



Anwendungsbericht/User Application Report

Produkt/Product:

penergetic p
penergetic k

Fachberater/Consultant:

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Anwender/User:

Maule Region, Chile

Datum/Date:

2016 and 2017

Application on Cherry Trees in Chile

Effect of the application of the bio stimulant products of soil and plant, penergetic k and penergetic p, on productivity and quality of fruit in cherry trees

Dosage / Recommendations (same for both orchards)

Application						
Penergetic	Pre-treatment	Pre-flower	Flowering	Fruit set	Post-harvest	Observations
penergetic b	300grs/ha					Application to the soil at the beginning of the season. Can be combined with herbicide.
penergetic p		250grs/ha				Can be mixed with NPK or foliar fertilizers. Fertilization reduce of 20%. Can be mixed with herbicides.
penergetic p			200grs/ha			
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penergetic b					300grs/ha	To improve the soil and composting of organic matter.

Orchard 1, 2016

The evaluated treatments considered a control (T0) without application of the products to evaluate and a treatment (T1) with application of products to evaluate in an area of approximately 1,6 hectares. All the applications were made on the ridge with pulverizer and python aimed at the root zone.

Location: Reserva de Comalle, located in Comalle

Variety: Cherry cv Royal Down

Beginning of assay 1: August 2016

End of assay 1: December 2016



Results

Fruit-bearing load, yield and productivity:

Field	Fruit-bearing	
	Fruits/tree	Fruits/ASTT
T0	2'537	18.0
T1	2'449	15.0

Field	Yield and productivity		
	Kg/tree	kg/ASTT	kg/ha
T0	18.9	0.13	16'818
T1	19.8	0.12	17'600

+ 782 kg/ha
= 4.65%

ASTT: trunk cross-sectional area

Quality of the fruit

Fruit weight

Field	Mean fruit weight (grs)
T0	7.5
T1	8.2

+ 0.7grs
= 9.33%

Firmness

Field	Mean firmness (Lb)
T0	12.0
T1	11.9

Soluble solids

Field	Mean °BRIX
T0	15.6
T1	16.3

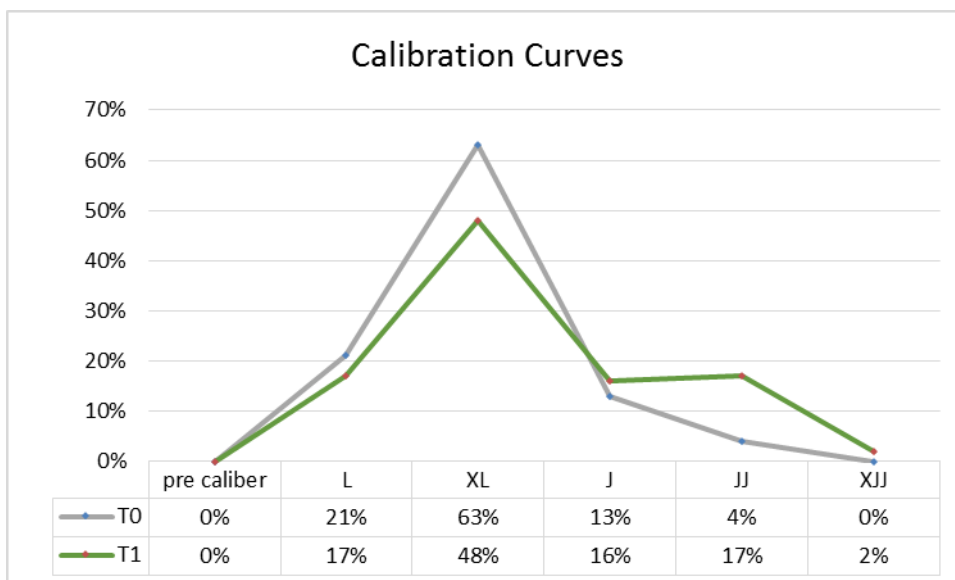
+ 0.7grs
= 4.49%

Results of the commercial evaluation of the products penergetic k and penergetic p

Operating operational utility (US\$/ha)						
Field	Kg/ha	Cost/kg	Cost/ha	NP/ha	Product cost/ha	US\$/ha
T0	16'818	1.2	20'182	56'752	0	36'571
T1	17'600	1.2	21'120	66'177	51	45'006
Differential						8'435

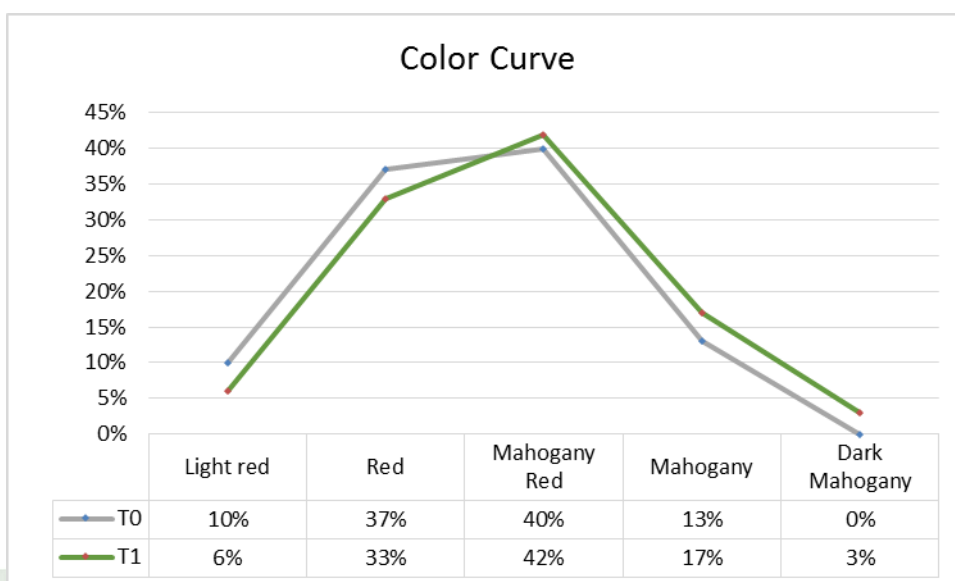


Calibration Curves



Historical average (USD) Royal Down					
Caliber	L	XL	J	JJ	XJJ
Net return producer	2.38	3.37	4.51	5.28	6.21

Color Curve



Orchard 2, 2017

The evaluated treatments considered a control (T0) without application of the products to evaluate and a treatment (T1) with application of products to evaluate in an area of approximately 0.5 hectares each. The plants were planted in 2014 with a distance of 4.25m x 2.3m to each other.

Location: Agrícola Montefrugal, sector La Higuera, community of Sagrada Familia

Variety: Cherry cv Lapins

Beginning of assay 2: September 2017

End of assay 2: December 2017

Results

Field	Yield		
	Fruit/plant	kg/plant	kg/ha
T0	1188	10.5	9'347
T1	1377	16.6	14'711

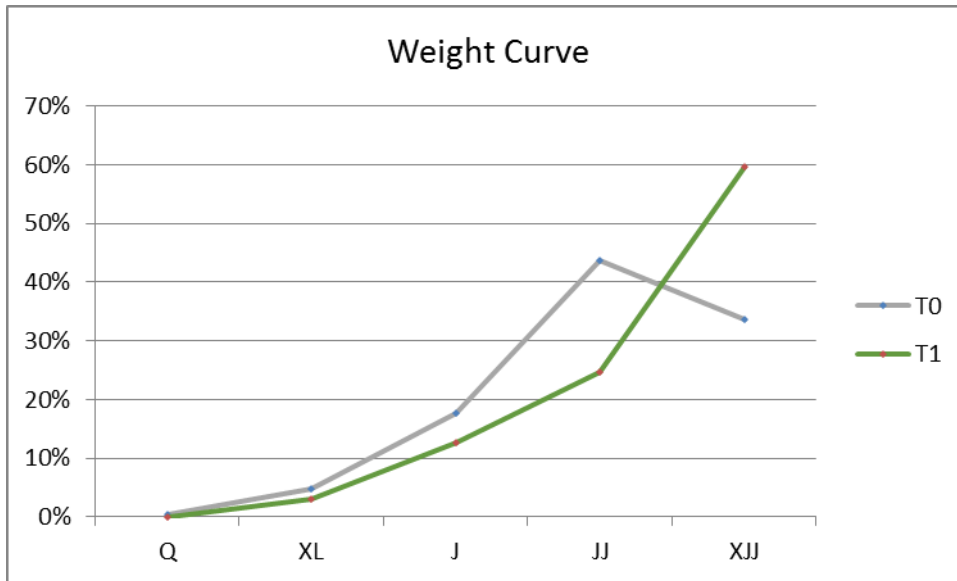
+ 5'364 kg/ha
= 57.38%

Calibration curves

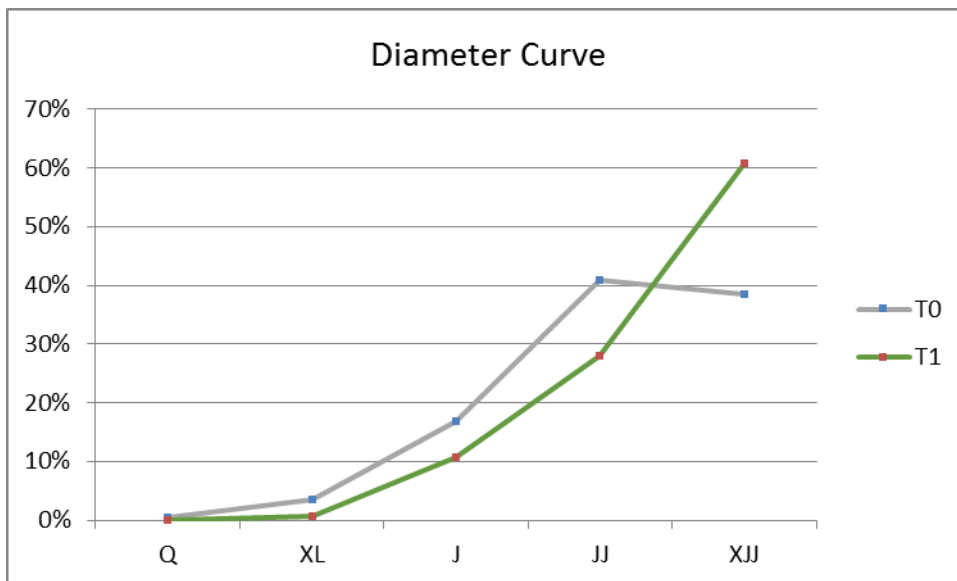
Weight and Size					
Calibration	Q	XL	J	JJ	XJJ
Weight in g	4.1-6.4	6.5-8.9	9.0-9.9	10.0-11.9	>12
Diameter in mm	22-24	24-26	26-28	28-30	>30



Weight



Diameter



Fruit quality

Field	Quality of fruit		
	Ø Weight in g	Firmness DU	SS °Brix
T0	11.6	70.0	19.8
T1	12.5	75.1	18.6

+ 0.9g
= 7.8%