

Prices in Euros.		2018	
Concepto	USE	OPI	EXT./PRIV
Multi-elemental and isotopic analysis by ICP- MS ^a			
Sample Preparation			
Acid digestion. For every 10 samples or fraction	387,66	488,47	586,16
Filtering. For every 10 samples or fraction	163,80	204,75	245,70
Conditioning matrix (as TDS, pH, dilution and acidified). For every 10 samples or fraction	109,20	136,50	163,80
Sample preparation QCs EPA 200.8: PRB, LFB, MX and other QCs. Per experiment	54,60	68,25	81,90
Set of calibration standards (7 samples) and EPA 200.8 and related internal standards	98,28	122,85	147,42
Other calibration standards	negotiable		
Others works samples preparations.	negotiable		
Training courses for users			
		A convenir	
Sample Measurement			
for every 10 readings or fraction			
(Calibration samples or unknown samples, 30 min. of plasma)	38,22	47,78	57,32
For each experiment: additional time and plasma cleaning and decontamination protocols	54,60	68,24	81,90
Using software for users Plasmalab training course (PC SIA). Per day booking	negotiable		
Study to special cases	negotiable		
Note: The use of different equipment configurations (standard, XI , PlasmaScreen...) will treat different experiment			
Other services ICP- MS		A convenir	
Unit food quality			
Working hours in wet	negotiable		
Airtime rates Teams			
Quarter hour or fraction (wet)		A convenir	
Time use NIR equipment	5,46	8,36	16,38
Quarter hour or fraction NIR equipment	0,98	1,97	4,02
NIR spectrum	0,56	0,81	2,65
More features of this unit	negotiable		
Biotechnology Unit			
Using quantitative PCR, per hour or fraction	negotiable		
Storage of samples at -80°C chest	negotiable		
Gas Chromatograph			
Extraction and measurement of fatty acids by chromatography think	22	23	25

Extraction and measurement of fatty acids by chromatography	22	23	25
in meat/fat			
Extraction and measurement of fatty acids by chromatography milk / dairy	22	23	25
cromatografía en leche/derivados			
Other services not listed in this unit	negotiable		
HPLC Chromatograph			
Measurement of organic acids in plants, roots	8,00	10,00	12,00
Other services not listed in this unit	negotiable		
IR			
Registration IR-FTR solid samples	6,00	8,00	10,00
Other Uses	negotiable		
Measurement of antioxidant FRAP method	8,00	10,00	12,00
CNS elemental analyzer macrosamples^b			
Solid samples	11,40	13,68	17,10
Liquidsamples	17,10	20,52	25,65
Other services not listed in this unit	negotiable		
Fitotrón^c			
Per m2 per day	0,25	0,40	negotiable
By cultivating table day	1,00	1,80	negotiable
Full day module	8,00	15,00	negotiable
Full module and month	200,00	360,00	negotiable
For complete module year	2000,00	3600,00	negotiable
Photoperiod	0,20	0,20	negotiable
Forzed	0,20	0,20	negotiable
Tables rooting	0,20	0,20	negotiable
Increased by application of heating	0,12	0,12	negotiable
Others	negotiable		
Determinations in soil			
Drying, grinding and sieving	7,00	8,40	10,50
Texture (hydrometer)	14,10	16,92	21,15
Texture (of sieves)	negotiable		
pH	4,20	5,04	6,30
Electricalconductivity	4,20	5,04	6,30
Total carbonates (Bernard)	4,20	5,04	6,30
Active limestone	7,10	8,52	10,65
Oxidizable organic matter	7,10	8,52	10,65
Organic matter on ignition	4,20	5,04	6,30
Total N (autoanalyzer)	10,00	12,00	15,00
N, C , Total S (autoanalyzer)	11,40	13,68	17,10
P (Olsen) (extraction and colorimetry)	8,50	10,20	12,75
Extraction of cations with ammonium acetate	7,30	8,76	10,95
Exchangeable Ca (meq/100 g) (AA)	1,90	2,28	2,85

Mg exchange (meq/100 g) (AA)	1,90	2,28	2,85
Rate K (meq/100 g) (AA)	1,90	2,28	2,85
Na exchange (meq/100 g) (AA)	1,90	2,28	2,85
Exchange cations (Ca, Mg, Na, K) (meq/100 g)	7,60	9,12	11,40
Al (colorimetry)	7,30	8,76	10,95
Removing CIC	7,50	9,00	11,25
Determination CIC	4,40	5,28	6,60
Removal of trace	7,50	9,00	11,25
Mn (AA)	1,90	2,28	2,85
Fe (AA)	1,90	2,28	2,85
Cu (AA)	1,90	2,28	2,85
Zn (AA)	1,90	2,28	2,85
Determination of (Fe/ Cu/ Mn/ Zn)	7,60	9,12	11,40
Preparation of patterns in different matrices	negotiable		
Boron removal	negotiable		
Boro (colorimetry)	negotiable		
NH ₄ ⁺ (extraction y colorymetry)	8,50	10,20	12,75
NO ₃ ⁻ (extraction and reflectometry)	7,10	8,52	10,65
Moisture determination	4,20	5,04	6,30
Cost analysis hydrometer texture and CNS			
Cost analysis of soil full 15% discount	121,14	145,37	181,71
Cost analysis > 8 samples(for sample) 55 % total cost	62,9928	79,9524	99,9405
Cost analysis > 20 samples(for sample) 45 % total cost	52,0902	65,4156	81,7695
The proportion discounts number of samples is maintained for individual determinations			
Analysis soil fertility recommendations (nitrate, P, Ca, Mg,K,Na, micros),	30	36	45
CIC analysis without enable Limestone, total N, nitrate and ammonium	86	103,2	129
Reduction> 8 samples 60%	52	62,4	78
Reduction> 20 samples 50%	43	51,6	64,5
Determinations in saturated soil paste			
Getting saturated paste (preparation and extract)	10,00	12,00	15,00
NO ₃ ⁻ (mg/L)	5,00	6,00	7,50
PO ₄ ³⁻ (mg/L)	4,30	5,16	6,45
SO ₄ ²⁻ (mg/L)	4,30	5,16	6,45
Cl ⁻ (mg/L)	5,00	6,00	7,50
CO ₃ ²⁻ / HCO ₃ ⁻ (mg/L)	5	6	7,5
Major anions in the saturation extract (nitrates, sulfates,phosphates,	23,6	28,32	35,4

chlorides,bicarbonates,carbonates)		0	0
Ca (mg/L)	1,9	2,28	2,85
Mg (mg/L)	1,9	2,28	2,85
K (mg/L)	1,9	2,28	2,85
Na (mg/L)	1,9	2,28	2,85
Major cations in the saturation extract (Ca, Mg, Na, K)	7,6	9,12	11,4
Comprehensive analyzes in saturated paste	37,2	44,64	55,8
Cost analysis 10 to 20 samples (for sample) 70% total cost	26,04	31,248	39,06
Cost analysis > 20 samples (for sample) 60 % total cost	22,32	26,784	33,48
The proportion discounts number of samples is maintained for individual determinations			
Foliar Analysis			
Drying and milling	4,20	5,04	6,30
Microwave digestion (acid quality Suprapur)	34,00	40,80	51,00
Microwave digestion (acid quality PA)	19,00	22,80	28,50
Calcination in muffle furnace	4,20	5,04	6,30
Digestion with acid ash quality Suprapur	19,00	22,80	28,50
Total N (autoanalyzer)	10,00	12,00	15,00
Total N and S (autoanalyzer)	11,40	13,68	17,10
P (colorimetry)	4,20	5,04	6,30
B (colorimetry)	4,20	5,04	6,30
Ca (AA)	1,90	2,28	2,85
Mg (AA)	1,90	2,28	2,85
Na (AA)	1,90	2,28	2,85
K (AA)	1,90	2,28	2,85
Determination of macronutrients (Ca, Mg, Na, K)	7,60	9,12	11,40
Fe (AA)	1,90	2,28	2,85
Cu (AA)	1,90	2,28	2,85
Mn (AA)	1,90	2,28	2,85
Zn (AA)	1,90	2,28	2,85
Determination of macronutrients (Fe, Cu, Mn, Zn)	7,60	9,12	11,40
Co (AA)	1,90	2,28	2,85
Ni (AA)	1,90	2,28	2,85
Full Cost foliar analysis calcination	60,00	72,00	90,00
10-20 Cost	36,50	43,80	54,75
Cost > 20	33,50	40,20	50,25
Analysis of organic growing media and soil improvers			
Drying	4,20	5,04	6,30
Calcination in muffle furnace	4,20	5,04	6,30
Digestion with acid ash quality Suprapur	19,00	22,80	28,50
Filtered by 0.22 or 0.45 µm	5,00	6,00	7,50
Determination of total macronutrients (AA)	7,60	9,12	11,40

Determination of total micronutrients (AA)	7,60	9,12	11,40
Determination of Total P	4,20	5,04	6,30
Removing ammonium acetate macronutrients (Ca, Mg, Na, K)	7,30	8,76	10,95
Determination of soluble macronutrients ammonium acetate (Ca, Mg, Na, K)	7,6	9,12	11,4
Removing CaCl ₂ /DTPA micronutrients (Fe, Cu, Mn, Zn)	7,50	9,00	11,25
Determination of soluble micronutrients in CaCl ₂ /DTPA (Fe, Cu, Mn, Zn)	7,6	9,12	11,4
C, N and S Total (autoanalyzer)	11,40	13,68	17,10
Total N (autoanalyzer)	10,00	12,00	15,00
NH ₄ ⁺ (colorimetry)	4,30	5,16	6,45
NO ₃ ⁻ (extraction and reflectometry)	7,10	8,52	10,65
Moisture determination	4,20	5,04	6,30
Determination of ash	4,20	5,04	6,30
pH	4,20	5,04	6,30
	4,20	5,04	6,30
Full cost analysis (10% discount)	105,00	126,00	157,50
10-20 samples cost	73,50	88,20	110,25
cost > 20	63,00	75,60	94,50
Water analysis			
Microwave digestion (acid quality Suprapur)	34,00	40,80	51,00
Filtered through 0.22 or 0.45 micras	5,00	6,00	7,50
pH	4,20	5,04	6,30
Electrical conductivity	4,20	5,04	6,30
C, N and S Total (autoanalyzer)	11,40	13,68	17,10
B (colorimetry)	4,20	5,04	6,30
Ca (AA)	1,90	2,28	2,85
Mg (AA)	1,90	2,28	2,85
Na (AA)	1,90	2,28	2,85
K (AA)	1,90	2,28	2,85
Controlling determination of cations(Ca, Mg, Na, K)	7,60	9,12	11,40
Fe (AA)	1,90	2,28	2,85
Cu (AA)	1,90	2,28	2,85
Mn (AA)	1,90	2,28	2,85
Zn (AA)	1,90	2,28	2,85
Determination of Fe, Cu, Mn and Zn	7,60	9,12	11,40
Co (AA)	1,90	2,28	2,85
Ni (AA)	1,90	2,28	2,85
NH ₄ ⁺ (colorimetry)	4,30	5,16	6,45
NO ₃ ⁻ (colorimetry)	5,00	6,00	7,50

PO ₄ ³⁻ (colorimetry)	4,20	5,04	6,30
SO ₄ ²⁻ (turbidimetry)	4,30	5,16	6,45
Cl ⁻ (volumetric)	5,00	6,00	7,50
CO ₃ ²⁻ / HCO ₃ ⁻ (volumetric)	5,00	6,00	7,50
Majority determining anions (nitrates, sulfates, phosphates, chlorides, carbonates and bicarbonates)	23,5	28,2	35,25
Total Cost	109,80	131,76	164,70
Total Cost undigested	75,80	90,96	113,70
Cost without digestion without CNS	64,40	77,28	96,60
Discounts apply for similar showing the soil and foliar			
Enzymatic analysis			
soil enzymatic activities			
Determinations soil enzymatic activities			
beta-glucosidase	25,00	30,00	37,50
phosphatasas(acid and alkaline)	25,00	30,00	37,50
urease	25,00	30,00	37,50
arylsulfatase	25,00	30,00	37,50
deshydrogenase	35,00	42,00	52,50
Value 5 determinations per sample 10% discount			
Determinations plant enzymatic activities			
catalase	15,00	18,00	22,50
peroxidase	15,00	18,00	22,50
Otrer services			
	Negotiable		
Image Analyzer			
Use per day	20	24	29
Other services			
Fiber extraction			
	Negotiable		
Fat Extraction			
	Negotiable		
Grinding prefetch			
	Negotiable		
Colorimetry			
Samples analysis	1,9	2,85	4,75
Otrers services	Negotiable		
a) Rates valid for implemented methods (EPA 200.8 and related). Refer to other methods.			
b) The rates include sample preparation. Discounts negotiable for monoelemental analysis or for large sample volumes.			
c) Fees for booking space phytotron rooms. Not include specific treatments. See discounts for special conditions.			