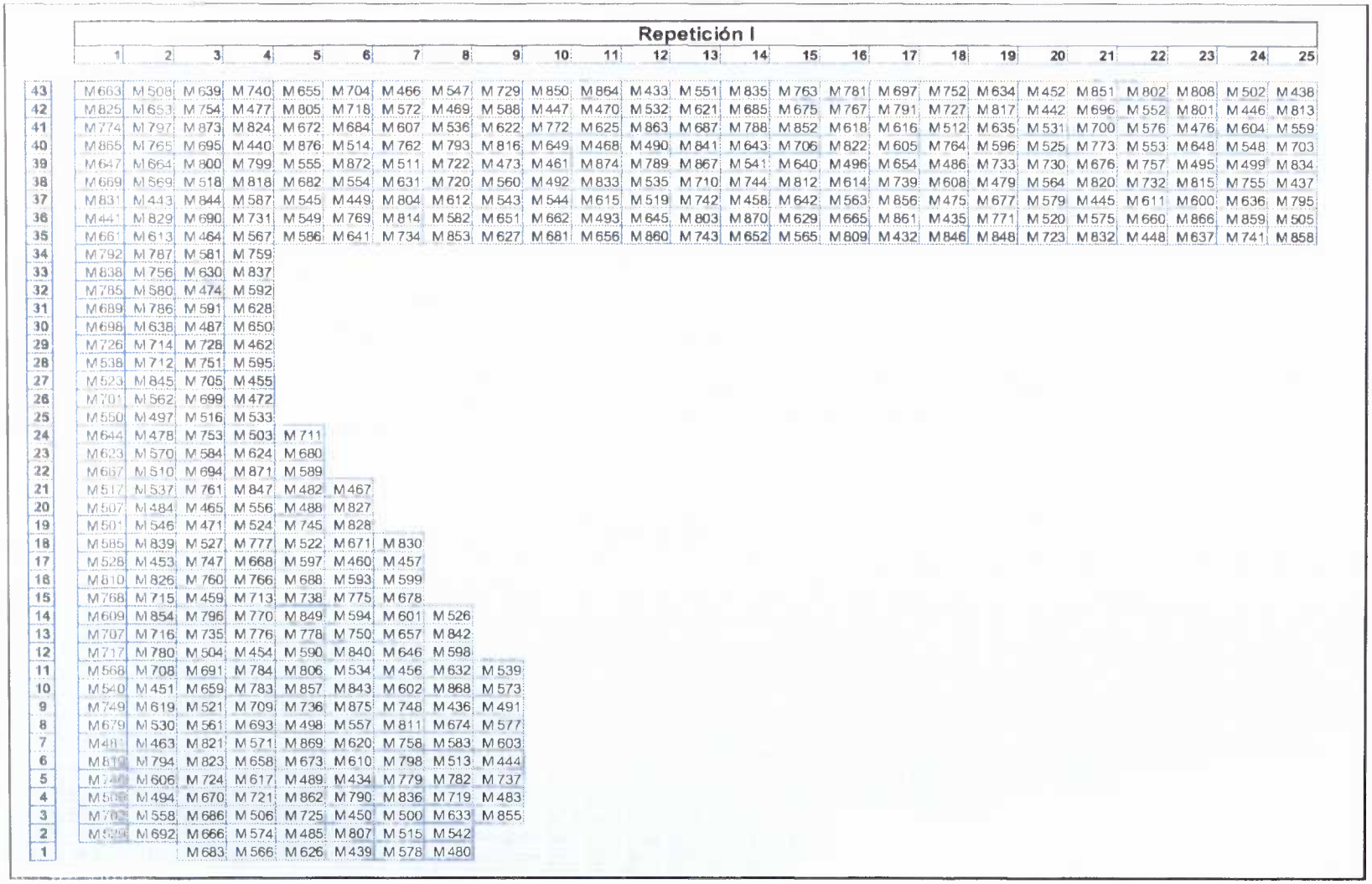
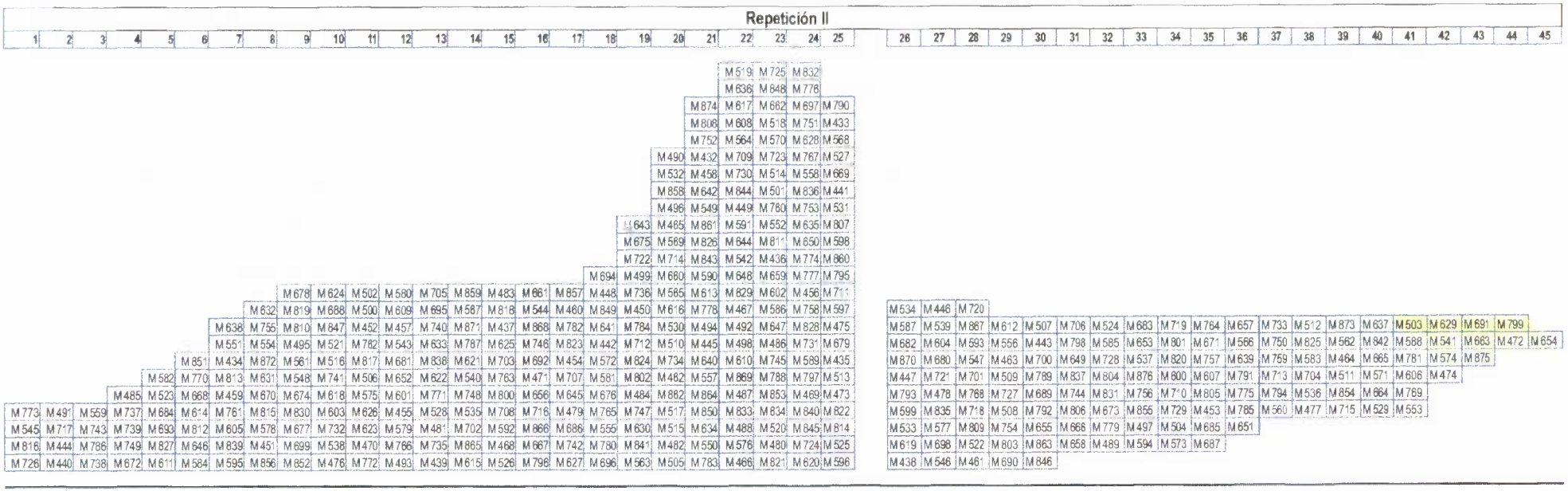


Figura 6. Distribución en el campo de los clones de cacao derivados de las progenies de mejoramiento cubiertas por el grupo 8.



	Repetición I																								
	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
43	M663	M508	M639	M740	M655	M704	M466	M547	M729	M850	M864	M433	M551	M835	M763	M781	M697	M752	M634	M452	M851	M802	M808	M502	M438
42	M825	M653	M754	M477	M805	M718	M572	M469	M588	M447	M470	M532	M621	M685	M675	M767	M791	M727	M817	M442	M696	M552	M801	M446	M813
41	M774	M797	M873	M824	M672	M684	M607	M536	M622	M772	M625	M863	M687	M788	M852	M618	M616	M512	M635	M531	M700	M576	M476	M604	M559
40	M865	M765	M695	M440	M876	M514	M762	M793	M816	M649	M468	M490	M841	M643	M706	M822	M605	M764	M596	M525	M773	M553	M648	M548	M703
39	M647	M664	M800	M799	M555	M872	M511	M722	M473	M461	M874	M789	M867	M541	M640	M496	M654	M486	M733	M730	M676	M757	M495	M499	M834
38	M669	M569	M518	M818	M682	M554	M631	M720	M560	M492	M833	M535	M710	M744	M812	M614	M739	M608	M479	M564	M820	M732	M815	M755	M437
37	M831	M443	M844	M587	M545	M449	M804	M612	M543	M544	M615	M519	M742	M458	M642	M563	M856	M475	M677	M579	M445	M611	M600	M636	M795
36	M441	M829	M690	M731	M549	M769	M814	M582	M651	M662	M493	M645	M803	M870	M629	M665	M861	M435	M771	M520	M575	M660	M866	M859	M505
35	M661	M613	M464	M567	M586	M641	M734	M853	M627	M681	M656	M860	M743	M652	M565	M809	M432	M846	M848	M723	M832	M448	M637	M741	M858
34	M792	M787	M581	M759																					
33	M838	M756	M630	M837																					
32	M785	M580	M474	M592																					
31	M689	M786	M591	M628																					
30	M698	M638	M487	M650																					
29	M726	M714	M728	M462																					
28	M538	M712	M751	M595																					
27	M523	M845	M705	M455																					
26	M701	M562	M699	M472																					
25	M550	M497	M516	M533																					
24	M644	M478	M753	M503	M711																				
23	M623	M570	M584	M624	M680																				
22	M667	M510	M694	M871	M589																				
21	M517	M537	M761	M847	M482	M467																			
20	M507	M484	M465	M556	M488	M827																			
19	M501	M546	M471	M524	M745	M828																			
18	M585	M839	M527	M777	M522	M671	M830																		
17	M528	M453	M747	M668	M597	M460	M457																		
16	M810	M826	M760	M766	M688	M593	M599																		
15	M768	M715	M459	M713	M738	M775	M678																		
14	M609	M854	M796	M770	M849	M594	M601	M526																	
13	M707	M716	M735	M776	M778	M750	M657	M842																	
12	M717	M780	M504	M454	M590	M840	M646	M598																	
11	M568	M708	M691	M784	M806	M534	M456	M632	M539																
10	M540	M451	M659	M783	M857	M843	M602	M868	M573																
9	M749	M619	M521	M709	M736	M875	M748	M436	M491																
8	M679	M530	M561	M693	M498	M557	M811	M674	M577																
7	M48[illegible]	M463	M821	M571	M869	M620	M758	M583	M603																
6	M819	M794	M823	M658	M673	M610	M798	M513	M444																
5	M24[illegible]	M606	M724	M617	M489	M434	M779	M782	M737																
4	M5[illegible]	M494	M670	M721	M862	M790	M836	M719	M483																
3	M70[illegible]	M558	M686	M506	M725	M450	M500	M633	M855																
2	M5[illegible]	M692	M666	M574	M485	M807	M515	M542																	
1			M683	M566	M626	M439	M578	M480																	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M636 M848 M776
M874 M617 M662 M697 M790
M808 M808 M518 M751 M433
M752 M564 M570 M628 M568
M490 M432 M709 M723 M767 M527
M532 M458 M730 M514 M558 M669
M858 M642 M844 M501 M836 M441
M496 M549 M449 M780 M753 M531
M643 M485 M861 M591 M552 M635 M807
M675 M569 M826 M844 M811 M650 M598
M722 M714 M843 M542 M436 M774 M860
M694 M499 M660 M590 M648 M659 M777 M795
M678 M624 M502 M580 M705 M859 M483 M661 M857 M448 M736 M565 M613 M829 M602 M456 M711
M632 M819 M688 M500 M609 M695 M587 M818 M544 M460 M849 M450 M616 M778 M467 M586 M758 M597
M638 M755 M810 M847 M452 M457 M740 M871 M437 M868 M782 M641 M784 M530 M494 M492 M647 M828 M475
M551 M554 M495 M521 M782 M543 M633 M787 M625 M746 M823 M442 M712 M510 M445 M498 M486 M731 M679
M851 M434 M872 M561 M516 M817 M681 M838 M621 M703 M692 M454 M572 M824 M734 M640 M610 M745 M589 M435
M582 M770 M813 M631 M548 M741 M506 M652 M622 M540 M763 M471 M707 M581 M802 M462 M557 M869 M788 M797 M513
M485 M523 M668 M459 M870 M674 M618 M575 M601 M771 M748 M800 M656 M645 M676 M484 M862 M864 M487 M853 M469 M473
M773 M491 M559 M737 M684 M614 M761 M815 M830 M603 M626 M455 M528 M535 M708 M716 M479 M765 M747 M517 M850 M833 M834 M840 M822
M545 M717 M743 M739 M693 M812 M605 M578 M677 M732 M623 M579 M481 M702 M592 M866 M686 M555 M630 M515 M634 M488 M520 M845 M814
M816 M444 M786 M749 M827 M646 M839 M451 M699 M538 M470 M766 M735 M865 M468 M667 M742 M780 M841 M482 M550 M576 M480 M724 M525
M726 M440 M738 M672 M611 M584 M595 M856 M852 M476 M772 M493 M439 M615 M526 M798 M627 M696 M563 M505 M783 M466 M821 M620 M596
M534 M446 M720
M587 M539 M887 M612 M507 M706 M524 M683 M719 M764 M657 M733 M512 M873 M637 M503 M629 M691 M799
M682 M604 M593 M556 M443 M798 M585 M653 M801 M671 M566 M750 M625 M562 M842 M588 M541 M663 M472 M654
M870 M680 M547 M463 M700 M649 M728 M537 M820 M757 M639 M759 M583 M464 M665 M781 M574 M875
M447 M721 M701 M509 M789 M837 M804 M876 M600 M607 M791 M713 M704 M511 M571 M606 M474
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M599 M835 M718 M508 M792 M806 M673 M855 M729 M453 M785 M560 M477 M715 M529 M553
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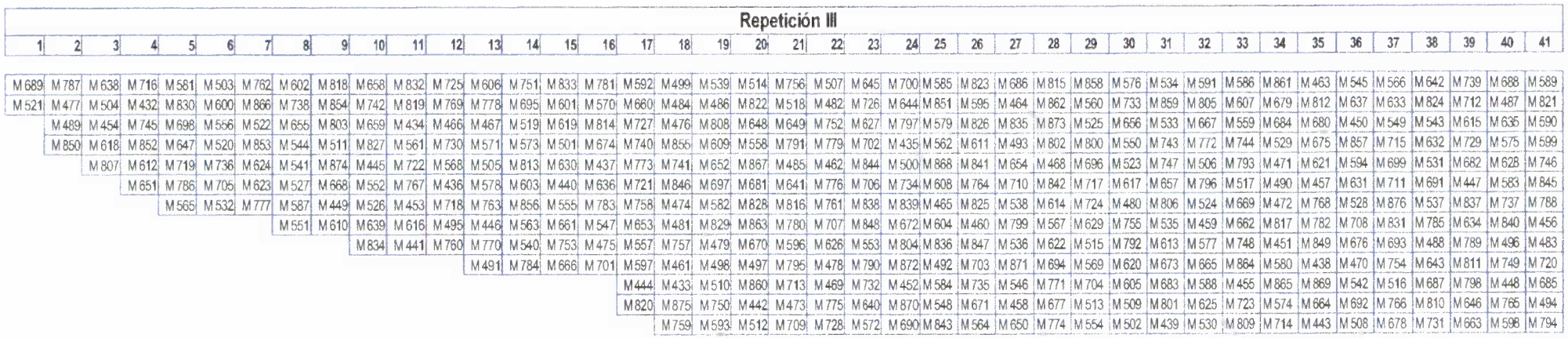
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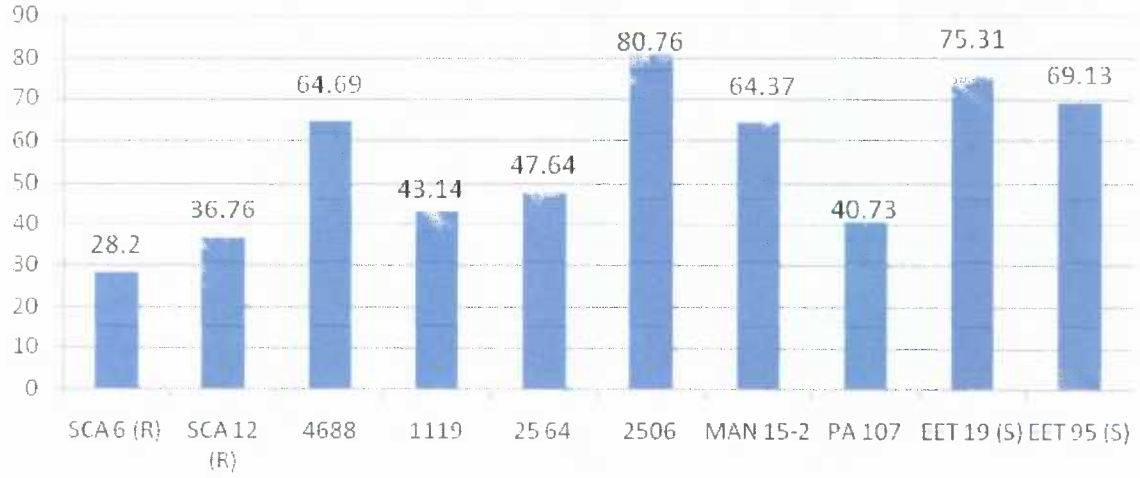
M521 M477 M504 M432 M830 M600 M866 M738 M854 M742 M819 M769 M778 M695 M601 M570 M660 M484 M486 M822 M518 M482 M726 M644 M851 M595 M464 M862 M560 M733 M859 M805 M607 M679 M812 M637 M633 M824 M712 M487 M821
M489 M454 M745 M698 M556 M522 M655 M803 M659 M434 M466 M467 M519 M619 M814 M727 M476 M808 M648 M649 M752 M627 M797 M579 M826 M835 M873 M525 M656 M533 M667 M559 M684 M680 M450 M549 M543 M615 M635 M590
M850 M618 M852 M647 M520 M853 M544 M511 M827 M561 M730 M571 M573 M501 M674 M740 M855 M609 M558 M791 M779 M702 M435 M562 M611 M493 M802 M800 M550 M743 M772 M744 M529 M675 M857 M715 M632 M729 M575 M599
M807 M612 M719 M736 M624 M541 M874 M445 M722 M568 M505 M813 M630 M437 M773 M741 M652 M867 M485 M462 M844 M500 M868 M841 M654 M468 M696 M523 M747 M506 M793 M471 M621 M594 M699 M531 M682 M628 M746
M651 M786 M705 M623 M527 M668 M552 M767 M436 M578 M603 M440 M636 M721 M846 M697 M681 M641 M776 M706 M734 M608 M764 M710 M842 M717 M617 M657 M796 M517 M490 M457 M631 M711 M691 M447 M583 M845
M565 M532 M777 M587 M449 M526 M453 M718 M763 M856 M555 M783 M758 M474 M582 M828 M816 M761 M838 M839 M465 M825 M538 M614 M724 M480 M806 M524 M669 M472 M768 M528 M876 M537 M837 M737 M788
M551 M610 M639 M616 M495 M446 M563 M661 M547 M653 M481 M829 M863 M780 M707 M848 M672 M604 M460 M799 M567 M629 M755 M535 M459 M662 M817 M782 M708 M831 M785 M634 M840 M456
M834 M441 M760 M770 M540 M753 M475 M557 M757 M479 M670 M596 M626 M553 M804 M836 M847 M536 M622 M515 M792 M613 M577 M748 M451 M849 M676 M693 M488 M789 M496 M483
M491 M784 M666 M701 M597 M461 M498 M497 M795 M478 M790 M872 M492 M703 M871 M694 M569 M620 M673 M665 M864 M580 M438 M470 M754 M643 M811 M749 M720
M444 M433 M510 M860 M713 M469 M732 M452 M584 M735 M546 M771 M704 M605 M683 M588 M455 M865 M869 M542 M516 M687 M798 M448 M685
M820 M875 M750 M442 M473 M775 M640 M870 M548 M671 M458 M677 M513 M509 M801 M625 M723 M574 M664 M692 M766 M810 M646 M765 M494
M759 M593 M512 M709 M728 M572 M690 M843 M564 M650 M774 M554 M502 M439 M530 M809 M714 M443 M508 M678 M731 M663 M598 M794

Figura 7. Planta de 14 meses de edad mostrando frutos maduros correspondiente a uno de los clones que se vienen comparando en el Lote Las Malvinas.

Figura 8. Porcentaje de plántulas infectadas con "Escoba" utilizando los métodos de estandarizados de evaluación de resistencia de "Escoba de Bruja" (SAI, Agar-drop, 25 000 esporas/ml y un tamaño de brote de 2,2 a 3,0 cm).



ANNEX 2

Estudio para la implementación de riego en los Lotes "LAS TECAS", "GANADERIA" y "MALVINAS", en el marco del Proyecto CACAO /INIAP/USDA/MARS.

MAISIR RIEGO

INFRAESTRUCTURA-SISTEMAS de RIEGO
Atilio E Mendoza Velásquez
Ingeniero Agrícola
R.U.C. 0902034719001

Guayaquil, Marzo 16 del 2.015

SEÑOR ING.
FREDDY AMORES PUYUTAXI
Programa Nacional de Cacao y Café
CORP INIAP "PICHILINGUE"
QUEVEDO.-

De mis consideraciones:

El Diseño del Sistema de Riego por Aspersión para los Lotes de Investigación "Las Malvinas", "Las Tecas" y "Ganadería" en la Estación Experimental PICHILINGUE, es del Tipo **Sobre-Follaje**, por que las Plantas de Cacao o Café, soportan las fuertes lluvias invernales sin sufrir daño alguno.

Como el área total de riego es 16,816 Has. Se establece Una Sola Unidad de Bombeo, ubicada en el sitio que suministre el agua necesaria y a una distancia conveniente para cada Lote. Esta tiene una Capacidad de 800 GPM a 290 FT de elevación total a 1.750 RPM.

El Aspersor seleccionado es de la Familia Gran Cañón, Marca NELSON Modelo 150 R con tobera de anillos intercambiables, que producen una excelente pulverización, más fina que durante el invierno.

El espaciamiento entre las posiciones de riego, formando triángulos es de 66 x 60 Ms. Para aplicar una lluvia de 16 a 20 mm. Hora.

Los Aspersores mediante sistemas de Acoplamiento Rápido, se instalan sobre Montajes de 4,5 M de altura, hechos con Tubos de Aluminio de pared gruesa, que a 1,20 M del suelo tienen su Válvula de Control Tipo Mariposa, así mismo de aluminio, por resistencia a la corrosión.

En cada Lote, por turno, riegan simultáneamente Dos Aspersores, mientras otros Dos están Instalados esperando su turno.

En los tres Lotes, hay 35 Posiciones de Riego en Circulo Completo y 22 en Circulo Parcial, si este es la mitad del Completo, Su Tiempo de Riego es la Mitad.

INFRAESTRUCTURA-SISTEMAS de RIEGO
Atilio E Mendoza Velásquez
Ingeniero Agrícola
R.U.C. 0902034719001

En resumen, los tres Lotes tienen 47 Posiciones de Riego Completas, si cada una dura una hora y media, y con los dos Aspersores se hacen Cinco Posiciones por día, con holgura en cinco días se riegan los tres Lotes con una Lámina de Riego de 25 mm.

Para la Instalación del Equipo, Se abren zanjas de profundidad mínima 60 cms.y 20 cms. de ancho para enterrar la tubería PVC, y los Montajes y cambio de dirección de la tubería se emplearán en bloques de hormigón.

Los Mano de Obra y Materiales empleados en la Instalación son por cuenta de la Compradora, ya que el uso de medios locales abarata la inversión.

LA PROFORMA ADJUNTA, cuyo Valor Total es de . . . . . $ 80,440.22 incluye: Costo **del Proyecto, Dirección Técnica-Práctica y Entrenamiento durante la Instalación, Prueba y Manejo del Sistema.**

Si el Proyecto se Queda en Este Nivel, las Labores Ejecutadas Durante Los Estudios, Cálculos, Diseño y Presupuesto, tienen un Costo Equivalente al 3,5 % del Presupuesto Total, así: 80,440.22 x 0,035 = $ 2,815.41

12 % del IVA $ 337.85

SUMAN: $ 3,153.26

Para compensar parte de lo que he invertido, considero conveniente, si se me adelanta como ANTICIPO un 50 % de la SUMA indicada.

Del Señor Ingeniero Atentos Prestan:

Muy Atentamente

Atilio E Mendoza Velásquez
Ingeniero Agrícola

Av. 12 S-E y 5 de Junio N 903 y 1er. Callejón 44 S-E Telf.: 2448776
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INFRAESTRUCTURA-SISTEMAS de RIEGO
Atilio E Mendoza Velasquez
Ingeniero Agricola
R.U.C. 0902034719001

Guayaquil, Marzo 16 del 2011

SEÑOR ING.
FREDDY AMORES PUYUTAXI
CORPINIAP "PICHILINGUE"
QUEVEDO.-

De mis consideraciones:

El Diseño del Sistema de Riego para Los Lotes de Investigación del Programa Nacional de Cacao y Café en la Estación E. "Pichilingue" del INIAP, establece una Sola Unidad de Bombeo, ubicada en un sitio que cuente con suficiente agua de abastecimiento y a una distancia conveniente para cada Lote.
La Unidad de Bombeo tiene Capacidad para elevar 800 GPM a 200 P.C. (88 M.) de altura total a 1.750 R.P.M.
El espaciamiento de las Posiciones de Riego formando triángulo es 66 x 68 Ms. Y los Aspersores utilizados son de la Familia Gran Cañón, esto es Un Sistema Sobre follaje, y se instalan sobre Montajes de Aluminio de pared gruesa a una altura de 4.50 Ms., mediante acoplamiento rápido. Los Aspersores NELSON recomendados son con toberas de anillos recambiables que producen una excelente pulverización, mayor que la entregada por los aguaceros invernales.
La lluvia aplicada en cada posición de riego es de 16 a 20 mm. por hora.
En cada Lote, por turno, riegan simultáneamente Dos Aspersores, mientras los otros Dos están instalados esperando su turno.
En Los Tres Lotes Suman 36 Posiciones de Riego en Circulo Completo y 21 en Circulo Parcial, si este es la mitad del circulo, su tiempo de riego es la mitad del circulo completo. Generalizando en Los Tres Lotes hay 47 Posiciones Completas.
Si cada una dura 1.5 hora, en total son 70.5 horas de riego, o sea que cada Aspersor Regando tiene 35.25 horas de trabajo, esto es 4.5 jornadas de ocho horas, para aplicar una lluvia de 24 mm. como mínimo.

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INFRAESTRUCTURA-SISTEMAS de RIEGO
Atilio E. Mendoza Velásquez
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R.U.C. 0902034719001

Si la Posesión de Riego es de tres horas, para tener una lámina mínima de 48 mm. el tiempo total de riego para cada Aspersor es 70.5 horas, o sea 9 días con jornadas de 8 horas por día.
Para La Instalación del Equipo de Riego, se deberá abrir zanjas de 70 cms. De profundidad por un ancho de 20 para enterrar toda la tubería de PVC y en cada accesorio y cambio de dirección se la debe empotrar en plintos de hormigón.
Las Valvulas de control en cada Montaje para facilitar su manejo deben ser De Mariposa y su material aluminio por resistente a la corrosión.
El Calculo, Diseño y Presupuesto de un Sistema de Riego tiene un Costo no menor al 3% de su Valor Total, que puede estar incorporado en la Venta Directa que Pueda Hacerla.

Del Señor Ing. Amores P.

Muy Atentamente

Atilio E Mendoza Velásquez
Ingeniero Agrícola

Av. 17 S-E (5 de Junio) N-903 y 1er. Callejón 44 S-E Telf.: 2448776
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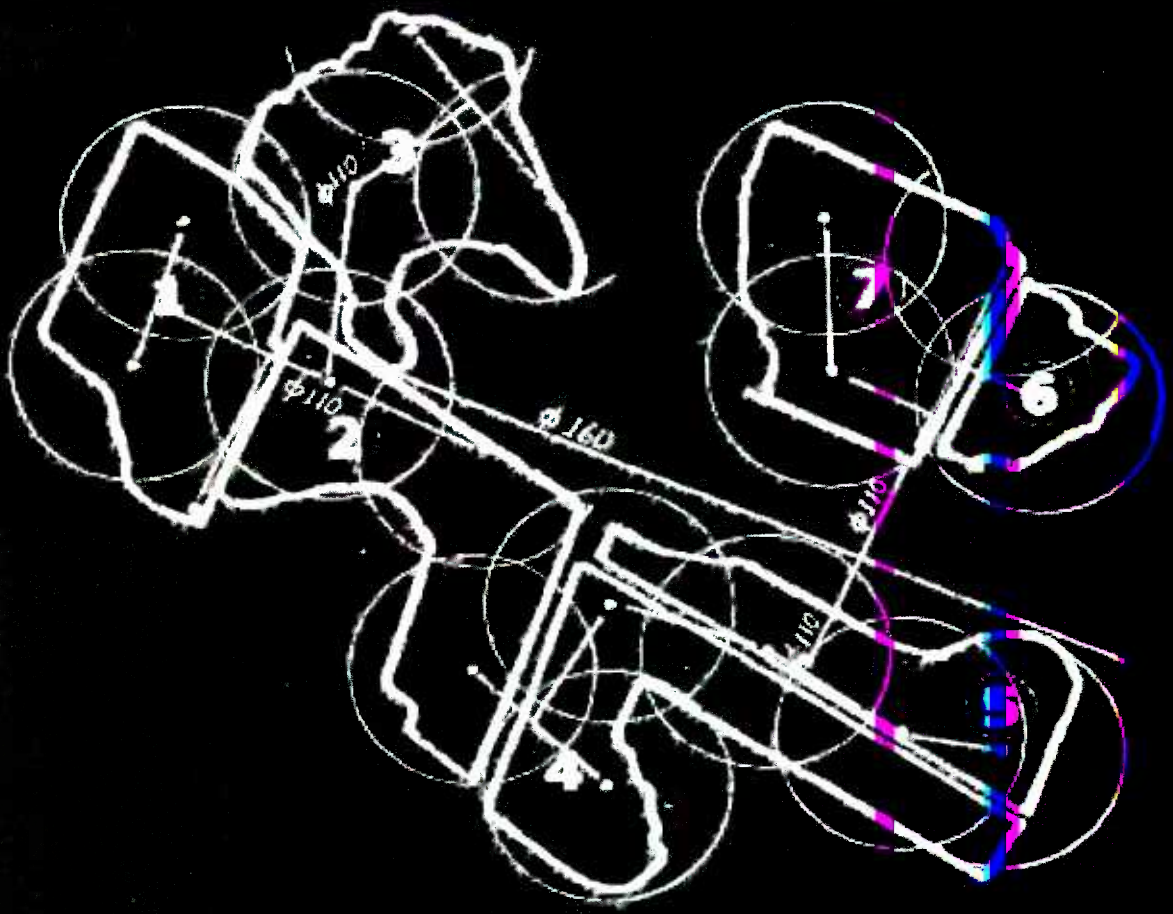
SECTOR LAS MALVINAS

Area Total : 54.059 M2

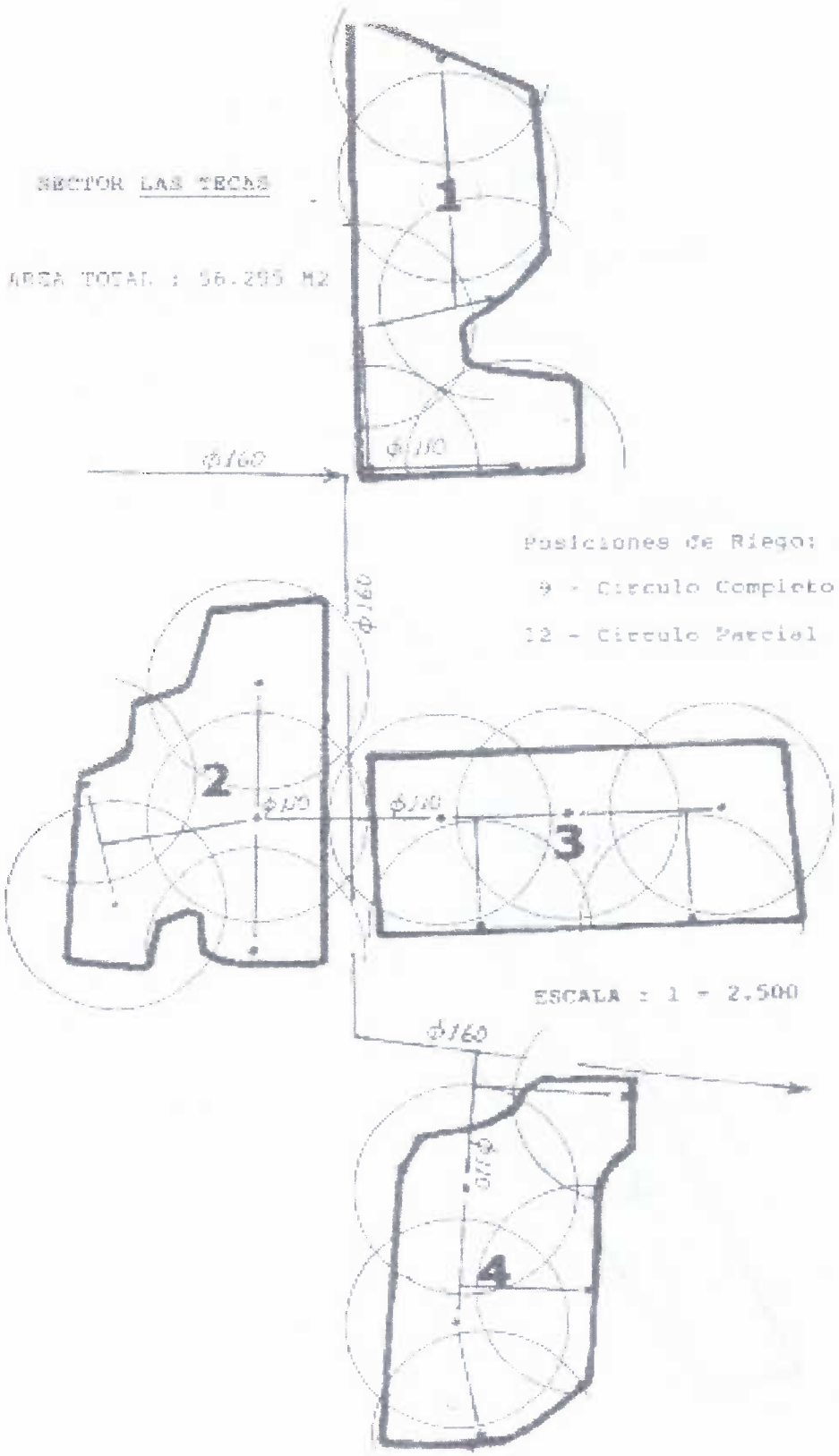
Posiciones de Riego:

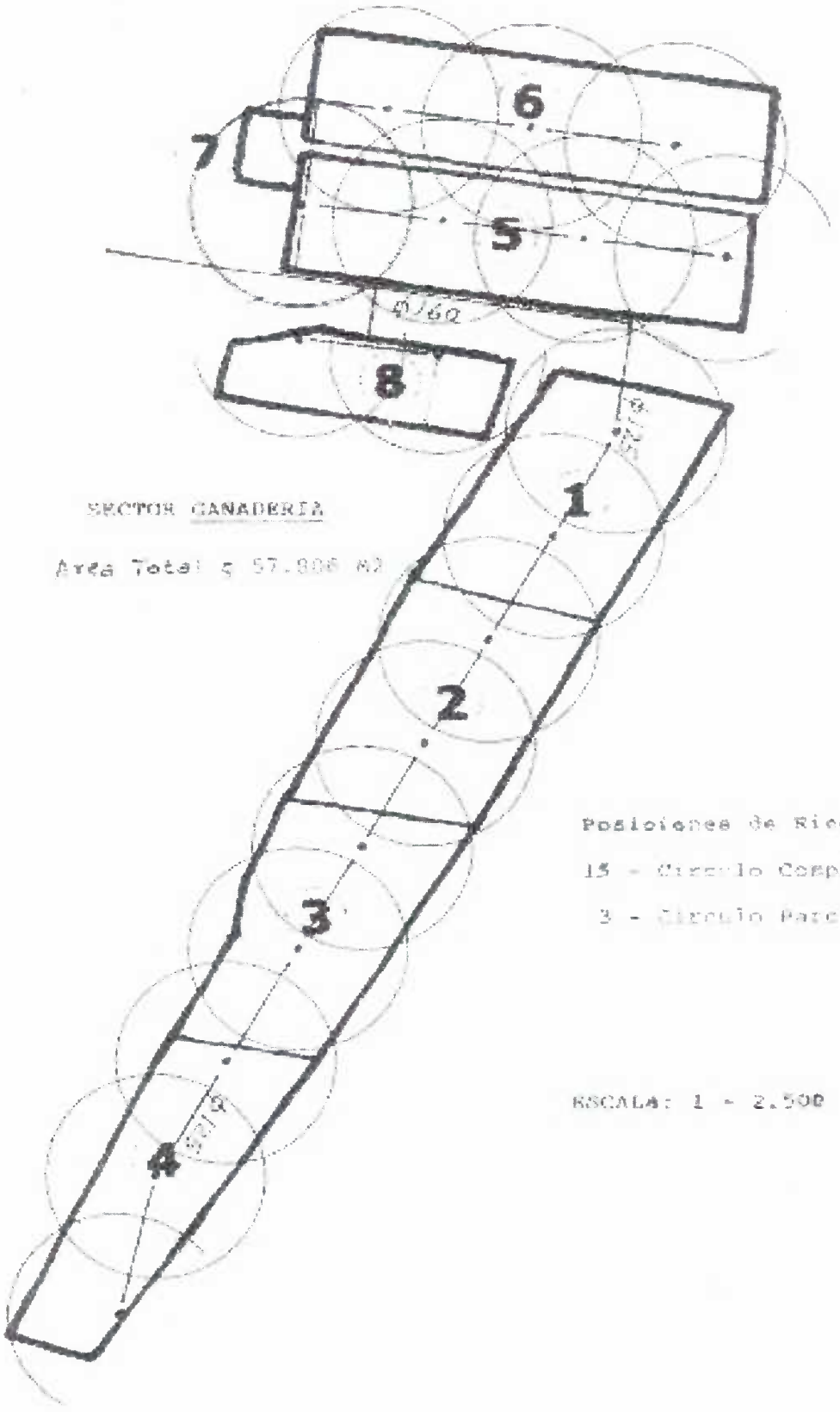
12 - Circulo Completo

6 - Circulo Parcial



ESCALA 1: 2.500


SECTOR LAS TECAS
AREA TOTAL : 56.295 M2
1
Φ160
Φ110
Posiciones de Riego:
9 - Circulo Completo
12 - Circulo Parcial
Φ160
2
Φ110
Φ110
3
ESCALA : 1 = 2.500
Φ160
Φ110
4



BIG GUN® OPTIONS AVAILABLE

TO ORDER BIG GUNS® SPECIFY THE FOLLOWING: [illegible]

Specification Example: [illegible]

	75 SERIES	100 SERIES	150 SERIES	200 SERIES
PERFORMANCE	10-160 GPM; 25-80 PSI	50-300 GPM; 40-110 PSI	100-600 GPM; 50-120 PSI	250-1200 GPM; 50-130 PSI
NOZZLE & TRAJECTORY	Full Circle F75: 21°, 24°; Part Circle SR75: 18°, 21°, 24°, 43°	Full Circle F100, Part Circle SR100: 18°, 21°, 24°, 43°; Part Circle SRA100: 15-43° Adjustable	Full Circle F150: 21°, 24°; Part Circle SR150: 21°, 24°, 27°, 43°; Part Circle SRA150: 15-43° Adjustable	Full Circle F200, Part Circle SR200: 21°, 24°, 27°
NOZZLE OPTIONS – TAPER	Not Available	100T (Specify Size)	150T (Specify Size)	200T (Specify Size)
NOZZLE OPTIONS – TAPER RING	TR75 (Specify Size)	100TR (Specify Size)	150TR (Specify Size)	Not Available
NOZZLE OPTIONS – RING	Not Available	100R (Includes Set of Rings)	150R (Includes Set of Rings)	200R (Includes Set of Rings)
SPECIAL OPTIONS	Not Available	Anodized & Powder Coated, Vaneless Range Tube*	Anodized & Powder Coated, Stainless Steel [illegible] Vaneless Range Tube	Anodized & Powder Coated
ADD-ON KITS	HD Lower Bearing, 12° Wedge Kit, Counterbalance Kit, Stream Straightener Vane	Low Pressure Drive Vane Kit, Counterbalance Kit, Secondary Nozzle Kit, 12° Wedge Kit, Stream Straightener Vane	Counterbalance Kit, Secondary Nozzle Kit, Stream Straightener Vane	Secondary Nozzle Kit (standard), 12° Wedge Kit (SR200 only)
MOUNTING DETAILS	Fits QC** & 2" 800 Series Valve	Fits QC** & 3" 800 Series Valve (100 [illegible])	Substantial thrust on riser, use 3" valve minimum	Substantial thrust on riser, use 4" valve minimum
CONNECTION OPTIONS	1-1/2" or 2" FNPT or FBSP, ANSI/DIN, Nelson or Euro Flange	2" FNPT or FBSP, 2-1/2" FNPT, ANSI/DIN, Nelson or Euro Flange; 2" FNPT or FBSP [illegible]	Nelson, Euro or ANSI/DIN Flange, Also, Nelson Flange to Female Adapters	Nelson, Euro or ANSI/DIN Flange, Also, Nelson Flange to Female Adapters

*Vaneless Range Tube option is for wastewater applications containing hair, straw, etc.

** The "Quick Coupling Valve" inlet is available in both 2" and 3" FNPT and FBSP for connection to the piping system. The "Quick Coupling Key" outlet is available in 2" FNPT, 2" FBSP and Nelson Flange Connection for connection to the Big Gun.

NELSON 150 SERIES BIG GUN® PERFORMANCE — U.S. UNITS

150 TAPER BORE NOZZLE **150T**

150T – Specify size when ordering

PSI	0.70" 9317-070 GPM	0.70" DIA. FT.	0.80" 9317-080 GPM	0.80" DIA. FT.	0.90" 9317-090 GPM	0.90" DIA. FT.	1.0" 9317-100 GPM	1.0" DIA. FT.	1.1" 9317-110 GPM	1.1" DIA. FT.	1.2" 9317-120 GPM	1.2" DIA. FT.	1.3" 9317-130 GPM	1.3" DIA. FT.	1.4" GPM	1.4" DIA. FT.
50	100	250	130	270	165	290	200	310	255	330	300	345	350	360	408	372
60	110	265	143	285	182	305	225	325	275	345	330	365	385	380	446	395
70	120	280	155	300	197	320	245	340	295	360	355	380	415	395	483	412
80	128	290	165	310	210	335	260	355	315	375	380	395	445	410	516	427
90	135	300	175	320	223	345	275	365	335	390	405	410	475	425	547	442
100	143	310	185	330	235	355	290	375	355	400	425	420	500	440	577	458
110	150	320	195	340	247	365	305	385	370	410	445	430	525	450	605	471
120	157	330	204	350	258	375	320	395	385	420	465	440	545	460	632	481

150 TAPER RING NOZZLE **150TR**

150TR = Body + Cap + 1 Taper Ring

Specify size when ordering

COMPONENTS: Body [illegible] · Taper Ring [illegible] · Cap [illegible]

PSI	0.86" 9238-022 GPM	0.86" DIA. FT.	0.96" 9238-024 GPM	0.96" DIA. FT.	1.04" 9238-026 GPM	1.04" DIA. FT.	1.12" 9238-028 GPM	1.12" DIA. FT.	1.2" 9238-030 GPM	1.2" DIA. FT.	1.28" 9238-032 GPM	1.28" DIA. FT.	1.36" 9238-034 GPM	1.36" DIA. FT.
50	133	272	164	286	196	302	233	318	274	333	314	347	365	358
60	146	284	179	301	214	317	255	334	301	351	350	367	405	378
70	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	442	393
80	170	310	207	325	247	346	295	364	347	381	404	397	467	409
90	181	320	220	340	262	357	313	377	368	396	429	411	495	424
100	191	329	231	350	277	366	330	386	388	405	452	423	522	436
110	200	339	243	359	290	376	346	397	407	416	474	433	548	446
120	209	349	253	368	303	386	361	407	425	425	495	443	572	457

150 RING NOZZLE **150R**

150R = Body + Cap + Set of 7 Rings

Specify size when ordering

COMPONENTS: Body [illegible] · Rings [illegible] · Cap [illegible]

PSI	0.86" 6287-086 GPM	0.86" DIA. FT.	0.97" 6287-097 GPM	0.97" DIA. FT.	1.08" 6287-108 GPM	1.08" DIA. FT.	1.18" 6287-118 GPM	1.18" DIA. FT.	1.26" 6287-126 GPM	1.26" DIA. FT.	1.34" 6287-134 GPM	1.34" DIA. FT.	1.41" 6287-141 GPM	1.41" DIA. FT.	1.47" GPM	1.47" DIA. FT.
50	100	245	130	265	165	285	205	300	255	320	300	335	350	350	383	353
60	110	260	143	280	182	300	225	315	275	335	330	350	385	365	423	368
70	120	270	155	290	197	310	245	330	295	350	355	365	415	380	458	383
80	128	280	165	300	210	320	260	340	315	360	380	380	445	395	490	399
90	135	290	175	310	223	330	275	350	335	370	405	390	475	405	522	409
100	143	300	185	320	235	340	290	360	355	380	425	400	500	415	550	419
110	150	310	195	330	247	350	305	370	370	390	445	410	525	425	577	429
120	157	315	204	335	258	360	320	380	385	400	465	420	545	435	603	439

BF6L914C

Specification data

General

Cylinders	6	
Cylinder arrangement	Vertical in-line	
Bore	102 mm	4.0 in
Stroke	132 mm	5.2 in
Cylinder displacement	1.08 liter	65.9 in
Total displacement	6.47 liter	394.9 in
Compression ratio	16.0:1	
Combustion system	Direct injection	
Aspiration	Turbocharged, aftercooled	

Fuel system

Lift pump suction head, max	1.0 m	39.4 in
Lift pump flow @ max rpm	117.0 l/h	30.9 GPH
Max restriction in fuel supply line	250 mbar	100 in. H2O
Max restriction in fuel return line	200 mbar	80 in. H2O
Max restriction in fuel pre-filter	250 mbar	30 in. H2O
Fuel filter type	Replaceable cartridge	
Fuel consumption @ max rating	35.0 l/h	9.3 GPH
Fuel consumption @ peak torque	29.0 l/h	7.7 GPH

Combustion air system

Combustion air flow @ max rating	680 m³/h	400.0 CFM
Max allowable clean restriction	30 mbar	20 in. H2O
Max allowable dirty restriction	75 mbar	30 in. H2O

Exhaust system

Exhaust gas flow @ max rating	1926 m³/h	1133.5 CFM
Exhaust temp. @ max rating	490 °F	914 °F
Max allowable back pressure	75 mbar	30 in. H2O

Cooling system

Type	Integrated oil cooling	
Cooling air flow rate @ max rating	2400 m³/h	4000.0 CFM
Max inlet air temp. rise over ambient	10 °C	18 °F
Discharge air temp. rise over inlet	55 °C	99 °F
Cooling air pressure:		
Max loss due to inlet duct	10 %	
Max loss due to discharge duct	10 %	

Lubrication system

Lubrication type	Forced feed lubrication	
Oil flow at max. rpm	80 l/min	21.1 GPM
Oil pump relief valve setting	7.0 bar	78.75 psi
Max oil temperature in oil sump	130 °C	266 °F
Filter capacity	1.2 liter	1.6 qt
Oil change interval	250 hr	

Electrical

Starter motor	12V, 3.1 kW	24V, 4.0 kW
Min battery CCA	1050A	750A
Voltage drop, battery to starter	1.0V	

Physical data

Length	1352 mm	53.2 in
Width	714 mm	28.1 in
Height	994.5 mm	39.2 in
Weight, dry	510 kg	1122 lb
Max bending @ housing	800 Nm	589.6 lb-ft
Max force @ flywheel		
Axial	3000 N	675.7 lb
Radial	4000 N	900.9 lb

Performance data

Peak torque	550 Nm	405.4 lb-ft
@ rpm	1500	
Low idle speed	650 rpm	

Net power

Engine RPM	1800	2000	2150	2300	2500
kW, intermittent	93.0	101.0	108.0	112.0	118.0
Hp, intermittent	125.1	137.4	144.2	152.3	160.5
kW, continuous	82.0	90.0	96.0	99.0	
Hp, continuous	111.5	122.4	130.6	134.6	

Fuel consumption

g/kWh	225	226	229	234	245
lb/bhph	0.369	0.371	0.376	0.384	0.402

Combustion air

m³/h	457	529	572	625	680
CFM	269	311	337	368	400

Exhaust gas @ 500° C

m³/h	1294	1498	1620	1760	1926
CFM	762	882	953	1037	1133

Cooling air

m³/h	5330	5970	6410	6860	7460
CFM	3130	3510	3770	4040	4390

Noise, dB(A)

Avg. @ 1 meter	95.9	97.2	98.4	100.4	103.2

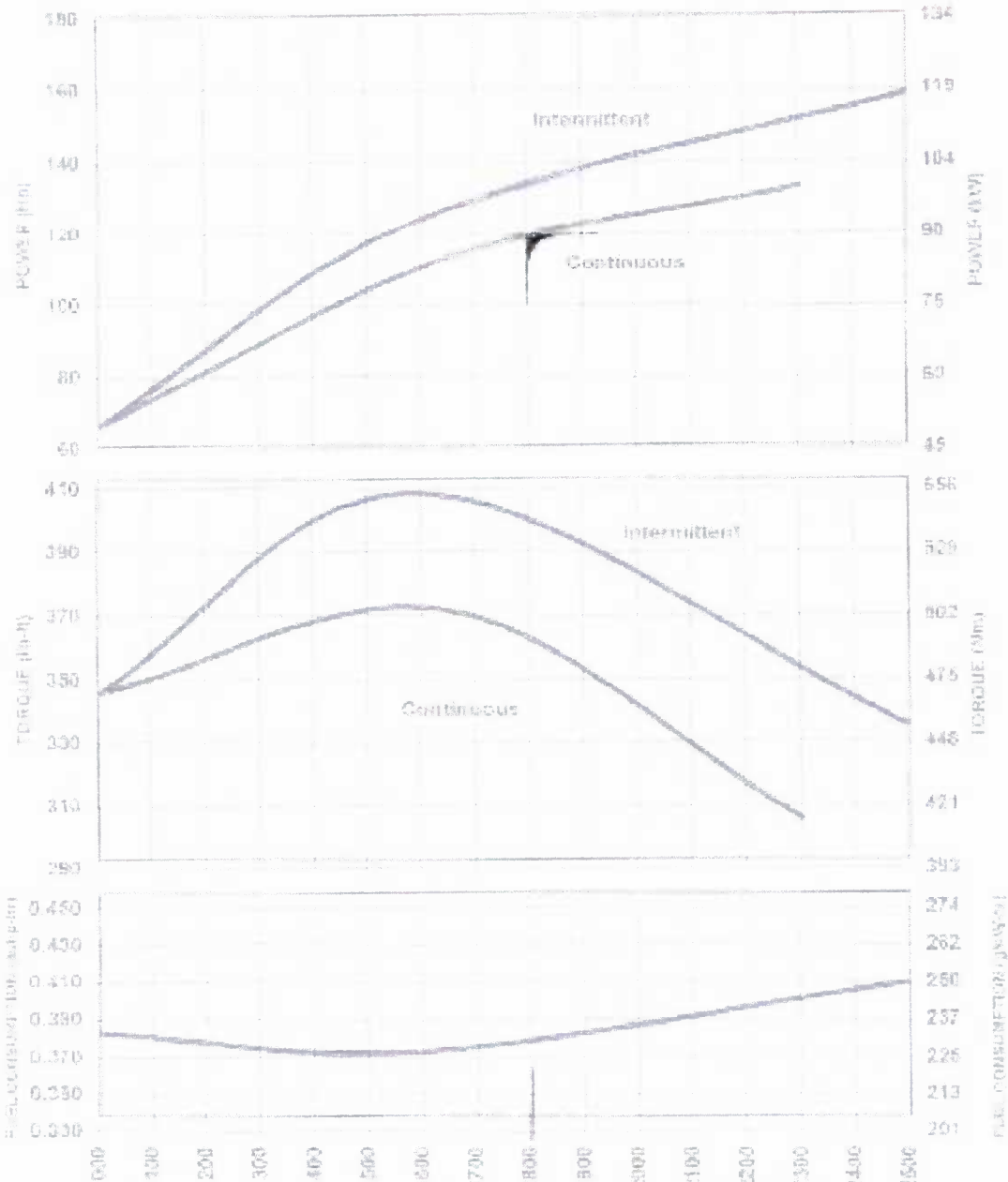
Certifications

U. S. EPA Non-road Tier 2

European COM 2

ENGINE PERFORMANCE CURVES

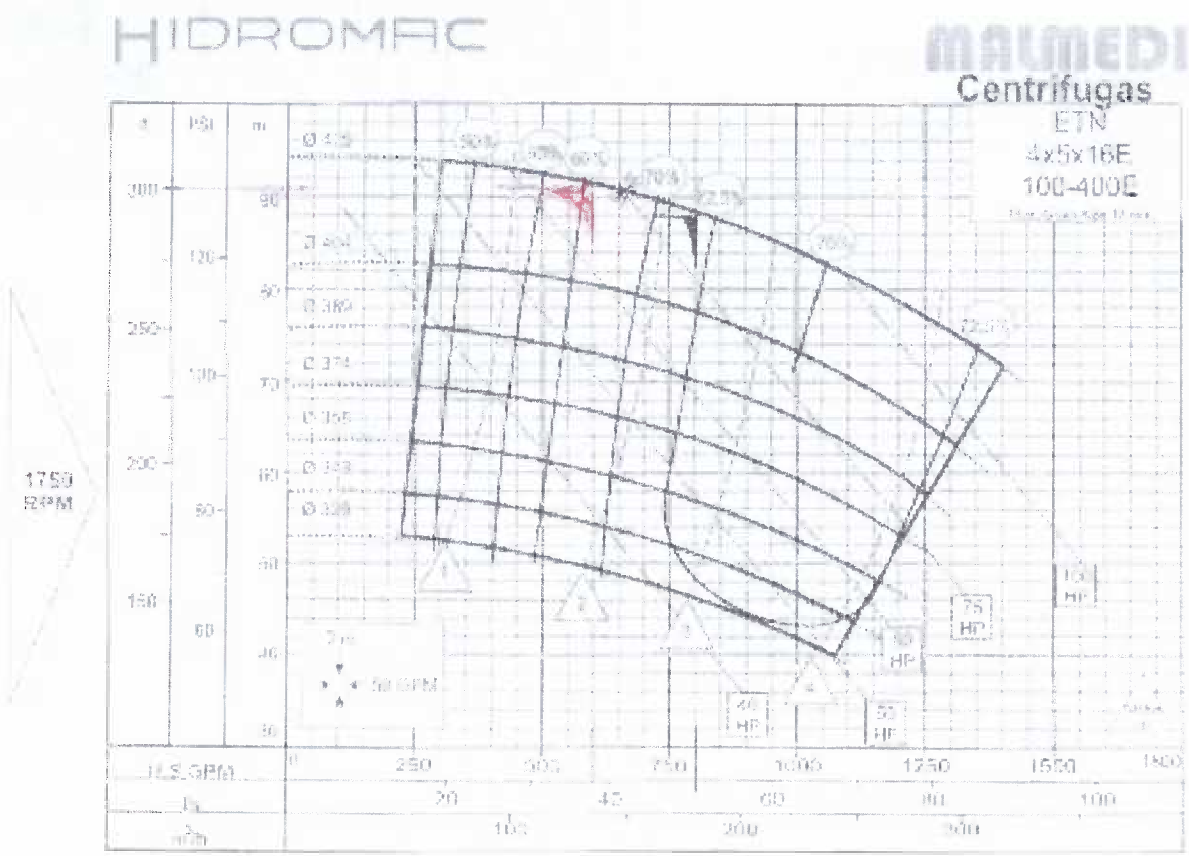
ENGINE MODEL	BF6L914C 300 mm blower
RATING STANDARD	ISO 3046
RATED INTERMITTENT POWER	158 Hp at 2500 rpm
MAX. TORQUE	405 lb-ft at 1800 rpm
EMISSION CERTIFICATION	EPA Tier 2/CCR1 2



Tolerance: +/- 5% per ISO 3046 Document: BF6L914C_158kW_EPA2

Reference conditions: 25 °C (77 °F) 99 kPa (29.31 in. Hg) Date: 14 April 2004

Fuel: 35 °C (104 °F) 0.85 kg/l (7.09 lb/gal) Name: Oldham


HIDROMAC
MALMEDI
Centrifugas
ETN
4x5x16E
100-400E
1750
RPM
U.S. GPM
75
HP
100
HP

Linea ETN - ETA

ETA 300-350

ETN 125-400

Aplicación

Descripción

Datos de operación

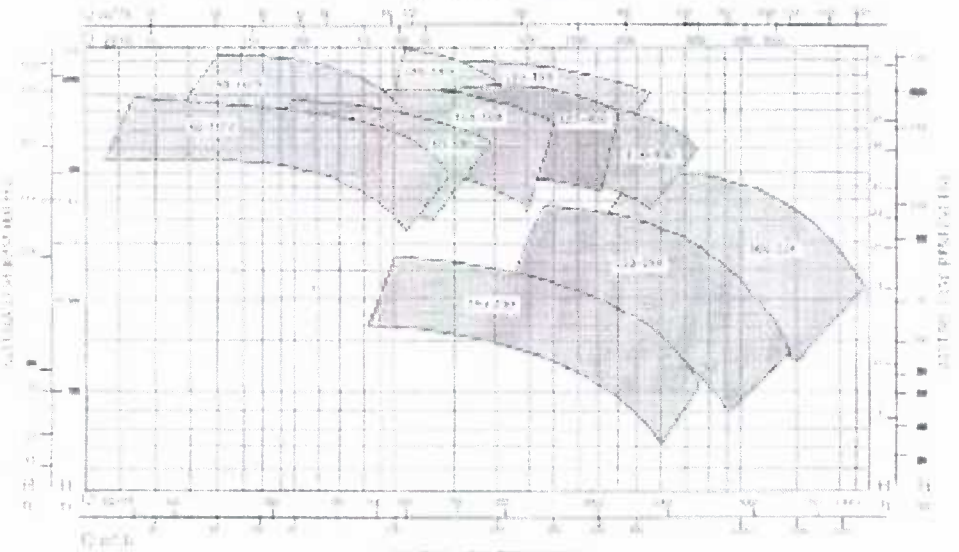
	DN 50 hasta 300
	hasta 1 800 m³/h
	hasta 120 m
	hasta 140°C
	6 bar
	15 bar
	desde 2 850 rpm

Aplicación

Descripción

Datos de operación

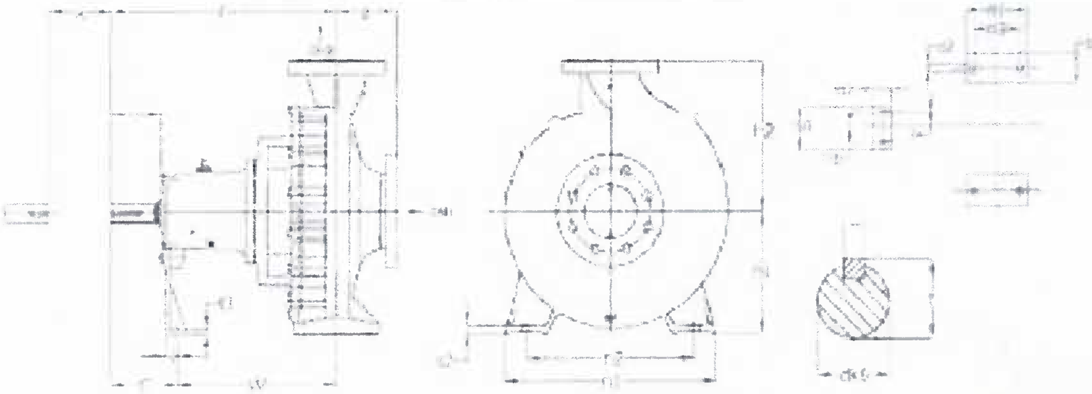
	DN 40 hasta
	200 m³/h
	80 m
	-10°C a 120°C
	10 bar
	16 bar
	hasta 3 550 rpm



Datos Tecnicos

Datos Tecnicos / Tamaños	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Soporte de Cojinete	IIIA	IVA	A55				A50A	IVA		D
[illegible]	5	11	11	12	35	35	35	60	20	97
[illegible]	0.33	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	100	200	225	225	225	225	225	80	80	100
[illegible]	80		150					80		
[illegible]	[illegible]									
[illegible]	120 / 100									
[illegible]	120 / 120									
[illegible]	140									
[illegible]	[illegible]									
Bridas	[illegible] ANSI [illegible]					[illegible] ANSI [illegible]				
[illegible]	[illegible]									
[illegible]	6306	6308	6311		(2) 6311			6310	6312	
[illegible]	Grasa		Aceite					Grasa	Aceite	
[illegible]	0.33		1					0.55	2	
[illegible]	[illegible]		[illegible]							

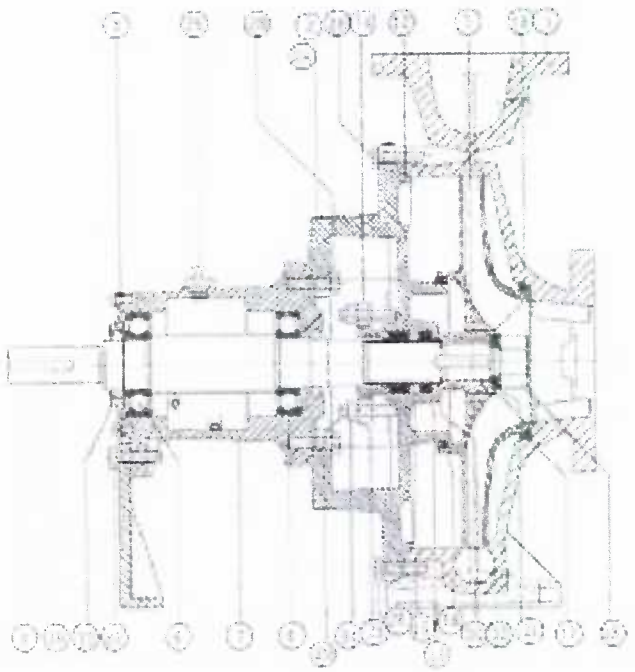
Dimensiones



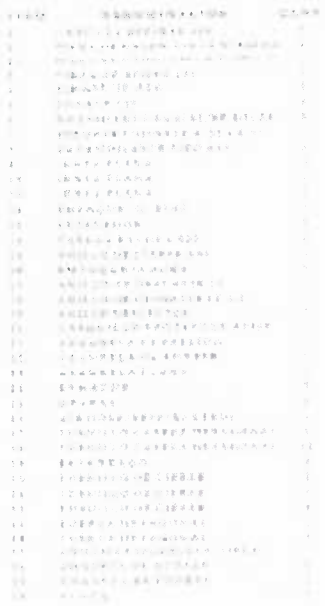
Modelos	Dimensiones de la Bomba																		Punta de Eje				
	DN1	DN2	a	f	h1	h2	b	m1	m2	m3	n1	n2	d2	s1	s2	w	l	C	x	d(k6)	l	t	u
[illegible]	100	80	[illegible]	470	200	250	80	50	—	90	340	290	12	12	13	559	70	200	140	23	40	31	8
[illegible]	100	80	328	470	200	350	80	50	—	90	340	290	12	12	13	669	70	200	140	23	60	31	8
80-400	125	80	125	530	280	335	80	160	130	44	135	316	18	20	20	370	23	160	140	42	110	45	12
100-400	125	100	140	530	280	355	100	200	150	53	500	400	23	20	12	379	26	160	140	42	110	45	12
125-400	150	125	140	530	315	400	100	200	150	52	500	400	23	20	12	375	26	160	140	42	110	45	12
150-400	200	150	160	530	315	450	100	200	150	52	550	450	23	20	12	379	26	160	140	42	110	45	12
[illegible]	200	200	250	525	400	300	140	250	200	110	530	440	23	25	25	690	60	14	140	42	110	45	12
250-290	250	250	220	580	570	290	140	250	190	158	860	580	23	28	25	1105	90	20	140	58	130	53	14
300-350	300	300	300	590	400	450	150	320	268	150	840	580	23	30	25	1105	90	20	140	58	130	53	14

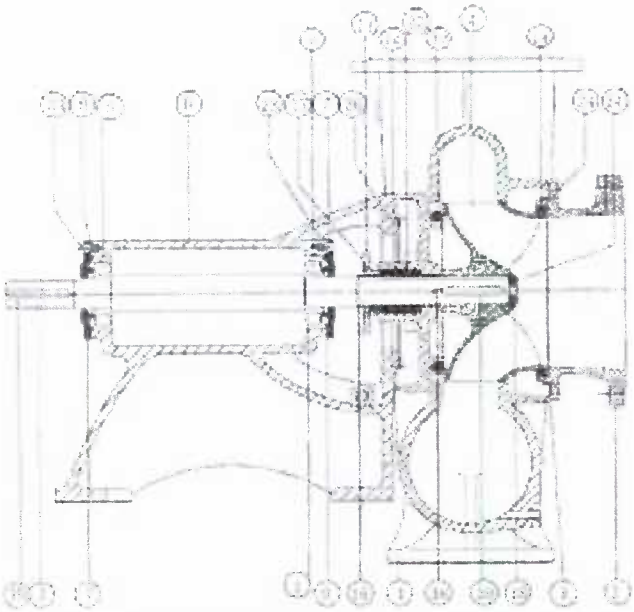
HIDROMAC

Corte Transversal y Lista de Piezas

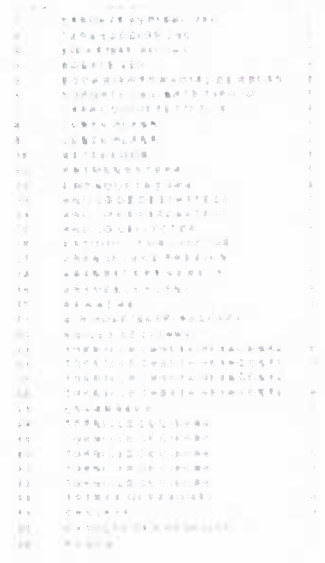


Lista de Piezas FTN





Lista de Piezas FTA



ELECTRO ECUATORIANA

PROFORMA

[illegible]

Numero: [illegible]

Fecha: 09/03/2011

Cliente: ING. ATILIO MENDOZA

Atención:

Dirección: GUAYAQUIL

Teléfono: [illegible]

Fax:

Asesor: HECTOR SANDOVAL

En atención a su solicitud, nos es grato poner a su consideración nuestra oferta como detallamos:

Descripcion	Codigo	Cantidad	Precio Unitario	Precio Total
MOTOR INDUSTRIAL DEUTZ BF6L914C [illegible]	[illegible]	1	19,000.00	19,000.00
EMBRAGUE WPT -SAE 3 - UN DISCO [illegible]	[illegible]	1	1,200.00	1,200.00
BOMBA HIDROMAC ETN-100-400E [illegible]	[illegible]	1	2,353.28	2,353.28
MONTAJE [illegible]	[illegible]	1	1,300.00	1,300.00

[illegible] ELECTRIO www.electroecuatoriana.com

ELECTRO ECUATORIANA

Sub. Total: USD.$	23,853.28
Descuento USD.$	0.00
12% Iva: USD.$	2,862.39
Transporte USD.$	0.00
TOTAL: USD.$	26,715.67

Condiciones de pago: CONTADO

Plazo de entrega: 4 SEMANAS

Validez de la Oferta: 1 MES

Observaciones: ENTREGA DEL EQUIPO: BODEGAS DE EESACI

Garantía: 1000 HORAS/USO, O UN AÑO A PARTIR DE LA FECHA DE LA ENTREGA RECEPCION DEL EQUIPO, LO QUE OCURRA PRIMERO

Atentamente

HECTOR SANDOVAL V.
ASESOR DE CLIENTES ESPECIALES

ACEPTADA
ING. ATILIO MENDOZA

[illegible]
1700 - ELECTRO www.electroecuatoriana.com

FINANCIAL REPORT

AGREEMENT INIAP - USDA MIAMI

EXECUTING ORGANIZATION: INIAP-Estación Experimental Pichilingue
TITLE OF THE PROJECT "Germplasm Evaluation, Breeding and Phytopathology Studies for Obtaining Improved Cocoa Varieties(USDA/MIAMI)"
RESPONSIBLE: Ing. Freddy Amores
PERIOD: **From April 01, 2010 to March 30, 2011**

	ITEM	BUDGET	EXPENDITURES			BUDGET BALANCE
			PREVIOUS YEAR BUDGET BALANCE	CURRENT EXPENDITURE April 01, 2010 March 30, 2011	CUMULATIVE EXPENDITURE	
1	Wages and Salaries	96,460.18	-126,247.50	51,352.42	177,599.92	-81,119.74
2	Travel Domestic and Foreing	10,000.00	146,336.98	9,028.92	9,028.92	147,308.06
3	Materials and Suplies	15,000.00	-41,884.17	23,154.40	65,038.57	-50,038.57
4	Vehicle	0.00	1,030.13	925.69	925.69	104.44
5	Indirect Costs	13,497.80	-1,166.36	13,498.00	14,664.36	-1,166.56
	TOTAL	**134,977.98**	**-21,930.92**	**97,959.43**	**267,257.46**	**15,087.63**

INCOMES / USDA/MIAMI	DATE	USD
Money transfer No.12	09/06/2010	134,977.98
Total Transfered		**134,977.98**
Receivable Balance		**0.00**

April 25, 2011

Ing. Fredy Amores Puyuntaxi
Proyect Leader
Estación Experimental Tropical Pichilingue

Carlos Nieto Cabrera Ph.D.
Ejecutive Director
Corporación INIAP "CORPOINIAP"