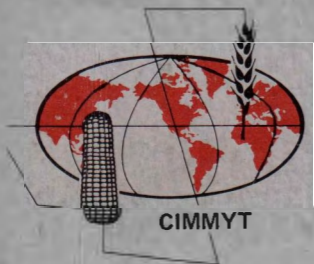


CIMMYT MAIZE TRAINING
OFF STATION EXPERIMENTS
1978 A



CENTRO INTERNACIONAL DE MEJORAMIENTO DE MAIZ Y TRIGO

INTERNATIONAL MAIZE AND WHEAT IMPROVEMENT CENTER

México

CIMMYT MAIZE TRAINING
OFF STATION EXPERIMENTS

1978 A

EXPERIMENTAL VARIETY TRIALObjectives:

1. To compare a commercially available hybrid with open pollinated varieties.
2. To compare commercially available materials with experimental varieties developed from CIMMYT's populations for adaptation to the Veracruz environment.

Varieties:

<u>ENTRY</u>	<u>TYPE</u>	<u>SEED ORIGIN</u>
1.- Pantnagar 7421	White Dent	PR 76 B-Lote 17
2.- La Máquina 7422	White Dent	PR 76 B-Lote 24
3.- Pichilingue 7429	White Dent	PR 76 B-Lote 78
4.- Tlaltizapan 7322	White Dent	TL 75 B-Lote 151
5.- Cuyuta (2) 7531	White Dent	PR 76 B-Lote 59
6.- Across 7432	White Dent	TL 75 B-Lote 135
7.- Across 7443	White Dent	TL 75 B-Lote 138
8.- Suwan 7430	White Flint	PR 76 B-Lote 74
9.- Gemiza 7544	White Dent	TL 77 A-Lote 153A
10.- Drought Tolerant	White Dent	PR 76 B-719-7
11.- Very Early Selection	White Mixed	PR 77 B-Lote 88
12.- Borer Resistant	White Mixed	PR 77 A-PPT 301-307
13.- Tlaltizapan (DN) 7621	White Dent	TL B-Lote 1529
14.- Criollo	White Dent	Farmer's seed
15.- H-509	White Dent	PRONASE
16.- Tuxpeñito	White Dent	PRONASE

Experimental Design:

A 4 x 4 Balanced Lattice Square having 5 replications.

Cultural Practices:

All varieties are thinned to 50,000 plants/ha except varieties 11 (100,000 plants/ha) and 14 (35,000 plants/ha) in 5 m rows 0.30 m apart. Fertilizers rates at San Carlos are 100 kg N/ha and 40 kg P₂O₅/ha. Fertilizers rates at Poza Rica Exp. Sta. are 200 kg N/ha and 80 kg P₂O₅/ha. Weed control was with Atrazine and 2,4-D. Insecticides are applied as needed.

Locations Planted:

Poza Rica Experiment Station
Rancho San Carlos

Conventional Tillage
Conventional Tillage

OPAQUE VARIETIES TRIALObjectives:

1. To compare a soft endosperm opaque variety with one selected for modified hard endosperm.
2. To compare the performance of each opaque variety with a commercially available normal (non-opaque) variety for adaptation to the Poza Rica environment.

Varieties:

<u>ENTRY</u>	<u>TYPE</u>	<u>SEED ORIGIN</u>
1. Tuxpeñito	White Dent	PRONASE
2. Tuxpeño Caribe O ₂	White Dent	PR 77 A-Lote 94
3. La Posta O ₂	White Dent	PR 77 A-Lote 96

Experimental Design:

A Randomized Complete Block design is used with 3 replications.

Cultural Practices:

All varieties are thinned to 50,000 plants/ha in 5 m rows 0.80 m apart. Fertilizer rates are 100 kg N/ha and 80 kg P₂O₅/ha. Insecticides are applied as needed. Weed control is by a preemergence application of atrazine and paraquat. To prevent yield bias due to pollination of opaque varieties by non-opaque pollen, all plots are detasseled. Pollen is supplied by borders of a mixture of the two opaque varieties.

Locations Planted:

Huizotate	Zero Tillage
Ramon Caracas	Conventional Tillage

VARIETY X PRODUCTION INPUTS TRIALObjectives:

1. To compare the yield responses for various production inputs and test for interactions between these inputs.
2. To identify critical practices or combinations of practices under conventional and zero tillage conditions.
3. To find an economic system for the production of maize in tropical areas with and without the use of machinery.

Treatments:

A - Varieties	(V)	V ₀	Criollo variety
		V ₁	Tuxpeñito variety
B - Nitrogen	(N)	N ₀	No N applied
		N ₁	100 kg N/ha
C - Insecticide	(I)	I ₀	No insecticide applied
		I ₁	Seed and whorl applications of Furadan
D - Density	(D)	D ₀	25,000 plants/ha
used only in		D ₁	50,000 plants/ha
zero tillage			
D - Weed Control	(W)	W ₀	One cultivation only
used only in		W ₁	Atrazine applied preemergence
conventional			
tillage			

Experimental Design:

This experiment is a Randomized Complete Block design with 2 replications. The plots are arranged as a 2⁴ factorial in blocks of 8 treatments with the four way interaction confounded with block effects.

Cultural Practices:

All plots are thinned to 50,000 plants/ha (in the case of conventional tillage trials) or to 25,000 or 50,000 plants/ha (in the case of zero tillage trials). Phosphorus is applied at a uniform rate of 40 kg P₂O₅/ha over the entire experiment. In the trials done under zero tillage, weed control is by a preemergence application of atrazine + paraquat.

Locations Planted:

Cruz de los Esteros	1 conventional and 1 Zero Tillage
Teayo	Zero Tillage
Zapotillo	Zero Tillage

BASIC FERTILIZER TRIALObjectives:

1. To compare the yield responses due to four different fertilizer nutrients under on-farm conditions.
2. To identify significant interactions between fertilizer nutrients.
3. To identify yield limiting nutrient elements for further study under on-farm conditions..

Treatments:

A -Nitrogen	(N)	N ₀	50 or 100 kg N/ha
		N ₁	150 kg N/ha
B -Phosphorus	(P)	P ₀	No phosphorus applied
		P ₁	80 kg P ₂ O ₅ /ha
C -Sulfur	(S)	S ₀	No sulfur applied
		S ₁	2,000 kg S/ha
D -Zinc	(Z)	Z ₀	No zinc applied
		Z ₁	2 kg Zn/ha

Experimental Design:

This experiment is a Randomized Complete Block design with 2 replications. The plots are arranged as a 2⁴ factorial in blocks of 8 treatments with the four way interaction confounded with block effects.

Cultural Practices:

All plots are thinned to 50,000 plants/ha in 5 m rows 0.80 m apart. Tuxpeñito variety is used. All fertilizers are applied at the time of planting. Nitrogen and phosphorus are applied in a hole to the side of the planting hole. Sulfur is broadcast and incorporated into the surface. Zinc sulfate is applied with the seed. Weed Control is by preemergence applications of Atrazine and Paraquat. Insecticides are applied as needed.

Locations Planted:

San Carlos	Conventional Tillage
Ramon Caracas	Conventional Tillage

VARIETY X FERTILIZERS TRIALObjectives:

1. To compare the yield responses of two different varieties under various combinations of fertilizer inputs.

Treatments:

A - Varieties	(V)	V ₀	Criollo variety
		V ₁	Tuxpeñito variety
B - Nitrogen	(N)	N ₀	No N applied
		N ₁	100 kg N/ha
C - Phosphorus	(P)	P ₀	No P applied
		P ₁	80 kg P ₂ O ₅ /ha
D - Zinc	(Z)	Z ₀	No Zn applied
		Z ₁	2 kg Zn/ha

Experimental Design:

This experiment is a Randomized Complete Block design with 2 replications. The plots are arranged as a 2⁴ factorial in blocks of 3 treatments with the four way interaction confounded with block effects.

Cultural Practices:

All plots are thinned to 50,000 plants/ha. Nitrogen and phosphorus are applied in a hole at one side of the planting hole. Zinc is applied as Zinc Sulfate with the seeds. Weed control is by a preemergence application of atrazine and paraquat. Insecticides are applied as needed.

Locations Planted:

El Jardin

Conventional Tillage

RELEVANCE OF PRODUCTION FACTORS TRIALObjectives:

1. To identify the most critical production factors under farmer's conditions.
2. To determine the effect of deleting one practice from the complete set of recommended practices.

Treatments:

In each plot the complete technological package (CTP) is applied or the CTP minus one factor. The CTP consists of 100 kg N/ha + 80 kg P₂O₅/ha + Tuxpeñito variety + 50,000 plants/ha + use of Atrazine + granular insecticide in the whorl + Furadan with the seed.

Treatment	Inputs
1	CTP - N No N applied
2	CTP - P No P applied
3	CTP - NP No N or P applied
4	CTP - F No insecticide used
5	CTP - V Criollo variety used
6	CTP - D 25,000 plants/ha density used
7	CTP - W No atrazine used, only 1 cultivation
8	CTP - F No furadan used
9	CTP All factors applied

Experimental Design:

A randomized Complete Block design is used with 4 replications.

Cultural Practices:

In all treatments except 4 and 8, insecticides are applied as needed. The plots are thinned to give the desired plant densities.

Locations Planted:

San Carlos	Conventional Tillage
Teayo	Zero Tillage

WEED CONTROL UNDER CONVENTIONAL TILLAGE CONDITIONS

Objectives:

1. To compare the effectiveness of several herbicides for control of broad and narrow leaved weeds.
2. To demonstrate the effect of weeds on the yield of maize.
3. To investigate the use of herbicide formulations which can be applied at low volumes of liquid per hectare.

Treatments:

1. Gesaprim 50 WP (50% Atrazine) applied preemergence as 2 kg a.i./ha in 400 l. water.
2. Gesaprim Combi 80 WP (40% Atrazine + 40% Igran) applied preemergence as 1 kg a.i. Atrazine/ha in 400 l. water.
3. Gesaprim 500 FW (50% Atrazine) applied preemergence as 2 kg a.i./ha in 10 l. solution/ha.
4. Primextra 500 FW (17% Atrazine + 33% Methylalachlor) applied pre-emergence as 1 kg a.i. Atrazine/ha in 15 l. solution/ha.
5. 2,4-D + Lasso applied preemergence as 1 l. a.i. 2,4-D/ha + 0.86 l. a.i. Lasso/ha in 400 l. water.
6. Manual Control of weeds starting 10 days after emergence and repeated whenever necessary.
7. Check. No weed control.

Experimental Design:

A Randomized Complete Block design is used with 4 replications.

Cultural Practices:

All plots are thinned to give a plant density of 50,000 plants/ha in 5 m rows 0.8 m apart. Insecticides are applied as needed. Nitrogen is applied at 100 kg N/ha and Tuxpeñito variety is used. All herbicides are applied preemergence.

Locations Planted:

Ramon Caracas	Conventional Tillage
San Carlos	Conventional Tillage
El Jardin	Conventional Tillage

WEED CONTROL TRIAL UNDER ZERO TILLAGE CONDITIONS

Objectives:

1. To determine the best combination of herbicides for maize under zero tillage conditions.
2. To study the costs of the herbicide treatments relative to the traditional tillage method.

Treatments:

active ingredients/ha.

1. 1.2 l. Paraquat + 1.5 kg Atrazine
2. 0.8 l. Paraquat + 1.5 kg Atrazine
3. 0.4 l. Paraquat + 1.5 kg Atrazine
4. 1.2 l. Paraquat + 1.0 kg Atrazine
5. 0.8 l. Paraquat + 1.0 kg Atrazine
6. 0.4 l. Paraquat + 1.0 kg Atrazine
7. 1.2 l. Paraquat + 0.5 kg Atrazine
8. 0.8 l. Paraquat + 0.5 kg Atrazine
9. 0.4 l. Paraquat + 0.5 kg Atrazine
10. 0.4 l. Paraquat + 0.5 kg Atrazine+ 0.5 l. Lasso
11. Traditional cultivation practice
12. Check (no weed control)

Experimental Design:

The entire set of treatments forms a Randomized Complete Block design with 2 replications. Treatments 1-9 form a 3 x 3 factorial with 2 replications.

Cultural Practices:

All plots are thinned to give a plant density of 50,000 plants/hectare in 5 m rows 0.8 m apart. Insecticides are applied as needed. Nitrogen is applied at 100 kg N/ha. All herbicides are applied preemergence. Tuxpeñito variety is used.

Locations Planted:

Zapotalillo

Zero Tillage

INSECTICIDE TRIAL

Objectives:

1. To assess the economic benefits of crop protection with insecticides.
2. To determine the effectiveness of insecticides in Farmer's fields.

Treatments:

1. No insecticide applied
2. One application of Birlane granules when necessary.
3. Two or more applications of Birlane granules when necessary.
4. Application of Furadan with the seed at planting and Furadan granules in the whorl 5 weeks after planting.

Experimental Design:

For instructional purposes either a Randomized Complete Block design or a Completely Randomized design are used, each having 4 replications. The Randomized Complete Block design may also be analyzed as a 4 x 4 Latin Square.

Cultural Practices:

All plots are thinned to give a density of 50,000 plants/ha in 5 m rows 0.80 m apart. Fertilizer rates are 100 kg N/ha and no phosphorus. Weed control is by a mixture of atrazine and paraquat applied preemergence in both conventional and zero tillage locations. Tuxpeñito variety is used.

Locations Planted:

Ramon Caracas	Conventional Tillage
San Carlos	Conventional Tillage
Zapotalillo	Zero Tillage
Teayo	Zero Tillage
Huizotate	Zero Tillage
El Jardin	Conventional Tillage

VARIETY X PLANT DENSITY TRIALObjectives:

1. To compare promising experimental varieties with local varieties.
2. To compare the responses of these varieties to three plant densities.

Treatments:

Varieties	TYPE	
V ₁ Across 7529	White Dent	TL 77 A-Lote 119A
V ₂ Tuxpeñito	White Dent	PRONASE
V ₃ Across 7532	White Dent	PR 76 B-Lote 49
V ₄ Tlaltizapan (DN) 7621	White Dent	TL 77 B-1529
V ₅ Criollo	White Dent	Farmer's seed

Densities

- D₁ 25,000 plants/ha
D₂ 50,000 plants/ha
D₃ 75,000 plants/ha

Experimental Design:

This experiment is planted as a Split Plot design with 3 replications. Main plots are densities and subplots are varieties.

Cultural Practices:

All plots are thinned to give plant densities of 25,000; 50,000 or 75,000 plants/ha in 5 m rows 0.80 apart. Only Nitrogen is applied at 100 kg N/ha. Weed control is by a mixture of Atrazine and Paraquat applied preemergence in either conventional or zero tillage conditions. Insecticides are applied as needed.

Locations Planted:

El Jardin

Conventional Tillage

NITROGEN X PHOSPHORUS TRIALObjectives:

1. To study the effect of Nitrogen and Phosphorus fertilizers on maize grown under farmers' conditions.
2. To determine an optimum, economic fertilizer rate under farmers' conditions.
3. To demonstrate the use and responses to fertilizers to local farmers.
4. To study the effect of sulfur or zinc on maize growth and to demonstrate the use of satellite treatments.

Treatments:

A - Nitrogen (N) applied as Urea

N ₀	No N applied
N ₁	50 kg N/ha
N ₂	100 kg N/ha
N ₃	150 kg N/ha

B - Phosphorus (P) applied as triple superphosphate

P ₀	No P applied
P ₁	40 kg P ₂ O ₅ /ha
P ₂	80 kg P ₂ O ₅ /ha

Sulfur (S) applied as powdered Sulfur OR Zinc (Z) applied as Zinc sulfate

Sulfur or Zinc are applied only in Satellite treatments.
Rates and treatments combinations vary.

Experimental Design:

A Randomized Complete Block design is used combining 4 nitrogen levels with 3 phosphate levels (4 X 3 factorial) in two replications. In the first block the treatments are arranged for demonstration purposes with N increasing along one side and P along the other side of the experiment. The sulfur or zinc plots are placed at one side of each block.

Cultural Practices:

All plots are thinned to give a density of 50,000 plants/ha in 5 m rows 0.80 m apart. Weed control is with a mixture of atrazine and paraquat applied preemergence in both conventional and zero tillage conditions. Insecticides are applied as needed. Tuxpeñito variety is used.

Locations Planted:

Ramon Caracas	Conventional Tillage
San Carlos	Conventional Tillage
El Jardin	Conventional Tillage
Zepotalillo	Zero Tillage
Teayo	Zero Tillage
Huizotate	Zero Tillage

NITROGEN X PLANT DENSITY TRIAL

Objectives:

1. To determine the optimum combination of nitrogen and plant density for a single variety under farmers' conditions.
2. To demonstrate the importance of the interaction between increased plant density and the use of fertilizer nitrogen.

Treatments:

A - Nitrogen (N) applied as Urea

- N₀ No N applied
- N₁ 50 kg N/ha
- N₂ 100 kg N/ha

B - Density (D)

- D₀ 25,000 plants/ha
- D₁ 50,000 plants/ha
- D₂ 75,000 plants/ha

Experimental Design:

This is a Randomized Complete Block design with 3 replications having 3 Nitrogen treatments and 3 densities arranged as a 3 x 3 factorial. In the first block the treatments are arranged for demonstration purposes with nitrogen levels increasing in one direction and density treatments increasing within each nitrogen level.

Cultural Practices:

All plots are thinned to give a plant densities of 25,000; 50,000 or 75,000 plants/ha in 5 m rows 0.80 m apart. Weed control is by a mixture of atrazine and paraquat applied preemergence in both conventional and zero tillage conditions. Insecticides are applied as needed. Tuxpeñito variety is used.

Locations Planted:

Ramon Caracas	Conventional Tillage
San Carlos	Conventional Tillage
Huizotate	Zero Tillage
Teayo	Zero Tillage
Zapotalillo	Zero Tillage
El Jardin	Conventional Tillage

VERIFICATION TRIAL

Objectives:

1. To compare the traditional variety and cultural practices used by local farmers with an improved variety and improved practices including fertilizers, insecticides, weed control and higher plant densities.
2. To demonstrate to the farmer in his own field that improved practices can greatly increase his yields and net income.
3. To demonstrate to the farmer a range of improved practices (with increasing costs of inputs) to overcome his reluctance to adopt an entire package of improved practices at one time.

Treatments:

1. The local variety (criollo) planted and cultivated by the farmer in the traditional way.
2. The improved variety (Tuxpeñito) planted and cultivated by the farmer in the traditional way.
3. The local variety planted with minimum capital inputs.
Density: 35,000 plants/ha
Fertilizer: 50 kg N/ha
Weed Control: Gesaprim Combi 3 kg commercial/ha
Insect Control: as needed with Birlane
4. The improved variety (Tuxpeñito) planted with minimum capital inputs.
Density: 35,000 plants/ha
Fertilizer: 50 kg N/ha
Weed Control: Gesaprim Combi 3 kg commercial/ha
Insect Control: as needed with Birlane
5. The local variety (criollo) planted with the recommended technology.
Density: 50,000 plants/ha
Fertilizer: 100 kg N/ha
Weed Control: Gesaprim Combi 3 kg commercial/ha
Insect Control: as needed with Birlane
6. The improved variety (Tuxpeñito) planted with the recommended technology
Density: 50,000 plants/ha
Fertilizer: 100 kg N/ha
Weed Control: Gesaprim Combi 3 kg commercial/ha
Insect Control: as needed with Birlane

Experimental Design:

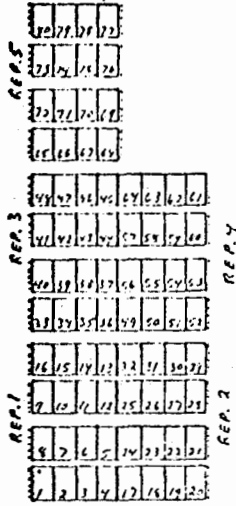
There are a total of 6 plots having only 1 replication. The plots are arranged in order of the treatments 1-6.

Cultural Practices:

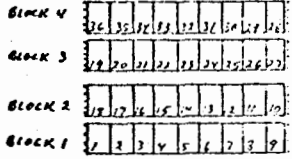
Plots 1 and 2 are planted and maintained by the local farmer. Plots 3, 4, 5 and 6 are planted and maintained by CIMMYT trainees. In plots 3-6 the rows are 20 m long and 0.80 m apart. No thinning is done in this trial. In trials done under zero tillage conditions, weed control is by a mixture of atrazine and paraquat applied preemergence.

Locations Planted:

Ramon Caracas	Conventional Tillage
San Carlos	Conventional Tillage
El Jardin	Conventional Tillage
Zapotalillo	Zero Tillage
Teayo	Zero Tillage
Huizotate	Zero Tillage
Cruz de los Esteros	Zero & Conventional Tillage

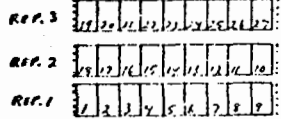


EVT

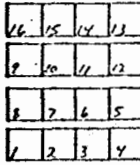


RELEVANCE

RELEVANCIA

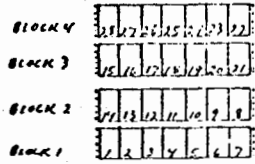


N x DENS.



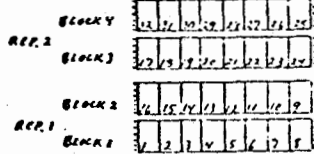
INSECTICIDE

INSECTICIDAS



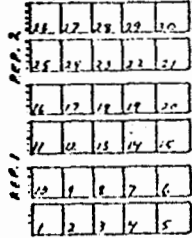
WEED CONTROL

CONTROL DE MALEZAS



BASIC FERTILIZER TRIAL

ENSAYO BASICO DE FERTILIZANTES

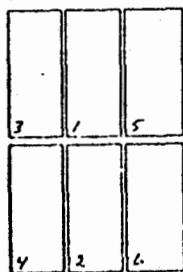
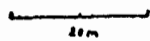


N x P + S

CONVENTIONAL TILLAGE
LABRANZA CONVENCIONAL

RANCHO SAN CARLOS

PLANTED - SEMBRADO
20 DEC., 1977



VERIFICATION

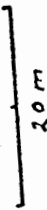
VERIFICACION

ROAD - CAMINO

ZAPOTALILLO

15 DEC, 1977

ZERO TILLAGE
NO LABRAZA



CHEMICAL WEED CONTROL
CONTROL QUIMICA DE MALEZAS

24	23	22	21	20	19	18	17	16	15	14	13
2	3	4	5	6	7	8	9	10	11	12	

REP. 3

19	20	21	22	23	24	25	26	27
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REP. 2

18	17	16	15	14	13	12	11	10
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REP. 1

1	2	3	4	5	6	7	8	9
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INSECTICIDAS

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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REP. 1

9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
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REP. 1

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
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INSECTICID
INSECTICIDAS

N X P

ROAD CAMINO

VERIFICACION
VERIFICACION

32	31	30	29	28	27	26	25
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17	18	19	20	21	22	23	24
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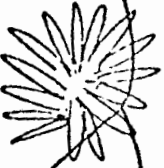
16	15	14	13	12	11	10	9
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1	2	3	4	5	6	7	8
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3	4	1	2	5	6
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VAR. X PROO.
INPUTS

VAR. X PRAC.
AGROM.



ZERO TILLAGE
NO LABRANZA

CONVENTIONAL TILLAGE
LABRANZA CONVENCIONAL

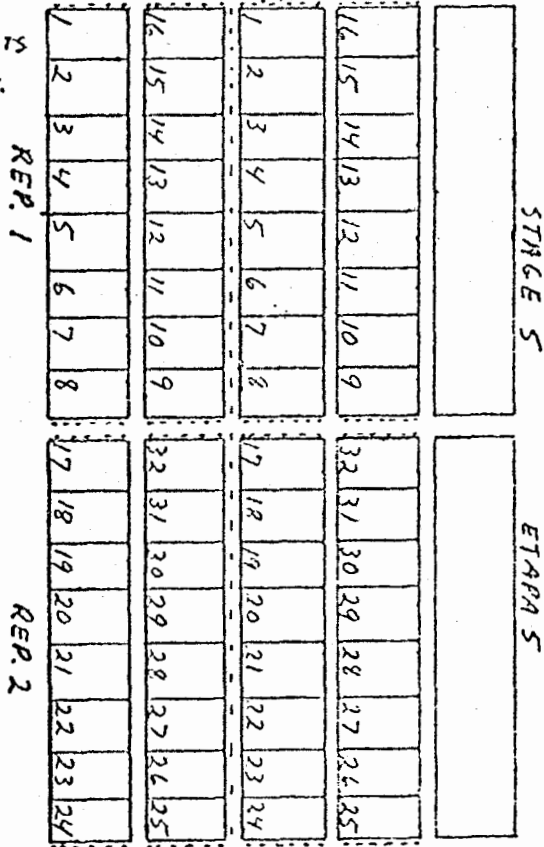
VAR. X PROD. INPUTS
VAR. X PRAC. AGRON.

VAR. X PROD. INPUTS
VAR. X PRAC. AGRON.

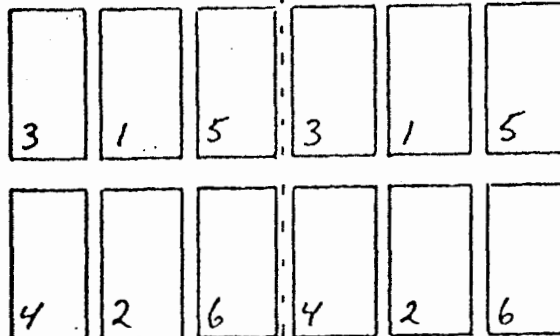
CRUZ DE
LOS ESTEROS

14-15 DEC., 1977

20m



VERIFICATION
VERIFICACION



VERIFICATION
VERIFICACION

20m

EL JARDIN

13 DEC. 1977

CONVENTIONAL
TILLAGE

LABRANZA
CONVENCIONAL

INSECTICIDE

INSECTICIDAS

REP.3

N X DENS.

REP.2

REP.1

REP.2 VAR. X FERTILIZER TRIAL

ENSAYO DE VAR. X FERTILIZANTES

REP.1

REP.3

VAR. X DENS.

REP.2 (REP.3 PLANTED-SEMBRADO)
14 DEC., 1977

REP.1

N X P + S

VERIFICATION

VERIFICACION

ALAMO

ROAD - CAMINO

8	7	REP. II	5	16	15	REP. II	13
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1	2	REP. I	4	9	10	REP. III	12
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19	20	21	22	23	24	25	26	27
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18	17	16	15	14	13	12	11	10
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1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

REP. 4	28	27	26	25	24	23	22	32	31	30	29	28	27	26	25
--------	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

REP. 3	15	16	17	18	19	20	21	22	23	24
--------	----	----	----	----	----	----	----	----	----	----

REP. 2	14	13	12	11	10	9	16	15	14	13	12	11	10	9
--------	----	----	----	----	----	---	----	----	----	----	----	----	----	---

REP. 1	1	2	3	4	5	6	7	1	2	3	4	5	6	7	8
--------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

30	29	28	27	26	25	24	23	22	21	20	19	18	17	16
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----

11	12	REP. 1	14	15	26	27	REP. 2	29	30
----	----	--------	----	----	----	----	--------	----	----

10	9	8	7	6	25	24	23	22	21
----	---	---	---	---	----	----	----	----	----

1	2	3	4	5	16	17	18	19	20
---	---	---	---	---	----	----	----	----	----

3	4	1	2	5	6
---	---	---	---	---	---

RAMON
CARACAS

PLANTED - SEMBRADO
27 DEC., 1977

CONVENTIONAL TILLAGE
LABRANZA CONVENCIONAL

FILLER
RELLENO

REP. 3
7 8 9

OPAQUE VAR.

REP. 2
6 5 4

VAR. OPACAS

REP. 1
1 2 3

FILLER
RELLENO

WEED CONTROL
CONTROL DE MALEZAS

REP. 4
28 27 26 25 24 23 22

REP. 4
16 15 14 13

REP. 4
INSECTICIDE

REP. 3
15 16 17 18 19 20 21

REP. 3
9 10 11 12

REP. 3

REP. 2
14 13 12 11 10 9 8

REP. 2
8 7 6 5

REP. 2
INSECTICIDAS

REP. 1
1 2 3 4 5 6 7

REP. 1
1 2 3 4

REP. 1

REP. 3
19 20 21 22 23 24 25 26 27

N X DENS.

REP. 2
18 17 16 15 14 13 12 11 10

REP. 1
1 2 3 4 5 6 7 8 9

VAR X PROD. 4

BLOCK 4
32 31 30 29 28 27 26 25

BLOCK 4
22 21 20 19 18 17 16 15

BLOCK 4

INPUTS

BLOCK 3

BLOCK 3
17 18 19 20 21 22 23 24

BLOCK 3
17 18 19 20 21 22 23 24

BLOCK 3
BASIC FERTILIZER TRIAL

VAR. X FRAC. AGRONOMICAS

BLOCK 2

BLOCK 2
16 15 14 13 12 11 10 9

BLOCK 2
16 15 14 13 12 11 10 9

BLOCK 2
ENSAYO BASICO DE FERTILIZANTE

BLOCK 1

BLOCK 1
1 2 3 4 5 6 7 8

BLOCK 1
1 2 3 4 5 6 7 8

BLOCK 1

11 12 13 14 15 26 27 28 29 30

NXP + Zn

REP. 1

10 9 8 7 6 25 24 23 22 21

REP. 2

1 2 3 4 5 16 17 18 19 20

20 m

4 3 2 1 6 5

VERIFICATION

VERIFICACION

TEAYO

ZERO ILLAGE
NO LABRANZA

20 m

PLANTED - SEMBRADO
21 DEC., 1977

VAR. X PROD. INPUTS

N X DENS

Block 2
Block 1

VAR. X PRAC. AGRON.

19	20	21	22	23	24	25	26	27
----	----	----	----	----	----	----	----	----

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

Block 1
Block 2

18	17	16	15	14	13	12	11	10
----	----	----	----	----	----	----	----	----

16	15	14	13
----	----	----	----

INSECTICIDE

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

9	10	11	12
---	----	----	----

11	12	13	14	15	26	27	28	29	30
----	----	----	----	----	----	----	----	----	----

8	7	6	5
---	---	---	---

INSECTICIDAS

10	9	8	7	6	25	24	23	22	21
----	---	---	---	---	----	----	----	----	----

1	2	3	4
---	---	---	---

1	2	3	4	5	16	17	18	19	20
---	---	---	---	---	----	----	----	----	----

$N \times P + Zn$

VERIFICACION

VERIFICACION

4	3	2	1	6	5
---	---	---	---	---	---

19	20	21	22	23	24	25	26	27
----	----	----	----	----	----	----	----	----

Block 3 RELEVANCE

18	17	16	15	14	13	12	11	10
----	----	----	----	----	----	----	----	----

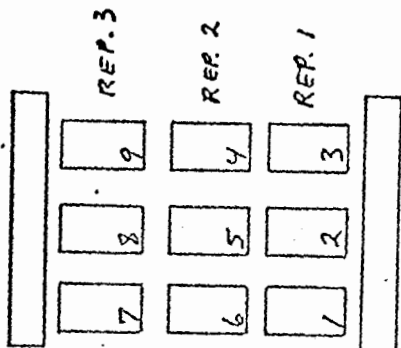
Block 2 RELEVANCIA

1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

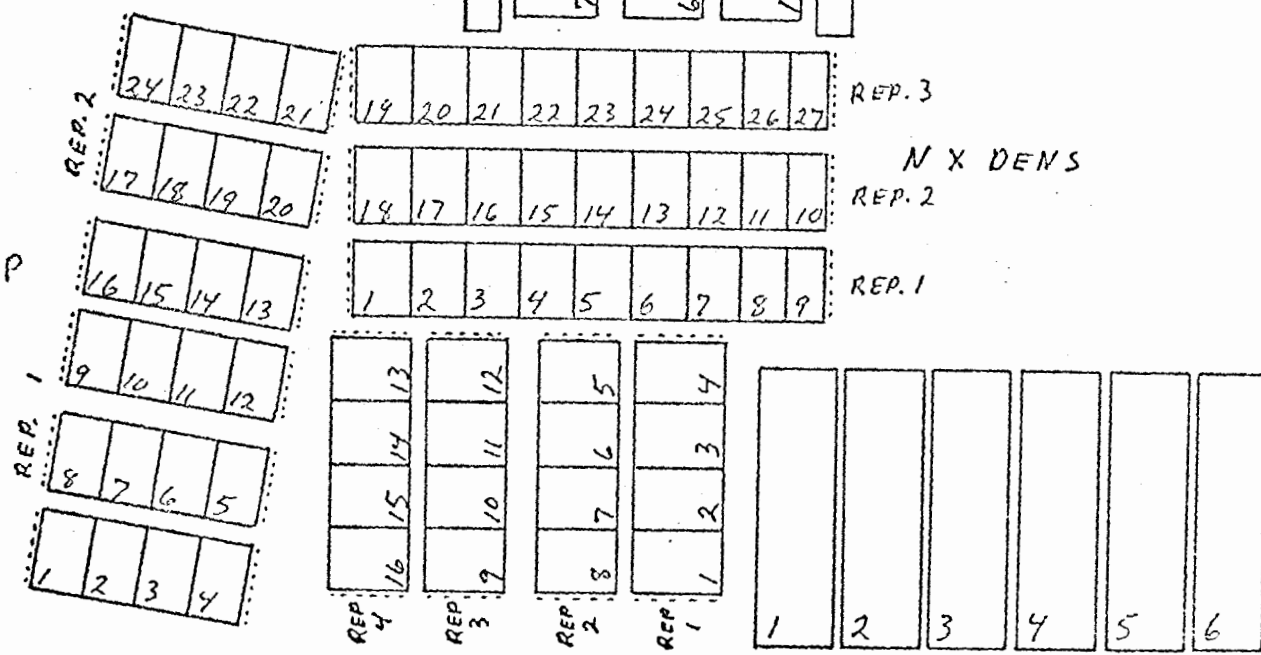
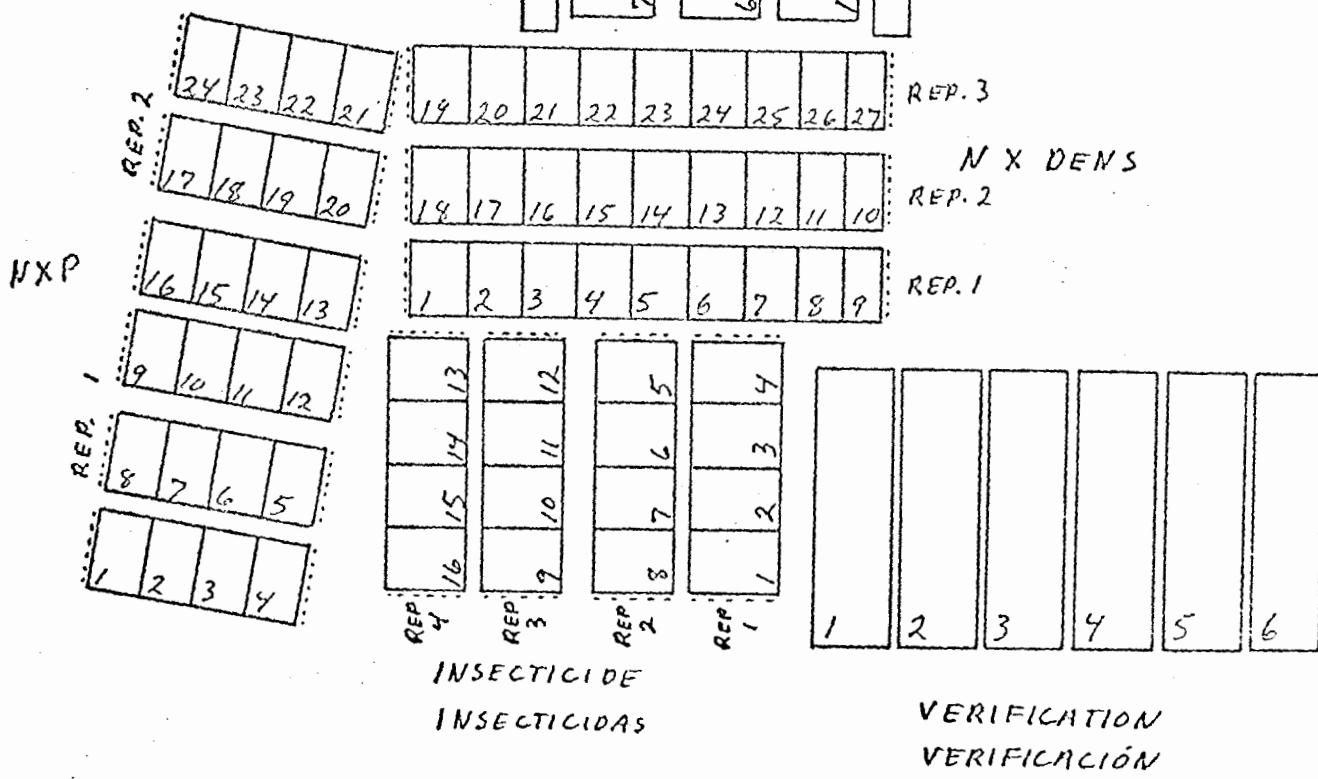
Block 1

PRO AD CAMINO

TEAYO →



OPAQUE VAR. TRIAL
ENSAYO VAR. OPACAS



HUIZOTATE

16 DEC., 1977

ZERO TILLAGE
NO LABRANZA

