

FINAL REPORT

TITLE: Evaluate the impact of applications of HUMUSON on peaches yield and quality (particular reference to productivity, size uniformity, firmness and yield).

HUMUSON COMPLEX® for use in organic agriculture.

TESTING FACILITY STUDY CODE: GOES21-HUM-01-01

CONDUCTED FOR:

SAPROPELORGANICS ES, S.L

PD Lo Blanc, 18

03187 – Los Montesinos, Alicante, España.

BY:

Innovaciones Agrícolas GOES S.L.L.

Polígono Industrial San Roque

C/Villa de Blanca nº6 Puerta 6 30540 Blanca (Murcia).

STUDY PERFORMED:

1. PP1/135(3) Efficacy evaluation of plant protection products Phytotoxicity assessment.
2. PP1/152(3) Design and analysis of efficacy evaluation trials. Efficacy evaluation of plant protection products.
3. PP1/181(3) Conduct and reporting of efficacy evaluation trials, including good experimental practice.

Start of Trial: 20th of January 2021.

Completion Trial: 28th of April 2021.

Final Report Date: 28th of June 2021.

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STUDY DIRECTOR: _____ DATE: 28/06/2021

J. Rafael Pérez Martínez – I. A. GOES

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BORRADOR

1 CONFIDENTIALITY STATEMENT

Claim of confidentiality is made for any information contained in this study.

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MANAGER : _____ DATE: 31/05/2021

J. Rafael Pérez Martínez – I. A. GOES

This document must not be released in any form to an outside party, nor must information contained in it be used by third parties without the authorization of the Sponsor.

2 QUALITY STATEMENT OF TRIAL IN ACCORDANCE WITH GEP*

Innovaciones Agrícolas GOES Test Facility is authorized in Spain by the “Ministerio de Agricultura, Pesca y Alimentación”, with the authorization nº: EOR 71/10 on October the 18th of 2010, to conduct studies with agrochemicals to evaluate the efficacy on Crop Protection.

This study was carried out in accordance with:

- Real Decreto 2163/1994, (accomplishment of directive n. 93/71/CEE)
- International guidelines: EPPO*
- Standard Operating Procedures (POS) by Innovaciones Agrícolas GOES.

This study was conducted in accordance with Good Experimental Practice Standards. The Study Director, who certifies that the information contained in this report is consistent with the data, reviewed the protocol and inspected the study at each stage in order to ensure its accuracy and integrity. Thus, the results have been reviewed by the Study Director, who certifies that the information contained in this report is consistent with the data.

3 STORAGE OF THE DATA

The study plan and the raw data, as well as a true copy of this report, are stored in the central archives of the Testing Facility, located at Innovaciones Agrícolas GOES S.L.L., Pol. Ind. San Roque Calle Villa de Blanca nave 6 pta. 6 de Blanca - Murcia.

4 OBJETIVES.

Evaluate the impact of applications of HUMUSON on peaches yield and quality (particular reference to productivity, size uniformity, firmness and yield), comparing it with an untreated control and a reference product.

HUMUSON COMPLEX is for use in organic agriculture.


5 RELIABILITY/VALIDITY OF THE TRIAL.

This study was carried out in a nectarine farm located in a traditional area of this crop. The trial farm is Alquerías in Murcia (Spain).

The trial was designed as randomized complete block with 4 replications. Different evaluations were performed on all plots during the trial. No special conditions arose during the study period, and the results of this trial can therefore be considered reliable.

6 DATA OF THE FINAL REPORT.

6.1 nº E.O.R. 71/10

 <p>MINISTERIO DE MEDIO AMBIENTE Y MEDIO RURAL Y MARINO</p>	<p>SECRETARÍA GENERAL DE MEDIO RURAL</p>
	<p>DIRECCIÓN GENERAL DE RECURSOS AGRÍCOLAS Y GANADERÍA</p>
<p>RESOLUCION DE AUTORIZACION PARA REALIZAR ENSAYOS CON PRODUCTOS FITOSANITARIOS CON ACREDITACION DE RECONOCIMIENTO OFICIAL.</p>	
<p>Nº. EOR 71/10</p>	<p>Titular de la Autorización INNOVACIONES AGRICOLAS GOES, S.L.L. C/ Nicolás Gómez Tornero, 28 3º D 30550 ABARAN Murcia</p>
<p>Fecha de autorización: 18 de octubre de 2010</p>	<p>MINISTERIO DE MEDIO AMBIENTE Y MEDIO RURAL Y MARINO Secretaría General de Medio Rural Dirección General de Recursos Agrícolas y Ganaderos <div style="border: 1px solid blue; padding: 2px; text-align: center; margin: 5px 0;"> <p>25 OCT 2010</p> </div> SUBDIRECCIÓN GENERAL DE MEDIOS DE REGISTRO SALIDA Nº 004 / 67370</p>
<p>Fecha de caducidad: 18 de octubre de 2015</p>	
<p>Examinada la solicitud de autorización para realizar ensayos con productos fitosanitarios presentada por el titular el 17 de noviembre de 2009, comprobado el cumplimiento de los requisitos establecidos en Orden Ministerial de 11 de diciembre de 1995 y visto el informe favorable de la Comisión de Evaluación de Productos Fitosanitarios, esta Dirección General ha resuelto:</p>	
<p>PRIMERO:</p>	<p>Autorizar a INNOVACIONES AGRICOLAS GOES, S.L.L. para la realización de ensayos de carácter genérico con productos fitosanitarios excepto cuando las sustancias sean microorganismos de nueva introducción o genéticamente modificados para los que deberá solicitar autorización específica en cada caso de acuerdo con la normativa vigente.</p>
<p>SEGUNDO:</p>	<p>Acreditar a dicha empresa para la realización de los citados ensayos con carácter de oficialmente reconocidos, en tanto cumplan los deberes y requisitos establecidos en el apartado 3 del artículo 13 y en los artículos 22 y 23 de dicha Orden, y bajo las siguientes condiciones:</p>

- a) La sustitución del Director de experimentación, D. José Antonio Gómez Castaño, Ingeniero Técnico Agrícola, deberá ser autorizada por esta Dirección General.
- b) Los demás miembros del equipo responsable de la planificación y ejecución de ensayos, sólo podrán sustituirse por personal que posea los conocimientos y experiencias suficientes, debiendo notificar las sustituciones a esta Dirección General, reseñando la titulación, formación y experiencia de los nuevos miembros, en particular la posesión del carnet de aplicador que corresponda según la Orden del Ministerio de la Presidencia de fecha 8 de marzo de 1994.
- c) En caso de que para la realización de ensayos se contraten parcelas, instalaciones o material, deberán mantenerse los contratos correspondientes unidos a la documentación del ensayo de que se trate.

La presente Resolución se dicta en virtud de lo establecido en el artículo 12 de la Orden Ministerial de 11 de diciembre de 1995, y tiene validez hasta el 18 de octubre de 2015 salvo que sea revisada o revocada antes de la conclusión de dicho plazo si se determina que ha dejado de cumplirse alguno de los requisitos exigidos para su autorización o de las obligaciones establecidas por dicha Orden Ministerial.

La presente Resolución, no agota la vía administrativa, de conformidad con el artículo 109 de la Ley 30/1992, de 26 de noviembre, de Régimen Jurídico de las Administraciones Públicas y del Procedimiento Administrativo Común, en la redacción dada por la Ley 4/1999, de 13 de enero, en relación con la Disposición Adicional Decimoquinta de la Ley 6/1997, de 14 de abril, de Organización y Funcionamiento de la Administración General del Estado. Contra ella podrá recurrirse, en alzada, ante la Sra. Ministra de Medio Ambiente y Medio Rural y Marino, en el plazo de un mes, contado a partir del día siguiente a aquel en que tenga lugar su notificación, de acuerdo a lo establecido en los artículos 114 y 115 de la Ley 30/1992.

Madrid 19 de octubre de 2010

EL DIRECTOR GENERAL

Carlos Escribano Mora



MINISTERIO DE AGRICULTURA
ALIMENTACIÓN Y MEDIO AMBIENTE

SECRETARÍA GENERAL DE
AGRICULTURA Y ALIMENTACIÓN

DIRECCIÓN GENERAL DE SANIDAD
DE LA PRODUCCIÓN AGRARIA

ASUNTO: Renovación Acreditación N° EOR 71/10

De acuerdo con lo establecido en el artículo 19 de la Orden de 11 de diciembre de 1995 por el que se establecen las disposiciones relativas a las renovaciones de autorizaciones de ensayos y experiencias con productos fitosanitarios, esta Dirección General ha resuelto, previo informe favorable de la Comisión de Evaluación de Productos Fitosanitarios de fecha 9 de octubre de 2015, renovar la acreditación N° EOR 71/10 concedida a su empresa, para realizar ensayos oficialmente reconocidos.

La validez de esta acreditación queda ampliada hasta el 27 de octubre del año 2020, salvo que sea revisada o revocada antes de la conclusión de dicho plazo si se determina que ha dejado de cumplirse alguno de los requisitos exigidos para su autorización o de las obligaciones establecidas por la Orden Ministerial de 11 de diciembre de 1995.

Madrid 27 de octubre de 2015

EL DIRECTOR GENERAL DE SANIDAD DE LA PRODUCCIÓN AGRARIA



Valentín Almansa de Lara

INNOVACIONES AGRICOLAS GOES, S.L.L.
MURCIA
IBD

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Tele: 91 347 62 93

6.2 DATA OF THE TESTED PRODUCT.

- Comercial name: **HUMUSON COMPLEX.**

- Composition:

AGROCHEMICAL INDICES Nitrogen, Phosphorus and Potassium.

ACTIVE SUBSTANCES Humic Acids, Fulvic Acids, Phytohormones (Cytokinin, Auxin, Gibberellins) and Enzymes (Catalases, Peroxidases, Reductases proteases, etc.).

QUALITATIVE INDICES Crude Protein, Digestible Protein, Glomalin, Crude Fiber, Carbohydrates, Reducing Sugars and Disaccharide (Sucrose).

AMINO ACIDS Glutamine Acid, Tyrosine, Aspartic Acid, Tryptophan, Leucine, Alanine, Carbohydrates, Glycine, Histidine, Serine, Threonine, Lysine, Arginine, Proline, Phenylalanine, Isoleucine, Valine and Methionine.

VITAMINS A (Retinol), E (Tocopherol), B1 (Thiamine) B2 (Riboflavin), B3 (PP and Nicotinic Acid), B6 (Pyridoxine), B12 (Cyanocobalamin), C (Ascorbic Acid and Dehydroascorbic Acid), Carotenes, Xanthophylls and Chlorophylls A + B.

MACRO AND MICRO ELEMENTS Ca (Calcium), Mg (Magnesium), Na (Sodium), Fe (Iron), Mn (Manganese), Zn (Zinc), Cu (Copper) and Se (Selenium).

6.3 TESTS CROPS.

FRUIT CROPS, Nectarine (*prunus persica var. nucipersica*), variety Patagonia.

6.4 DATE AND SIGN.

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28/06/2021

6.5 COMMENTS.

There are no known incompatibilities with other chemicals and / or fertilizers.

7 SUMMARY.

The field trial was carried out according to the Good Agricultural Practices (GAP), with the objective of evaluate the efficacy of the formulation of Humuson Complex applied on nectarine and compare it with a non-treated control and with a Standard reference product.

Sapropel is a term used in marine geology and they are sediments rich in organic matter which are present at the bottom of shallow seas and lakes. Sapropel is formed by dead aquatic vegetation, remains of living organisms and humus particles from the soil. The formation of Sapronel is a slow, rigorous and specific process that is estimated to take more than 10.000 years.

Humuson complex liquid is a product specially designed for plant root system development by increasing their resistance under unfavorable environmental conditions.

After assessments, a predisposition to a greater weight and size is observed in fruits treated with Humuson complex. Regarding to the production, there is also a trend in the average production in the thesis treated with Humuson complex compared to the untreated thesis.

The products tested did not cause phytotoxic effects in the crop.

7.1 BASIC INFORMATION ON THE TRIAL SITE

7.1.1 Trial location.

City:	Alquerías
District:	Murcia.
Postal code:	30580.
Country:	Spain.
Latitude:	37° 59' 17,8"N.
Longitude:	0° 58' 54,5"W.
Altitude:	94 m.

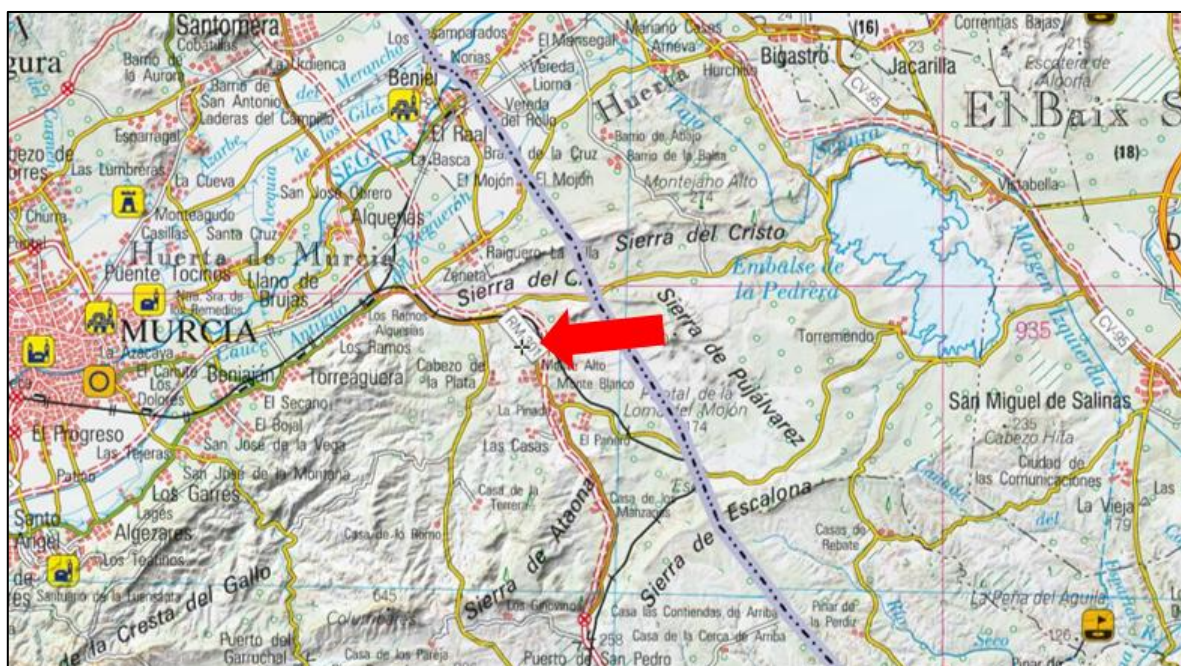


Fig 1. Trial location.

7.1.2 Crop description.

Scientific name: *Prunus persica* var. *nucipersica*.

Common name: Nectarine.

Variety: Patagonia.

7.1.3 Environmental conditions.

Open field.

7.1.4 Trial type.

Efficacy and Selectivity assessments.

7.2 TRIAL CONDITIONS.

7.2.1 Cultural conditions.

The plots selected for the trial had similar cultural conditions in previous years. The trial experimental design consisted of a randomized block design with four repetitions per plot and per thesis 75 m² per elementary plot.

Crop:	Nectarine
Variety:	Patagonia
Distance between the rows:	3 m
Plant spacing:	5 m
Fertilization:	Mineral fertilizer.
Irrigation:	Drip system

Tab. 1 – Trial cultural conditions.

7.3 DESIGN, LAY-OUT AND SITE OF THE TRIAL

7.3.1 Trial lay-out.

Experimental design: randomized.

Number of replicates: 4.

Number of plants per plot: 5

Elementary plot: 60 m².

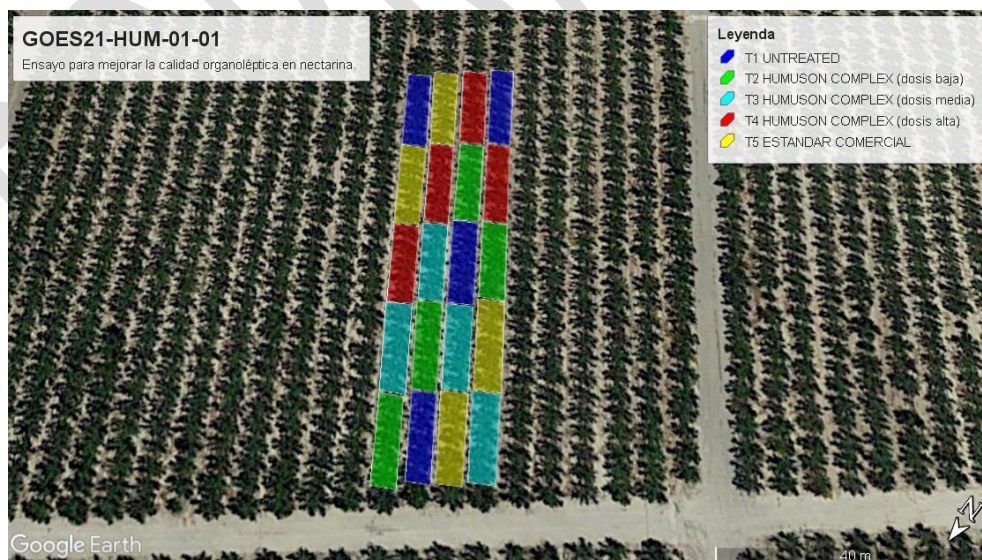


Fig 2.1 Trial lay-out.

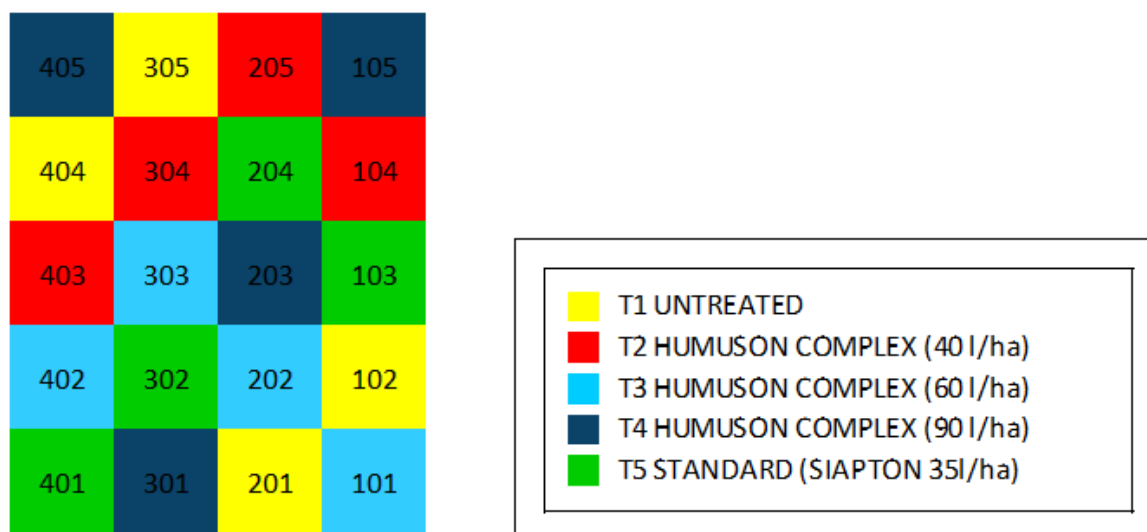


Fig 3. Trial lay-out and experimental design of the trial.

7.3.2 Trial maintenance

All thesis of the trial was treated with a phytosanitary program by the farmer for the good maintenance of the trial.

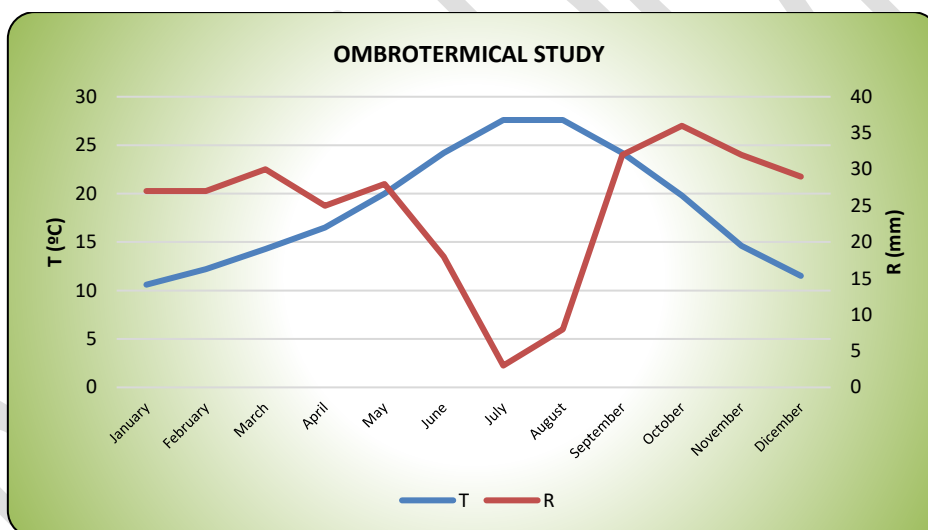
7.4 CLIMATOLOGICAL STUDY IN 20 YEARS.

Month	T	TM	Tm	R	H	DR	DN	DT	DF	DH	DD	I
January	10.6	16.6	4.7	27	65	3.8	0.1	0.2	1.1	2.3	8.0	189
February	12.2	18.4	5.9	27	63	3.6	0.0	0.5	2.0	1.2	7.1	190
March	14.3	20.9	7.7	30	59	3.3	0.0	0.5	0.8	0.3	6.5	223
April	16.5	23.3	9.7	25	53	3.6	0.0	1.6	0.6	0.0	5.8	256
May	20.0	26.6	13.3	28	52	3.9	0.0	2.3	0.6	0.0	5.8	289
June	24.2	31.0	17.4	18	49	2.0	0.0	2.1	0.3	0.0	10.9	323
July	27.2	34.0	20.3	3	50	0.6	0.0	0.9	0.2	0.0	16.1	353
August	27.6	34.2	20.9	8	54	1.0	0.0	1.4	0.2	0.0	12.5	316
September	24.2	30.4	18.0	32	59	3.0	0.0	3.2	0.4	0.0	6.7	239
October	19.8	25.6	13.9	36	64	3.7	0.0	2.0	0.6	0.0	5.3	217
November	14.6	20.3	8.9	32	65	4.1	0.0	0.5	0.8	0.2	7.1	186
December	11.5	17.2	5.8	29	68	3.9	0.0	0.2	1.0	1.5	7.0	172
year	18.6	24.9	12.3	297	58	36.5	0.2	15.6	8.7	5.5	99.2	2967

CAPTION	
T	Monthly / yearly average temperature (° C)
TM	Monthly / yearly average of maximum daily temperatures (° C)
Tm	Monthly / yearly average of daily minimum temperatures (° C)
R	Monthly / yearly average of precipitations (mm)
H	Average relative humidity (%)
DR	Monthly / yearly average number of days of precipitation equal or greater than 1 mm
DN	Monthly / yearly average number of snow days
DT	Monthly / yearly average number of storm days
DF	Monthly / yearly average number of foggy days
DH	Monthly / yearly average number of frost days
DD	Monthly / yearly average number of days cleared
I	Monthly / yearly average number of sunshine hours

Tab 2. Climatological study in 20 years.

7.5 OMBROTHERMIC STUDY.



Graph.1. Ombrothermic study.

7.6 METEOROLOGICAL DATA.

ESTATION	PROVINCE	LOCATION
CI 42	Cieza	La Carrichosa

FECHA	TMAX (° C)	TMED (° C)	TMIN (° C)	HRMAX (%)	HRMED (%)	HRMIN (%)	PREC (mm)
20/01/2021	10,03	7,1	2,83	97,5	92,28	78,3	0,4
21/01/2021	20,65	10,33	2,14	97,2	77,57	35,91	0
22/01/2021	21,01	13,51	6,51	92,1	59,59	29,17	0,2

FECHA	TMAX (° C)	TMED (° C)	TMIN (° C)	HRMAX (%)	HRMED (%)	HRMIN (%)	PREC (mm)
23/01/2021	18,74	9,83	1,19	93,9	66,96	32,14	0
24/01/2021	22,76	16,28	8,58	88	53,23	27,16	0
25/01/2021	20,86	16,09	8,52	80,5	57,37	44,23	0
26/01/2021	21,47	15,54	11,72	92,9	74,7	52,75	0
27/01/2021	24,83	17,5	11,16	89,4	67,33	44,87	0
28/01/2021	26,25	17,95	10,84	87,6	60,37	31,53	0
29/01/2021	28,5	16,73	9,39	90,4	57,93	18,8	0
30/01/2021	22,59	15,65	9,15	79,3	51,47	27,7	0
31/01/2021	20,59	15,76	11,32	71,6	50,21	37,11	0
01/02/2021	24,94	20	15,06	58,45	40,58	28,48	0
02/02/2021	23,66	16,19	8,33	92	59,59	33,98	0
03/02/2021	20,38	12,48	6,76	93,1	73,84	40,64	0
04/02/2021	17,76	11,25	4,97	95,8	84,43	62,62	0
05/02/2021	17,73	12,98	6,59	97	81,38	61,34	0
06/02/2021	20,93	13,67	7,35	93,1	66,64	38,09	0
07/02/2021	18,62	12,63	5,88	83,7	57,6	36,38	0
08/02/2021	19,41	13,24	8,11	78,8	55,25	30,37	0
09/02/2021	16,55	9,98	3,72	90,3	72,79	54,31	0
10/02/2021	22,5	13,98	6,69	88,6	59,27	26,34	0
11/02/2021	24,11	15	7,27	81	62,61	37,26	0
12/02/2021	23,97	17,3	12,04	85,2	55,95	22,52	0
13/02/2021	22,04	16,29	8,6	90,2	52,69	28,97	0
14/02/2021	18,27	11,71	4,56	94,9	79,24	51,24	0
15/02/2021	17,03	12,42	5,81	93,4	76,05	51,03	0
16/02/2021	19,45	10,76	3,38	95,3	76,78	44,88	0
17/02/2021	20,23	12,44	6,87	95,2	73,93	42,26	0
18/02/2021	20,97	13,1	7,79	94,9	76,12	33,27	0
19/02/2021	20,93	11,65	6,59	97,7	85,75	53,12	0,2
20/02/2021	16,42	12,66	9,61	97,2	84,03	65,7	0
21/02/2021	18,07	13,43	9,82	93,2	75,49	57,84	0
22/02/2021	17,45	12,44	7,83	85	58,5	35,48	0
23/02/2021	17,87	11,65	4,24	92,8	72,09	44,57	0
24/02/2021	17,71	12,56	6,52	93,9	76,65	59,53	0
25/02/2021	16,45	12,73	6,72	95,5	81,31	66,15	0
26/02/2021	16,42	13,89	12,26	79,8	71,49	60,31	0
27/02/2021	16,44	12,55	9,08	89,9	72,11	53,52	0
28/02/2021	15,2	12,96	9,96	89,1	76,43	64,23	0
01/03/2021	16,34	13,67	9,96	89,5	75,77	66,2	0,4
02/03/2021	16,45	12,73	7,98	93,4	80,99	62,7	0
03/03/2021	16,81	13,27	10,27	93,9	81,51	60,56	0
04/03/2021	16,96	12,28	7,63	95,9	79,83	54,12	0
05/03/2021	15,54	12,88	10,47	93,3	83,41	70,1	0
06/03/2021	16,21	12,53	7,6	96,1	81,67	58,27	0,99

FECHA	TMAX (° C)	TMED (° C)	TMIN (° C)	HRMAX (%)	HRMED (%)	HRMIN (%)	PREC (mm)
07/03/2021	12,63	11,79	10,91	97,5	95,51	91	35,24
08/03/2021	17,86	12,52	9,21	97	83,4	54,23	5,94
09/03/2021	15,76	11,94	9,27	97,7	84,32	61,15	0,59
10/03/2021	20,43	12,04	5,65	97,1	75,09	32,55	0
11/03/2021	23,44	13,65	5,85	96,2	72,83	32,48	0,2
12/03/2021	24,32	16,5	8,46	93	64,63	40,33	0
13/03/2021	20,59	13,67	7,53	95,9	79,21	52,53	0,2
14/03/2021	23,13	14,71	8,1	97	64,64	27,64	0
15/03/2021	20,18	12,8	6,64	95,8	77,57	50,89	0
16/03/2021	18,12	11,41	4,99	96,9	79,63	51,92	0,2
17/03/2021	22,13	12,79	4,26	97,2	72,23	27,35	0
18/03/2021	14,11	8,91	4,99	97,3	91,32	81,1	9,1
19/03/2021	14,44	10,18	6,87	96,4	74,19	44,24	8,71
20/03/2021	13,93	8,97	2,96	97,1	72,4	49,7	0,4
21/03/2021	18,1	9,82	2,03	91,4	62,45	29	0
22/03/2021	18,8	12,37	6,48	94,6	61,55	36,28	0
23/03/2021	22,04	12,74	4,52	96,8	71,49	33,29	0
24/03/2021	20,3	12,28	4,92	97,1	84,11	58,78	0,2
25/03/2021	24,73	14,79	6,34	97,9	76,2	35,94	0
26/03/2021	24,18	16,26	10,21	94,9	74,28	38,52	0
27/03/2021	21,12	14,2	8,61	96,2	76,52	45,93	0,2
28/03/2021	20,11	13,69	8,36	94,1	69,46	41,88	0
29/03/2021	19,52	14,23	9,73	94	73,35	55,14	0
30/03/2021	20,26	14,21	9,14	94,1	71,71	46,53	0
31/03/2021	19,81	13,42	6,43	94,4	69,82	36,6	0,2
01/04/2021	20,45	14,06	9,43	95	74,34	46	0
02/04/2021	26,09	17,08	8,32	97,2	65,57	35,41	0
03/04/2021	24,09	16,04	10,83	97,3	71,92	40,1	4,75
04/04/2021	19,75	13,37	7,5	98,3	86,27	65,43	0,99
05/04/2021	21,07	14,92	9,63	96,2	77,21	51,47	0
06/04/2021	28,12	17,55	8,37	95,7	62,27	24,24	0
07/04/2021	17,04	14,1	11,32	94,8	83,66	70,4	1,19
08/04/2021	15,96	12,29	9,1	95	77,81	53,5	0,2
09/04/2021	17,42	12,81	10,04	95	84,22	67,52	1,19
10/04/2021	16,18	13,62	11,58	96,9	91,55	82,9	1,58
11/04/2021	23,74	16,9	11,27	96,4	78,59	48,67	0,2
12/04/2021	16,98	14,03	11,08	97,5	83,27	57,23	0
13/04/2021	18,61	15,1	12,45	92,2	76,22	56,51	0
14/04/2021	18,19	13,95	11,12	95,1	81,18	57,45	2,77
15/04/2021	13,17	11,29	9,7	97,4	93,54	80,9	15,44
16/04/2021	19,37	12,35	8,01	97	77,68	42,05	1,78
17/04/2021	19,35	12,28	5,91	97,7	79,6	45,87	0
18/04/2021	17,82	13,72	9,58	94,2	77,23	56,97	0

FECHA	TMAX (° C)	TMED (° C)	TMIN (° C)	HRMAX (%)	HRMED (%)	HRMIN (%)	PREC (mm)
19/04/2021	24,02	15,14	6,49	97	69,87	32,29	0
20/04/2021	22,27	16,68	11,21	92	79,58	55,78	0,2
21/04/2021	22,68	16,38	14,11	96,9	84,67	54,45	2,77
22/04/2021	18,36	15,29	12,88	97,2	89,18	73,9	2,18
23/04/2021	19,37	15,03	10,82	96,9	81,39	64,66	0,2
24/04/2021	18,34	15,27	12,85	90,1	78,96	65,2	0
25/04/2021	20,88	16,79	13,04	95,1	75,83	61,5	2,97
26/04/2021	22,96	17,34	13,98	96,6	83,17	58,59	4,95
27/04/2021	23,86	17,31	12,04	96,8	76,64	47,01	5,15
28/04/2021	23,96	17,55	10,43	98	77,39	47,92	0,2

Tab 3. Temperature, relative humidity and precipitation data.

7.7 PHOTOPERIOD.

DATE	SUNRISE	SUNSET	HOURS OF SUN	DATE	SUNRISE	SUNSET	HOURS OF SUN
20.01	08:18:57	18:15:00	9:56	12.03	07:22:28	19:11:00	11:48
21.01	08:18:57	18:16:00	9:57	13.03	07:20:56	19:11:58	11:51
22.01	08:18:57	18:17:00	9:58	14.03	07:19:24	19:12:55	11:53
23.01	08:18:57	18:18:00	9:59	15.03	07:17:52	19:13:52	11:55
24.01	08:18:22	18:19:07	10:00	16.03	07:16:19	19:14:49	11:58
25.01	08:17:45	18:20:14	10:02	17.03	07:14:46	19:15:46	12:00
26.01	08:17:06	18:21:22	10:04	18.03	07:13:13	19:16:42	12:03
27.01	08:16:25	18:22:31	10:06	19.03	07:11:40	19:17:38	12:05
28.01	08:15:43	18:23:39	10:07	20.03	07:10:07	19:18:35	12:08
29.01	08:14:58	18:24:47	10:09	21.03	07:08:33	19:19:31	12:10
30.01	08:14:12	18:25:56	10:11	22.03	07:07:00	19:20:27	12:13
31.01	08:13:25	18:27:05	10:13	23.03	07:05:26	19:21:22	12:15
01.02	08:12:35	18:28:14	10:15	24.03	07:03:53	19:22:18	12:18
02.02	08:11:00	18:29:23	10:17	25.03	07:02:19	19:23:14	12:20
06.02	08:08:04	18:33:58	10:25	26.03	07:00:46	19:24:09	12:23
07.02	08:07:05	18:35:07	10:28	27.03	06:59:12	19:25:05	12:25
08.02	08:06:05	18:36:15	10:30	28.03	06:57:39	19:26:00	12:28
09.02	08:05:03	18:37:23	10:32	29.03	07:56:06	20:26:56	12:30
10.02	08:04:00	18:38:31	10:34	30.03	07:54:33	20:27:51	12:33
11.02	08:02:56	18:39:39	10:36	31.03	07:53:00	20:28:47	12:35
12.02	08:01:50	18:40:47	10:38	01.04	07:51:28	20:29:42	12:38
13.02	08:00:42	18:41:54	10:41	02.04	07:49:56	20:30:37	12:40
14.02	07:59:34	18:43:01	10:43	03.04	07:48:24	20:31:33	12:43
15.02	07:58:24	18:44:08	10:45	04.04	07:46:53	20:32:28	12:45
16.02	07:57:13	18:45:14	10:48	05.04	07:45:22	20:33:24	12:48

DATE	SUNRISE	SUNSET	HOURS OF SUN	DATE	SUNRISE	SUNSET	HOURS OF SUN
17.02	07:56:01	18:46:21	10:50	06.04	07:43:52	20:34:19	12:50
18.02	07:54:47	18:47:26	10:52	07.04	07:42:22	20:35:15	12:52
19.02	07:53:32	18:48:32	10:54	08.04	07:40:52	20:36:11	12:55
20.02	07:52:17	18:49:37	10:57	09.04	07:39:23	20:37:07	12:57
21.02	07:51:00	18:50:41	10:59	10.04	07:37:55	20:38:03	13:00
22.02	07:49:42	18:51:46	11:02	11.04	07:36:27	20:38:59	13:02
23.02	07:48:23	18:52:50	11:04	12.04	07:35:00	20:39:55	13:04
24.02	07:47:03	18:53:53	11:06	13.04	07:33:33	20:40:51	13:07
26.02	07:44:21	18:55:59	11:11	14.04	07:32:07	20:41:47	13:09
27.02	07:42:58	18:57:02	11:14	15.04	07:30:42	20:42:43	13:12
28.02	07:41:35	18:58:04	11:16	16.04	07:29:17	20:43:40	13:14
29.02	07:40:11	18:59:06	11:18	17.04	07:27:54	20:44:36	13:16
01.03	07:38:45	19:00:07	11:21	18.04	07:26:31	20:45:33	13:19
02.03	07:37:20	19:01:08	11:23	19.04	07:25:09	20:46:30	13:21
03.03	07:35:53	19:02:09	11:26	20.04	07:23:47	20:47:27	13:23
04.03	07:34:26	19:03:09	11:28	21.04	07:22:27	20:48:24	13:25
05.03	07:32:58	19:04:09	11:31	22.04	07:21:08	20:49:21	13:28
06.03	07:31:30	19:05:09	11:33	23.04	07:19:49	20:50:18	13:30
07.03	07:30:01	19:06:08	11:36	24.04	07:18:32	20:51:15	13:32
08.03	07:28:31	19:07:07	11:38	25.04	07:17:15	20:52:12	13:34
09.03	07:27:01	19:08:06	11:41	26.04	07:16:00	20:53:09	13:37
10.03	07:25:31	19:09:04	11:43	27.04	07:14:45	20:54:06	13:39
11.03	07:24:00	19:10:02	11:46	28.04	07:13:32	20:55:03	13:41

Tab 4. Photoperiod.

8 APPLICATIONS OF TREATMENTS.

8.1 TEST AND REFERENCE PRODUCTS

8.1.1 Product.

HUMUSON COMPLEX.

8.1.2 Treatment tested.

Treatment	Name treatment	Rate per application	Nº applications	Moment	Type of application
1	UNTREATED CONTROL	--	--	--	--
2	HUMUSON COMPLEX (LOW)	7 L/ha per application	7	A-B-C-D-E-F-G-H	Drip Irrigation
3	HUMUSON COMPLEX (MEDIUM)	8,5 L/ha per application	7	A-B-C-D-E-F-G-H	Drip Irrigation
4	HUMUSON COMPLEX (HIGH)	13 L/ha per application	7	A-B-C-D-E-F-G-H	Drip Irrigation
5	SIAPTON (Standard comercial)	5 L/ha per application	7	A-B-C-D-E-F-G-H	Drip Irrigation

Tab 5. Treatments tested.

Application timing:

Moment A: BBCH 60: First flowers open. (20/01/2021).

Moment B: BBCH 65: Full flowering: at least 50% of flowers open, first petals falling. A + 13 days. (02/02/2021).

Moment C: BBCH 73: Second fruit fall. B + 13 days. (15/02/2021).

Moment D: BBCH 75: Fruit about half final size. C + 15 days. (03/03/2021).

Moment E: BBCH 75: Fruit about half final size. D + 17 days. (20/03/2021).

Moment F: BBCH 76: Fruit about 60% of final size. E + 16 days. (05/04/2021).

Moment G: BBCH 81: Beginning of fruit colouring. F + 15 days. (20/04/2021).

Mixing and application:

The first application was done when the first flower opened. A machine Maruyama model MSO 73D was used at each application timing.

A machine Maruyama model MSO 73D was used for the applications by drip irrigation.

Type of application:

Application though irrigation, in fertirrigation; First irrigate 10 minutes with water, then apply application mix with diluted product for 20 minutes and, to finish, another 10 minutes with plain water to wash the piping system.

Material used in the treatments.

Backpack	Maruyama model MSO 73D.
Weighing machine	Cobos model JC-30.
Anemometer	Skywatch.
Termo-higrómetro	TFA 30.5000.02.
Chronometer	Ventix.

Root application, in fertigation by drip irrigation in the last minutes of localized irrigation. First water 10 minutes with water, then for 20 minutes application of the product (diluted mixture of the product in 80 litres of water), then 10 minutes wash irrigation with water.

UNTREATED CONTROL - Did not use amino acids and / or similar products.

Application	A	B	C	D	E	F	G
Date	20/01/2021	02/02/2021	15/02/2021	03/03/2021	20/03/2021	05/04/2021	20/04/2021
Time of day (start/end)	09:30/13:00	09:45/12:00	08:50/11:35	12:30/15:00	10:00/12:20	11:30/13:45	13:45/16:00
Application method	Drip irrigation	Drip irrigation	Drip irrigation	Drip irrigation	Drip irrigation	Drip irrigation	Drip irrigation
Air temperature (°C)	11,5	17,8	17,0	20,3	16,3	24	31,1
Relative humidity (%)	55	36	43	37	45	35	31
Wind velocity (m/s)	--	--	--	--	--	--	--
Wind direction	--	--	--	--	--	--	--
Dew presence (Y/N)	yes	no	no	no	no	no	no
Soil temperature	8,7	14,5	13,5	15,4	12,7	19,8	17,9
Soil moisture	wet	wet	wet	wet	wet	wet	wet
Cloud cover (%)	100	0	30	90	20	60	10
Mixture temperature (°C)	18,8	18,7	16,8	18,6	15,2	22,4	25,4

Tab 6. Treatment details.

8.2.2 Crop stage at application.

Application A: January 20, 2021.

Stage majority (%): BBCH Stage 60: First flowers open.

Application B: February 02, 2021.

Stage majority (%): BBCH Stage 65: Full flowering: at least 50% of flowers open, first petals falling.

Application C: February 15, 2021.

Stage majority (%): BBCH Stage 73: Second fruit fall.

Application D: March 03, 2021.

Stage majority (%): BBCH stage 75: Fruit about half final size.

Application E: March 20, 2021.

Stage majority (%): BBCH stage 75: Fruit about half final size.

Application F: April 05, 2021.

Stage majority (%): BBCH stage 76: Fruit about 60% of final size.

Application G: April 20, 2021.

Stage majority (%): BBCH stage 81: Beginning of fruit colouring.

8.2.3 Treatment application comments.

Treatments were applied by experienced technicians.

9 ASSESSMENT.

9.1 STATISTICAL ANALYSIS

The data obtained were analysed using Statgraphics Centurion XVI.I program, for the statistical analysis of variance (ANOVA) and an LSD in each evaluation. Average figures followed by same letter or symbol do not significantly differ ($P=0.05$, LSD).

9.2 ASSESSMENTS.

In order to check the efficacy of the tested formulations, a monitoring of the development of the fruits per elementary plot was carried out during the duration of the test. Specifically:

Several field evaluations were carried out to determine organoleptic quality.

- Assessment of size of 1.000 fruits, weight, acidity, penetromy and soluble contents (13/04/2021) of 200 fruits per thesis (50 nectarine/ plot).
- The production in each of the collections (13/04/2020, 19/05/2020 and 24/05/2020).
- Shoot growth, more than 2.500 measurements per day (6/04/2021 y 28/04/2021).
- Impacts on the general condition of Peach-tree, the condition and appearance of the leaves:
 - Size. (29/04/2021)
 - Stress on the sheet. (28/04/2021)
 - Color. (29/04/2021)

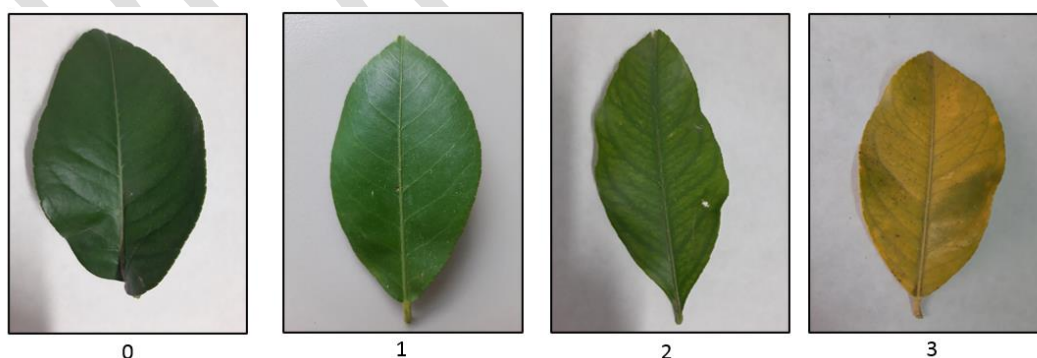


Fig.4 color scale.

9.3 SELECTIVITY ON THE CROP.

The phytotoxic effect on the crop will be evaluated during the trial.

10 RESULT.

10.1 SHOOT GROWTH.

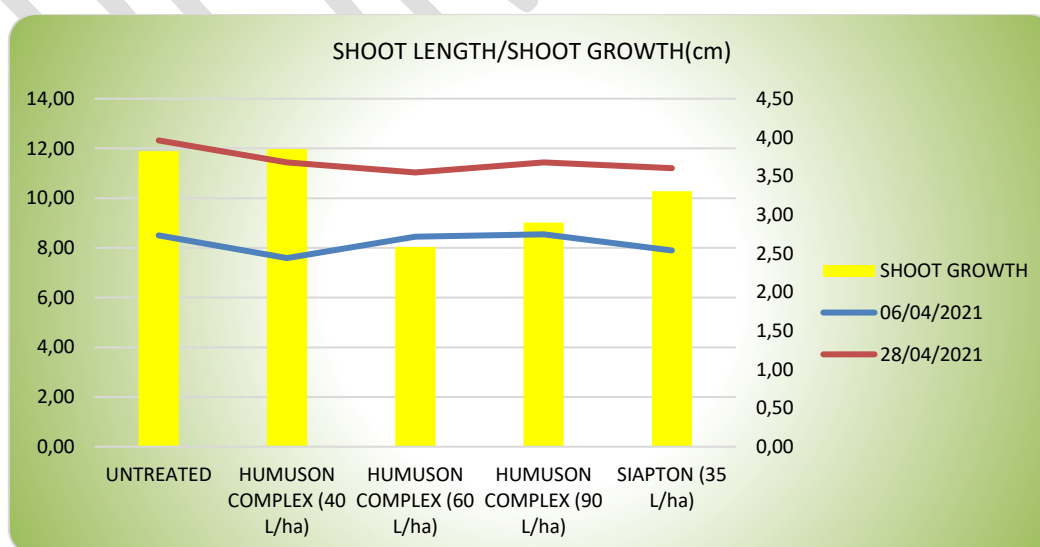
To determine the sprouting uniformity coefficients, two assessments were carried out on 06/04/2021 and 28/04/2021. The coefficient of variation and thence the homogeneity are calculated. This coefficient makes it possible to compare the dispersions of two distributions. The greater dispersion (less uniformity) will correspond to the assessment of the greater coefficient of variation.

On the other hand, if they tend to 1 it is a very dispersed sample. The coefficient of variation normally takes values between 0 and 1. If the coefficient is close to 0, it means that there is little variability in the data and it is very compact sample. In the same way, the coefficient of homogeneity (1-coefficient of variation) is a greater if the homogeneity is greater.

	6/04/2021			28/04/2021			SHOOT GROWTH
	Shoot growth		coefficient of homogeneity	Shoot growth		coefficient of homogeneity	
UNTREATED	8,50	a	0,06	12,32	a	0,00	3,82
HUMUSON C (40 L/ha)	7,59	a	0,04	11,44	a	0,00	3,85
HUMUSON C (60 L/ha)	8,45	a	0,02	11,03	a	-0,04	2,58
HUMUSON C (90 L/ha)	8,54	a	0,03	11,44	a	-0,06	2,90
SIAPTON (35 L/ha)	7,90	a	0,02	11,20	a	-0,03	3,30

Tab 7. shoot length and shoot growth. The letters next to each of the results indicate whether these pairs of average figures show statistically significant differences with a level of 95,0% confidence. Average figures with the same letter do not differ significantly (P=.05n LSD de Fisher)

The assessment about shoot growth does not show significant statistical differences between the thesis. The shoot growth and the **coefficient of homogeneity** are similar in all the thesis of the trial.



Graph 2. Average shoot length (06/04/2021 and 28/04/2021) and shoot growth.

10.2 ORGANOLEPTIC QUALITY IN LABORATORY.

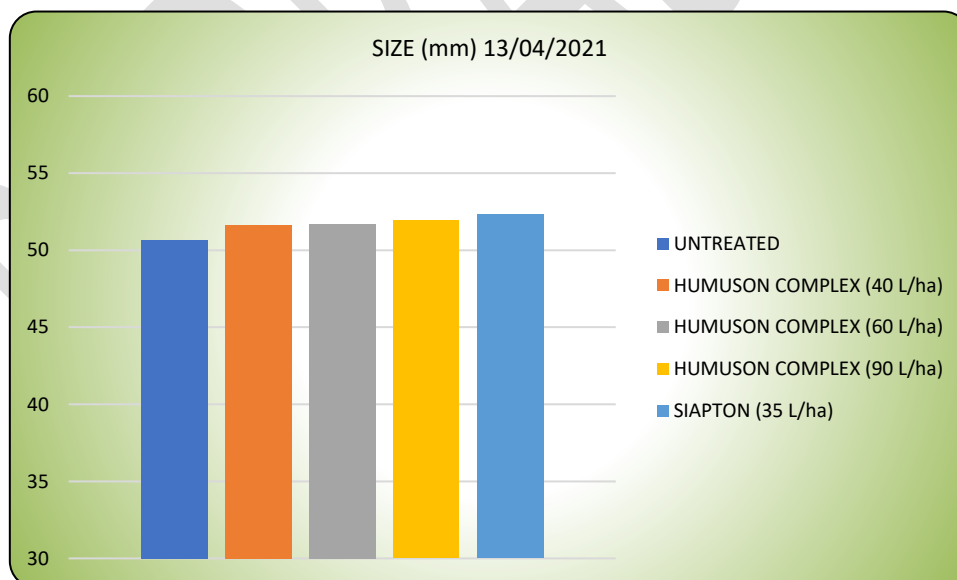
10.2.1 Size.

A day before of the first crop (April 13, 2021) It was evaluated 10.000 fruits (500 fruits/plot). Size was determined either by the maximum diameter of the equatorial section

THESIS	PRODUCT	SIZE (cm)	
T1	UNTREATED	50,68	a
T2	HUMUSON COMPLEX (40 L/ha)	51,64	ab
T3	HUMUSON COMPLEX (60 L/ha)	51,67	ab
T4	HUMUSON COMPLEX (90 L/ha)	51,92	b
T5	SIAPTON (35 L/ha)	52,33	b

Tab 8. Mean size of the nectarine (13/04/2020). The letters next to each of the results indicate whether these pairs of average figures show statistically significant differences with a level of 95,0% confidence. Average figures with the same letter do not differ significantly (P=.05n LSD de Fisher).

After data collection and statistical study, statistically significant differences were observed, thereby a greater size is appreciated in the thesis treated with HUMUSON COMPLEX, almost 2 mm bigger. The dose effect is appreciated, the thesis of higher dose shows greater size.

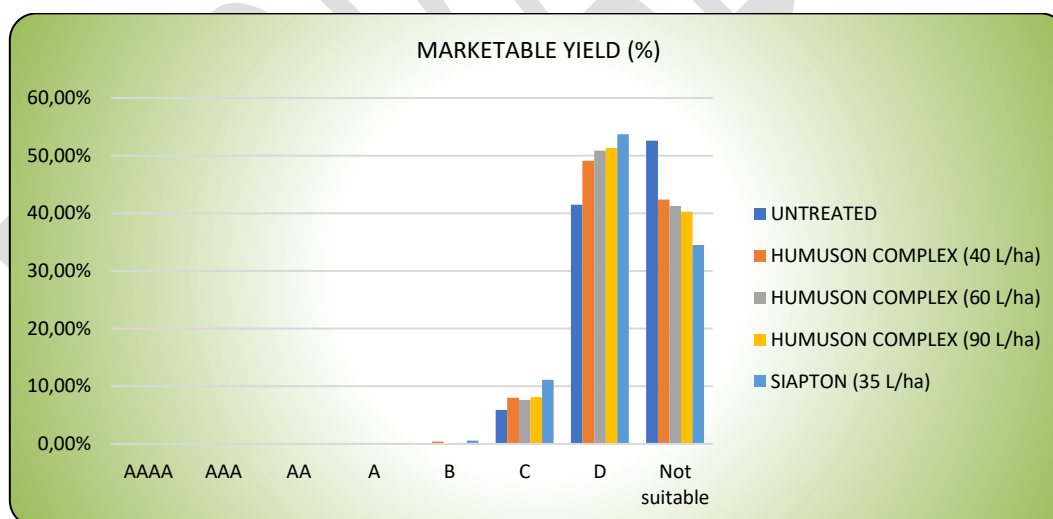


Graph 3. Average size of the nectarine (13/04/2021).

We obtained data allow us to compare the results with the commercial parameters of nectarine size.

MARKETABLE YIELD		T1	T2	T3	T4	T5
		UNTREATED	HUMUSON COMPLEX (40 L/ha)	HUMUSON COMPLEX (60 L/ha)	HUMUSON COMPLEX (90 L/ha)	SIAPTON (35 L/ha)
> 90 mm	AAAA	0,0%	0,0%	0,0%	0,0%	0,0%
80 mm ≤ 90 mm	AAA	0,0%	0,0%	0,0%	0,0%	0,0%
73 mm ≤ 80 mm	AA	0,0%	0,0%	0,0%	0,0%	0,0%
67 mm ≤ 73 mm	A	0,0%	0,0%	0,0%	0,0%	0,0%
61 mm ≤ 67 mm	B	0,1%	0,4%	0,1%	0,2%	0,6%
56 mm ≤ 61 mm	C	5,9%	8,0%	7,6%	8,1%	11,1%
51 mm ≤ 56 mm	D	41,5%	49,1%	50,9%	51,3%	53,7%
≤ 51 mm	Not suitable	52,6%	42,4%	41,3%	40,3%	34,5%
COMMERCIAL TOTAL		47,50%	57,50%	58,60%	59,60%	65,40%

Tabla 9. Marketable yield (%)



Graph 4. Marketable yield (%).

Sizes from 61 mm (size B) are the best-selling Fruit on the market for nectarine of Patagonia variety. The thesis treated with Humuson Complex has a higher percentage marketable yield than untreated thesis, nearly 60%. The percentage of commercial fruits increases with increasing doses of the product. Untreated thesis shows more fruits no commercial.

10.2.2 Weight.

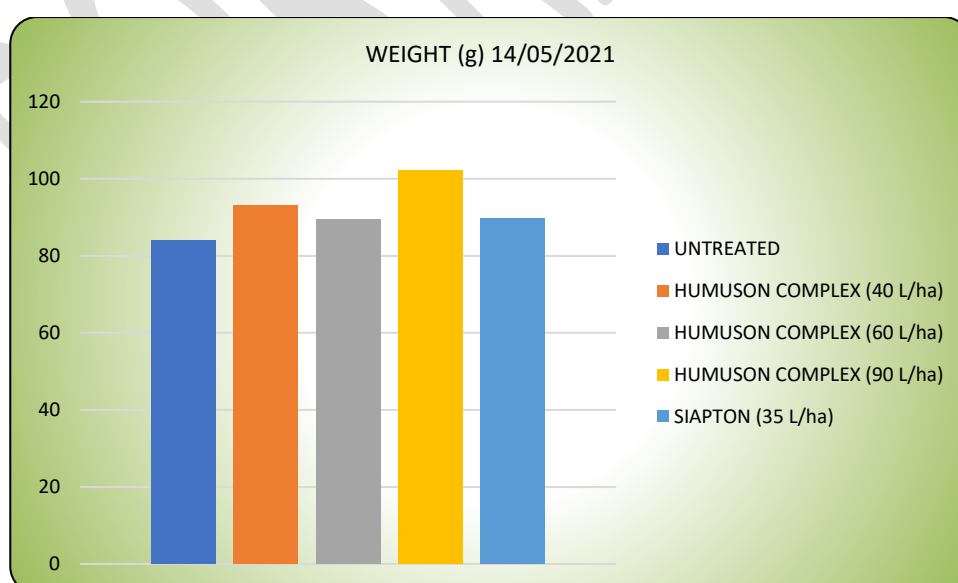
To correct the variability of the average number of fruits per plant in contributions due to the average production, a study of the covariance was carried out, which carried out the measurement and the statistical study, eliminating the effects of the other factors.

Therefore, to determine the average weight all fruits collected were taken into account, taking into account number of fruitss.

THESIS	PRODUCT	WEIGHT (g)	
T1	UNTREATED	83,98	a
T2	HUMUSON COMPLEX (40 L/ha)	93,12	ab
T3	HUMUSON COMPLEX (60 L/ha)	89,54	a
T4	HUMUSON COMPLEX (90 L/ha)	102,14	b
T5	SIAPTON (35 L/ha)	89,79	a

Tab 10. Average weight. 14/04/2021. The letters next to each of the results indicate whether these pairs of means show statistically significant differences with a level of 95,0% confidence. Averages with the same letter do not differ significantly (P=.05n LSD de Fisher).

Statistically significant differences were found between the treatments in the weight assessment, better data is appreciated in the treatment of HUMUSON COMPLEX. In fact, the thesis with better weight was T4 HUMUSON COMPLEX (90 L/ha) with 18,16 g more than the fruit of untreated thesis.



Graph 5. Average weight of nectarine (g) 14/04/2021.

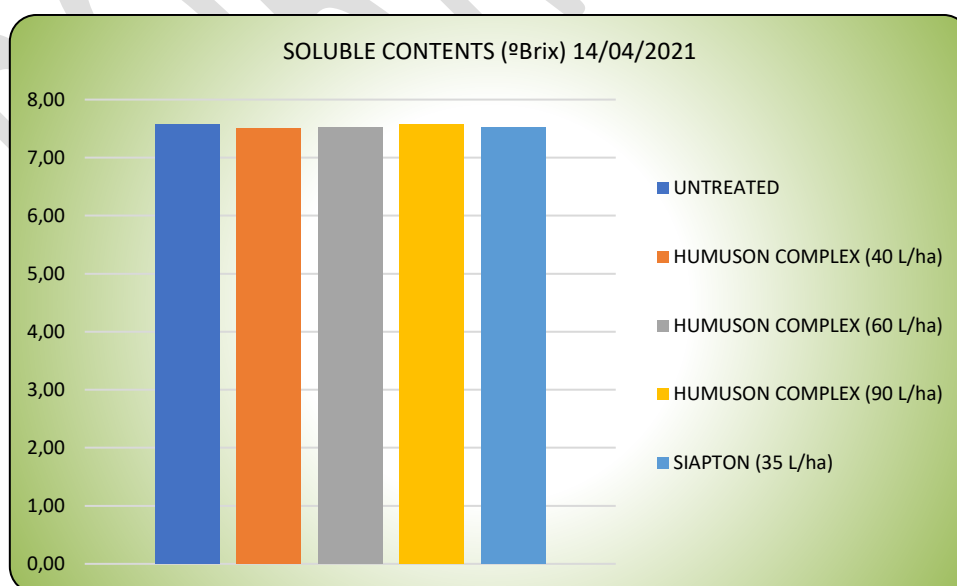
10.2.3 Soluble contents, acidity and consistency.

On 13/04/2020, coinciding with the first day of harvest, the organoleptic analysis (consistency, acidity and soluble solids) was carried out in the laboratory of 50 fruits per plot, in total 200 fruits per treatment, obtaining the following results:

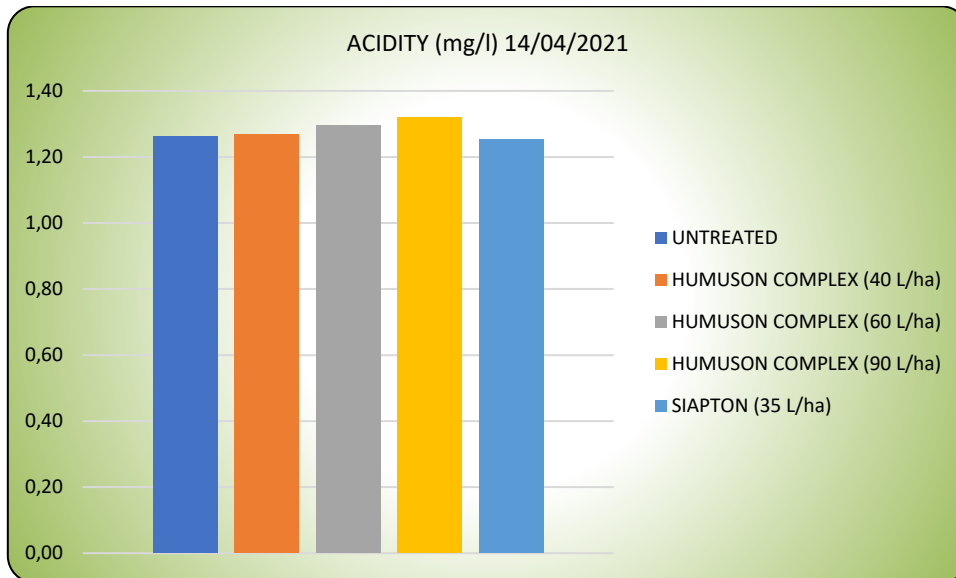
THESIS	PRODUCT	SOLUBLE CONTENTS(°brix)		ACIDITY (mg/l)		PENETROMY (Kg/0,5 cm ²)	
T1	UNTREATED	7,58	a	1,26	a	7,47	a
T2	HUMUSON COMPLEX (40 L/ha)	7,50	a	1,27	a	7,47	a
T3	HUMUSON COMPLEX (60 L/ha)	7,53	a	1,30	a	7,12	a
T4	HUMUSON COMPLEX (90 L/ha)	7,58	a	1,32	a	7,46	a
T5	SIAPTON (35 L/ha)	7,53	a	1,25	a	7,47	a

Tab 11. Average soluble contents, acidity and penetromy in the field. The letters next to each of the results indicate whether these pairs of means show statistically significant differences with a level of 95,0% confidence. Averages with the same letter do not differ significantly (P=,05n LSD de Fisher).

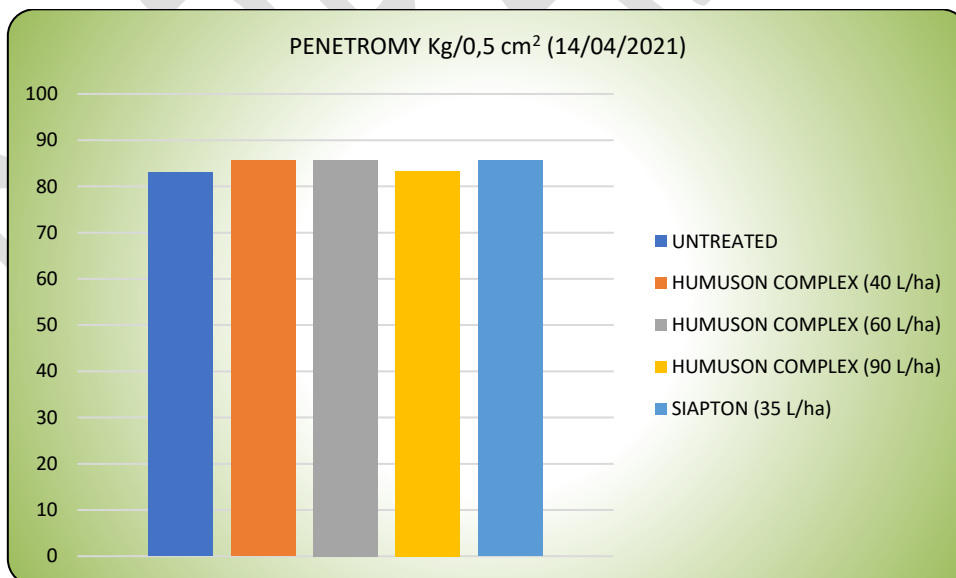
In the evaluation of soluble solid contents, the titratable acidity and the consistency of the fruit no statistically significant differences were found between the thesis with treatment and the untreated thesis.



Graph 6. Average soluble contents ° brix of nectarine. (14/04/2021).



Graph 7. Average acidity of nectarine. mg/l (14/04/2021)



Graph 8. Penetromy kg/0,5m². (14/04/2021)

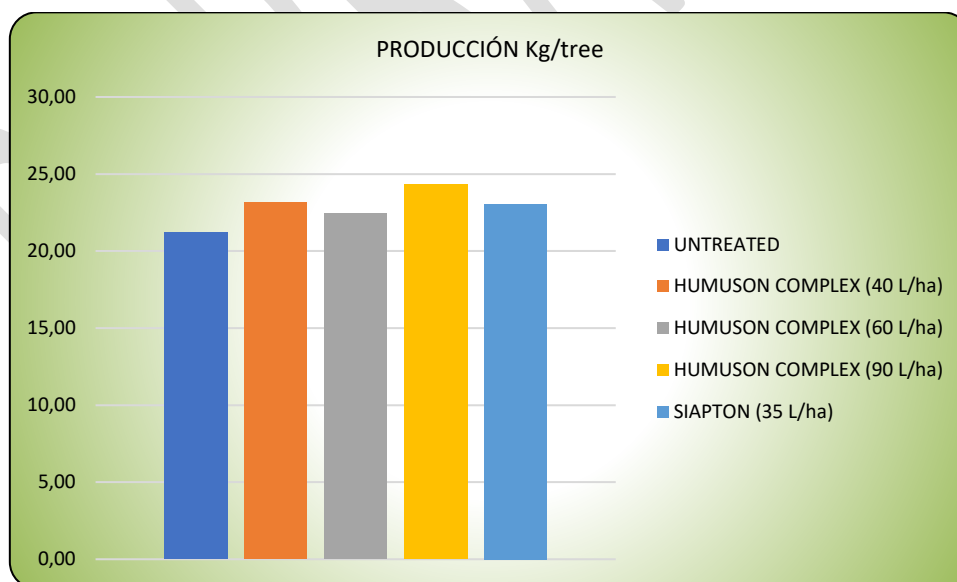
10.3 PRODUCTION.

To correct the variability of the average number of fruits per plant in contributions due to the average production, a study of the covariance was carried out, which carried out the measurement and the statistical study, eliminating the effects of the other factors.

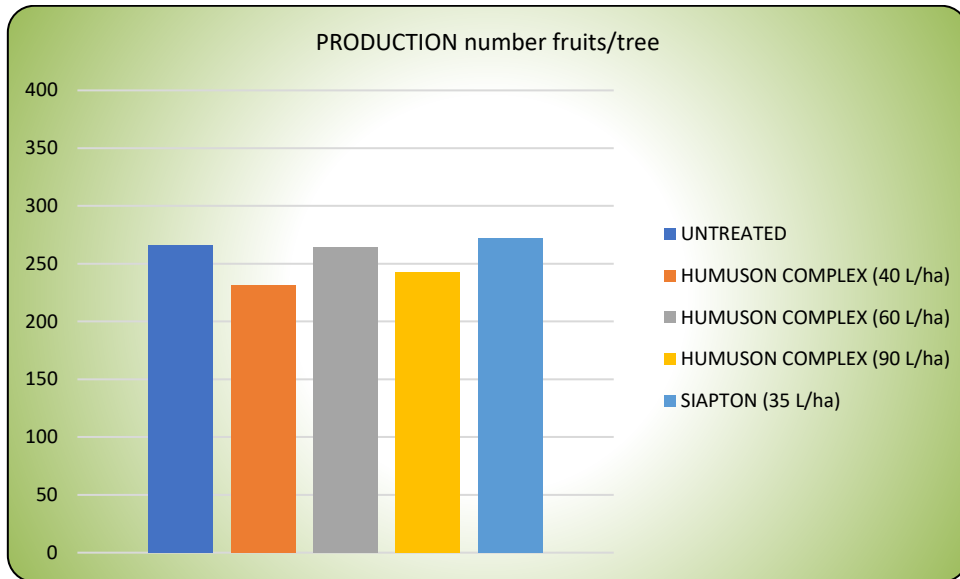
PRODUCTION							
THESIS	PRODUCT	FRUITS/TREE		PRODUCTION/TREE (kg)		SIGMA (Ls)	Kg/ha
T1	UNTREATED	266,25	a	21,21	a	0,53	14.141,25
T2	HUMUSON (40 L/ha)	231,8	a	23,16	bc	0,53	15.435,86
T3	HUMUSON (60 L/ha)	264,35	a	22,44	ab	0,53	14.961,70
T4	HUMUSON (90 L/ha)	242,6	a	24,32	c	0,53	16.213,05
T5	SIAPTON (35 L/ha)	272,15	a	23,06	bc	0,53	15.374,60

Tab 12. Total production, production per tree and number of the fruits. The letters next to each of the results indicate whether these pairs of means show statistically significant differences with a level of 95,0% confidence. Averages with the same letter do not differ significantly ($P=0.05$ LSD de Fisher).

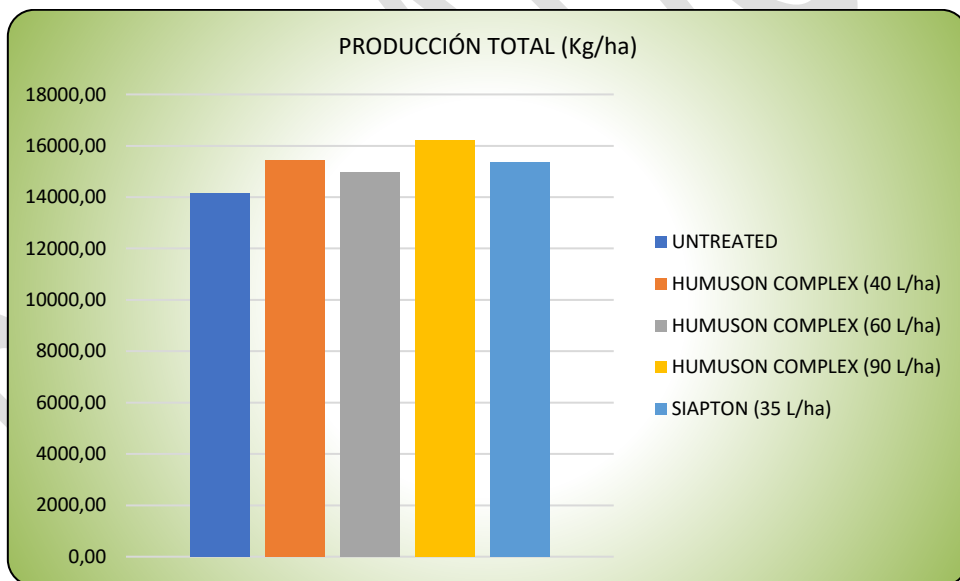
Regarding the crop production of the nectarine, statistically significant differences were found between the thesis treated with Humuson complex and the untreated thesis, T4 Humuson complex (90 L/ha) is the best thesis with 24,32 kg per tree and 16.213 kg/ha, that mean, 3.22 kg more per tree and 2.071 kg/ha more than untreated thesis. A big increase in production for the farmer.



Graph 9. Production (kg/tree).



Graph 10. Production (number of fruits).

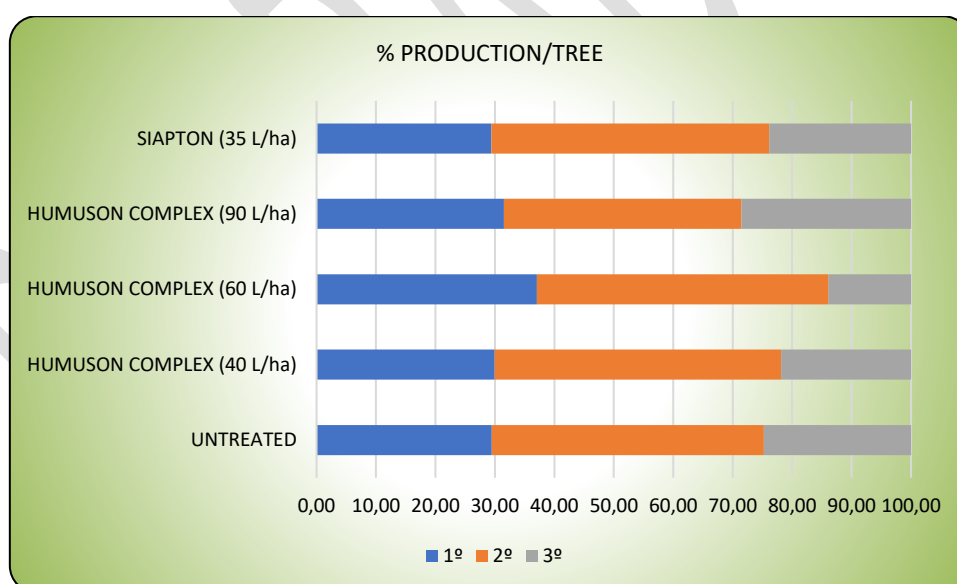


Graph 11. Total production (kg/ha).

Three harvests were made (14/04/2021, 19/04/2021 and 23/04/2021). The next data table shows the production per tree in each of the collections and the percentage of all the crop.

PRODUCTION										
THEESIS	PRODUCT	1ª HARVEST			2ª HARVEST			3ª HARVEST		
		14/04/2021			19/04/2021			23/04/2021		
		%		Kg	%		Kg	%		Kg
T1	UNTREATED	29,47	a	6,38	45,75	ab	10,12	24,78	bc	5,46
T2	HUMUSON (40 L/ha)	29,95	a	6,49	48,19	b	10,28	21,86	b	4,76
T3	HUMUSON (60 L/ha)	37,08	b	8,06	49,03	b	11,72	13,89	a	3,28
T4	HUMUSON (90 L/ha)	31,49	a	7,28	39,99	a	9,14	28,52	c	7,00
T5	SIAPTON (35 L/ha)	29,43	a	6,91	46,73	b	11,30	23,85	bc	6,01

Tab 13. Weight and % in each harvest. (Kg/tree). The letters next to each of the results indicate whether these pairs of means show statistically significant differences with a level of 95,0% confidence. Averages with the same letter do not differ significantly (P=.05n LSD de Fisher).



Graph 12. % Production in each harvest.

These data table shows the weight in each harvest and the percentage per day.

In the three harvests, statistically significant differences were found between the treatments.

The reduction of collections benefits the farmer, expensive will be lower if there are fewer collections, this is achieved with the homogeneity of shoots.

10.4 IMPACTS ON THE GENERAL CONDITION OF PEACH-TREE, THE CONDITION AND APPEARANCE OF THE LEAVES.

10.4.1 Chlorosis.

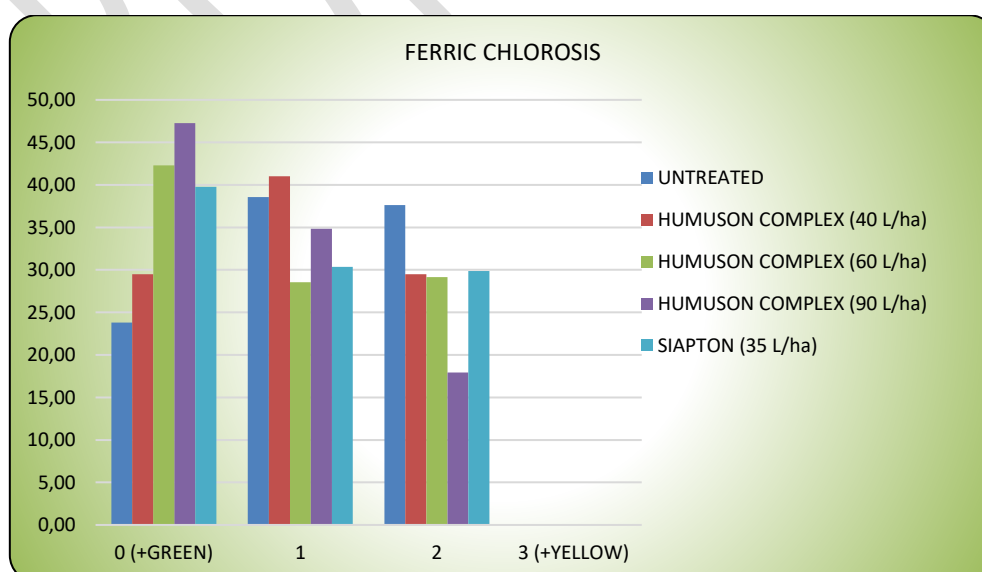
Chlorosis assessment was carried out on 29/04/2021 according to the color scale of fig. 4 (pag. 21).

This evaluation measures the percentage of yellow in the leaf tissue caused by the lack of chlorophyll.

Chlorosis 29/04/2021									
Tesis	Producto	0 (+ Green)		1		2		3 (+Yellow)	
T1	UNTREATED	28,79%	a	38,29%	ab	37,77%	b	0,00%	a
T2	HUMUSON (40 L/ha)	32,14%	ab	39,75%	b	32,63%	ab	0,00%	a
T3	HUMUSON (60 L/ha)	40,50%	bc	32,19%	a	32,47%	ab	0,00%	a
T4	HUMUSON (90 L/ha)	43,40%	c	36,11%	ab	24,04%	a	0,00%	a
T5	SIAPTON (35 L/ha)	39,03%	abc	33,41%	a	32,90%	ab	0,00%	a

Tab 14. Chlorosis 29/04/2021. The letters next to each of the results indicate whether these pairs of means show statistically significant differences with a level of 95,0% confidence. Averages with the same letter do not differ significantly (P=.05n LSD de Fisher).

On this case, several ferric chlorosis is not appreciated, although if it shows a higher percentage in the untreated thesis of grade 2 and a lower percentage of leaves in scale 0, the better grade. Statistically significant differences were found between the thesis with treatment and the untreated thesis. T4 Humuson complex (90 L/ha) shows the best results about chlorosis 43,40% in scale 0.



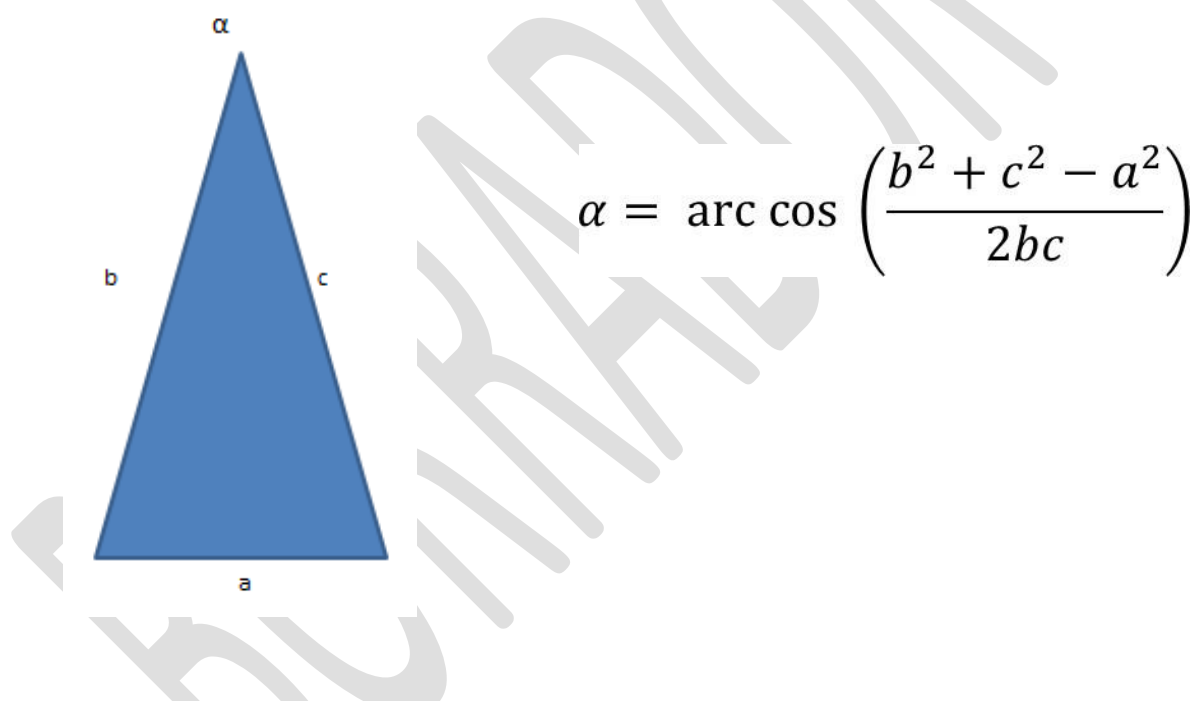
Graph 13. % Ferric chlorosis.

10.4.2 Stress.

Stress in plants is from the presence of a factor external or internal to the plant caused by environment. This exerts a negative influence on its optimal development.

In a stressful situation, an evident characteristic of peach leaves is that they fold away from the leaves by the central nerve, reducing the exposed surface, but this reduction also reduces photosynthesis.

To measure the stress of the plant, we measure the surface leaf in the field and later in the laboratory using the following formula.



Tesis	Producto	stress	
T1	UNTREATED	117,39	a
T2	HUMUSON COMPLEX (40 L/ha)	116,84	a
T3	HUMUSON COMPLEX (60 L/ha)	119,12	a
T4	HUMUSON COMPLEX (90 L/ha)	113,72	a
T5	SIAPTON (35 L/ha)	114,80	a

Tab 15. Stress 29/04/2021. The letters next to each of the results indicate whether these pairs of means show statistically significant differences with a level of 95,0% confidence. Averages with the same letter do not differ significantly (P=.05n LSD de Fisher).

11 CONCLUSIONS.

Under the conditions in which the present test was developed the following can be concluded:

- The assessment about **shoot growth** does not show significant statistical differences between the thesis.
- Assessment about **size shows statistically significant differences**. Treatment T4 (Humuson complex 90 l/ha) shows the best results an average of 51,92 mm, 2 mm more than the untreated thesis.
- Assessment about **weight shows statistically significant differences**. Treatment T4 (Humuson complex 90 l/ha) shows the best results an average of 102,14 g, 18,16 g more than the untreated thesis.
- The evaluation of **soluble solid contents**, the **titratable acidity** and the **consistency** of the fruit no statistically significant differences were found between the treatments.
- **Regarding the crop production (yield) of the nectarine, statistically significant differences were found**. The results are positive with respect to Humuson complex treatments, the dose effect is appreciated. Treatment T4 (Humuson complex 90 l/ha) 24,32 kg/tree and 16.213 kg/ha. The best results.
- According to the impacts on the general condition of peach-tree, the condition and appearance of the leaves, the **stress** don't show statistically significant differences between thesis.
- **Assessment of ferric chlorosis on the leaves show significant statistical differences**. the thesis treated with Humuson complex (90 l/ha) show a higher percentage of leaves without toxicities or deficiencies (leaves in scale 0, green leaves).
- **It has not been observed that phytotoxicity has occurred in the crop with any of the treatments at each of the application times.**

ANEXO I: ANEXO FOTOGRÁFICO

Aplicación A (20/01/2021).

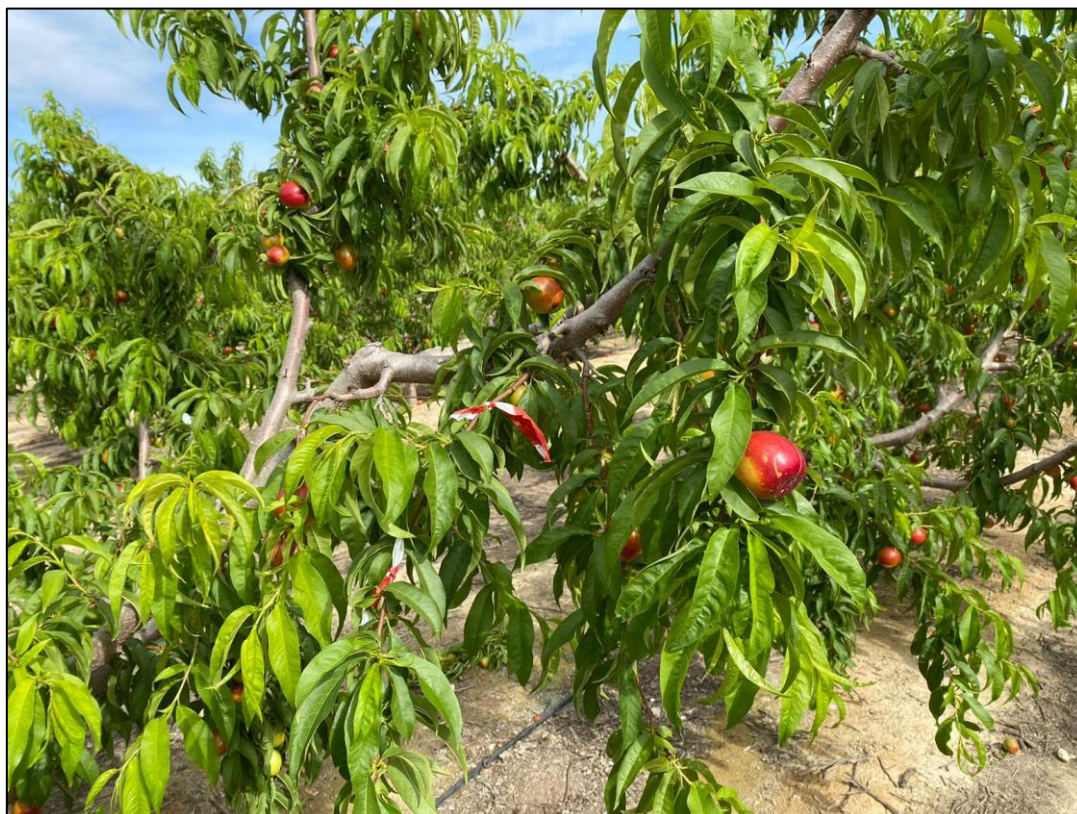


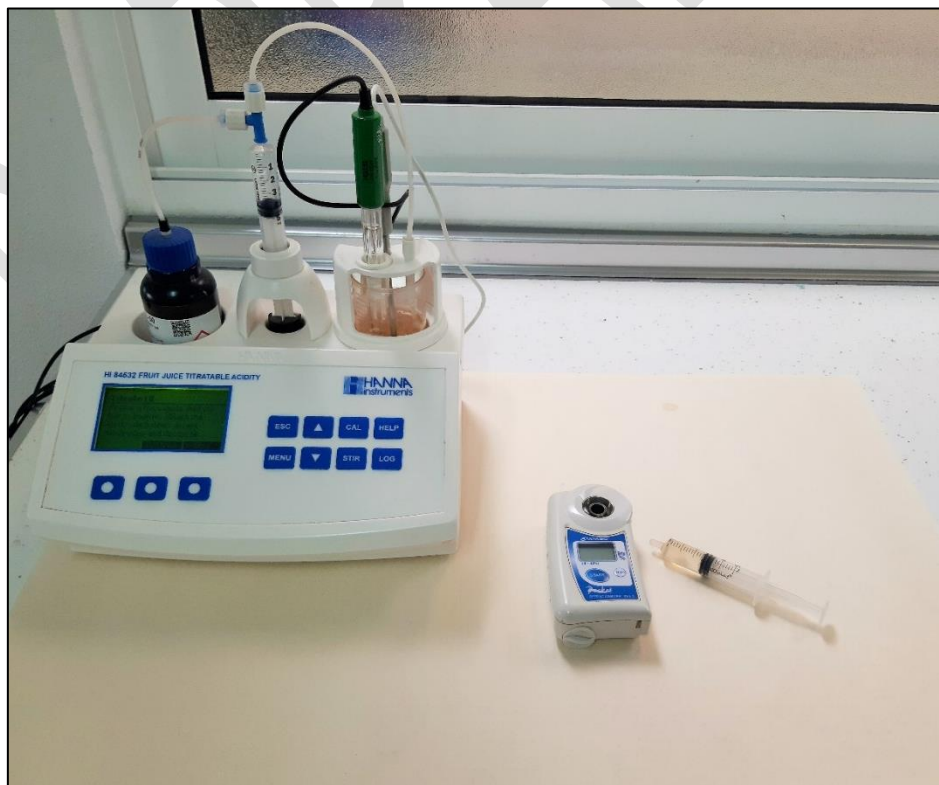






Quality Parameters at harvest (13/04/2021).





Shoot growth.(28/04/2021)



1ºharvest (14/04/2021).



2ºharvest (19/04/2021).



3ºharvest (23/04/2021).



Impacts on the general condition of Peach-tree, the condition and appearance of the leaves.



Color 28/04/2021





stress assessment (28/04/2021)

