

Project Title:

**Towards a Common Quality Control and food chain
traceability system for the Greek – Italian primary sector of
activity**



Deliverable Title:

Monitoring of the technical activities | 5.2.1.

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Introduction

During the “Argoquality” program and upon the review of 80 questionnaires there were two producers that selected based on the requirements that were necessary to be applied to recommended cultivating practices to improve the performance in terms of quality and quantity.

Producer 01: Nousia Konstantina (Louros, Preveza)

Personal Data

Name: Konstantina

Surname: Nousia

Father’s name: Andreas

Date of birth: 09/07/1965

Phone number: 2682031245

Olive field data

Region: LOUROS – PREVEZA

Area: PARSIES

Cultivation: OLIVE, var. KALAMON

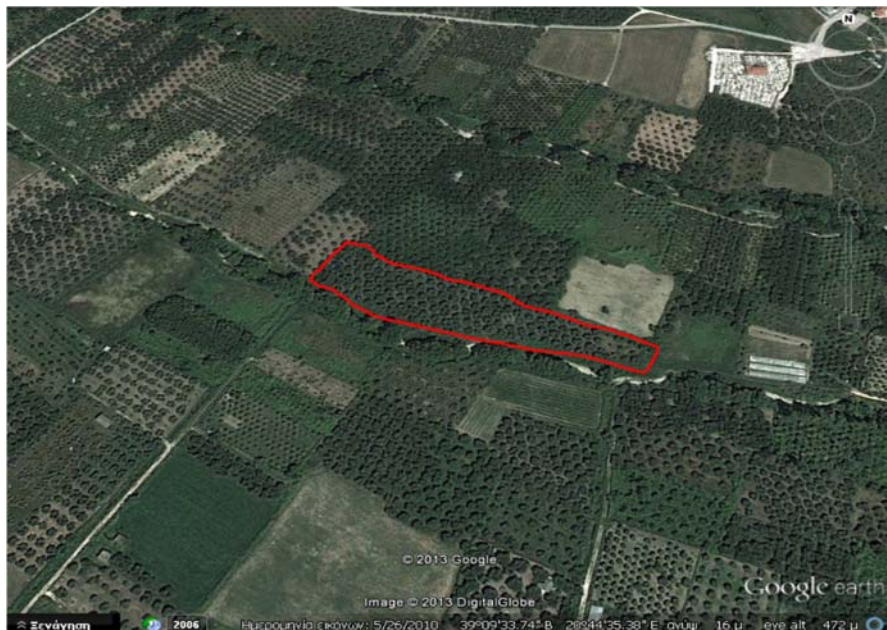


Photo 1: Photograph of olive grove through Google Earth. The borders are defined by red color.



Photo 2. Photograph before choosing the olive grove.

Soil and leaves analysis

First, before any intervention, there was a sampling of a cross- section of soil and leaves which was sent for analysis to Bio lab EPIRUS in Arta. The sampling (of soil and leaves) took place in 11/10/12. The samples were delivered to the lab in 15/10/12. In the meantime the samplings were preserved as provided. The receiving of the results of the specific analysis became in 29/01/2013. The results of the analysis are in annex I&II.

Fertilization

After an agreement between the fertilization program and the Agroquality group, there was a fertilization on the olive grove in 17/03/2013 with 3kg of fertile 11-15-15 and 0.5kg of fertile 26-0-0 in every tree. The purchase of the fertiles, which were used for the nutrition of the oil trees, was by ΑΦΟΙ ΓΙΩΤΟΙ & ΣΙΑ Ο.Ε in Stefani (Preveza). Moreover, there was a fertilization with the add of fertile 26-0-0 in every tree in 13/04/2013.



Photo 3. Photo of fertilizers used, according to the planning, in the selected olive grove.



Photo 1 - Photographs from the fertilization of the olive grove.

Phytosanitaire

After a close cooperation with the advisory group of Agroquality, we resulted that the spraying of oil trees with copper hydroxide that took place in 28/04/2013 was necessary. The recommended dose was 2.5kg of copper hydroxide in 1200 litres of spray and this recommendation was complied. The purchase of copper hydroxide became in the agricultural shop of Mr Leonidas Maglaras, who is a agriculturist, in Kostakious (Arta).



Photo 2 - Photos at the implementation of a program agreed phytosanitary in the olive grove. Spraying with copper hydroxide.

Harvesting

The harvesting process (photo 6) of the olive began in 8/12/2012 and lasted until 19/12/2012. Members of the family and people with whom agreed undivided share of oil produced, participated in the process of harvesting. We have to remind that there was a hail before, as we mention below (damages). the harvesting was done with brush.

Yield

The harvested production delivered to the oil press PETROS & JOHN VOULISTIOTIS to Oropos Prevezas for the oil extraction. The extraction procedure was completed in 19/12/2013. The oil production in 13/12/2013 for 1.242 pounds olives was 162 pounds. Moreover, in 19/12/2012 the oil production for 1325.60 pounds of olives was 155 pounds of oil (12%). As it was agreed, the total production of oil was shared equally between two families that participated in the collection procedure.



Photo 3 - Harvesting olives in olive grove selected.

Pruning

Upon the collection of the oil fruit, the pruning of the olive trees was followed. The procedure was completed during 20/01/2013 and 15/02/2013. In the pruning procedure, were participated the family members and two workers. The pruning residues ended as firewood for the house or they have been burned. The pruning procedure was not in daily basis.



Photo 4 - Application pruning in the olive grove.

Damages: Hail storm

It is important to be mentioned the fact that the heavy hail storm damaged the olive grove which had as result to reduce significantly the production as of the expected. Indicatively, some of the dates of heavy hail stormes which has been announced from ELGA was 29th October 2012 and 8th November 2012



Photo 5 - Loss after a intense hailstorm that took place in the olive grove of Nousia Constantina.

Producer 02: Alexi Anna (Peta, Arta)

One of the two producers, Mrs Anna Alexi, has in her possession 2 parcels with olives in the region of Peta, in the municipality Nicholaos Skoufas. One of the two olive groves was selected in order to apply the necessary cultivating and phytosanitaire practices in the framework of the Right Agricultural Practice Code with the objective to improve the quality and quantitate of the production (Photo 9).



Photo 9. Olive grove in the area "prohomata", region of Peta, in the municipality Nicholaos Skoufas

Upon the composition of a research team including agriculturists teachers and Assistant Professors of Epirus T.E.I the following cultivating proposals were recommended.

Pruning

To reduce the effect of alternate bearing of olive trees after one year of increased fruiting up, it was recommended a light pruning (to avoid removing stems of medium vividness that will probably develop into fruiting) during the months of January and February.

Fertilization

After a soil examination of the ground and a leaf-diagnostic control the fertilization was recommended to take place in two operations. The first one, in the end of January with 0,5 kg sulfuric potassium and 2,5 kg phosphate ammonia per tree, and the second one in the end of March with 1 kg of nitrate ammonium per tree.

Weedkiller / Herbicides

Applying the fertilization must precede the destruction of winter weeds by mechanical means such as brushcutters or lawnmower. For the destruction of summer weeds which pose the most serious problems was set up the frequent cutting up with brushcutters or lawnmower.

Removing fast-growth stems

The destruction of gluttonous shoots was recommended to be done in 2 operations. The first one, end of June and the second in the first ten days of August.

Phytosanitaire

Depending on the soil and weather conditions, it was recommended a preventive spraying at the early spring, with a copper-containing formulation for reducing the appearance of fungal diseases such as leaf spot, pastella. Also in early July and because of the increased rainfall, it was recommended the placement of olive fly traps to control the olive fly population. Each control and change of the trap's solution was recommended to be done every five days and having identified more than 5 adult to be sprayed with a pyrethroid formulation to combat the olive fly.

The producer under constant supervision made the following farming operations:

1. Light fructification pruning for January - February (Fig. 2).
2. Fertilization with the appropriate fertilizers in two installments late January and late March (Fig. 3).
3. Weed killer with brushcutters two applications before fertilization and one mid to late May (Fig. 4).
4. Remove fast growth stems in two applications, the first end of June and the second on August 10.
5. Phytosanitaire. An operation with copper (coccide) early spring (March 15) (Fig. 5) and one pyrethroid operation (Fastac 10 SC) early July (July 10) to combat the olive fly after detecting six adults at some olive fly trap.



Photo 10. Pruning (January-February 2013)



Photo 11. First fertilization (late January 2013).



Photo 12. Weed killer with brushcutters.



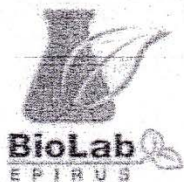
Photo 13. Spraying with a copper cover composition (mid-March)

ANNEX I: SOIL ANALYSIS

*ΤΑ ΑΠΟΤΕΛΕΣΜΑΤΑ ΣΧΕΤΙΖΟΝΤΑΙ ΜΟΝΟ ΜΕ ΤΑ ΣΥΓΓΕΚΡΙΜΕΝΑ ΑΝΤΙΚΕΙΜΕΝΑ ΠΟΥ ΥΠΟΒΛΗΘΗΚΑΝ ΣΕ ΔΟΚΙΜΗ

ΣΕΛΙΔΑ 2 ΑΠΟ 2

ΚΩΔΙΚΟΣ ΔΕΙΓΜΑΤΟΣ 153029 ΕΩΣ 153030



ΕΙΔΟΣ ΔΕΙΓΜΑΤΟΣ: ΕΔΑΦΟΣ
ΚΩΔΙΚΟΣ ΔΕΙΓΜΑΤΟΣ: 153030

ΠΟΣΟΤΗΤΑ: 1 kg

ΕΚΤΕΛΕΣΘΕΙΣΕΣ ΔΟΚΙΜΕΣ	ΜΕΘΟΔΟΣ	ΑΠΟΤΕΛΕΣΜΑ	ΜΟΝΑΔΑ ΜΕΤΡΗΣΗΣ	ΟΡΙΟ
ΜΗΧΑΝΙΚΗ ΣΥΣΤΑΣΗ	Calculated	CL-		
ΑΡΓΙΛΟΣ	ΒΟΥΓΙΟΥΚΟ	29,12	%	
ΙΛΥΣ	ΒΟΥΓΙΟΥΚΟ	29,64	%	
ΑΜΜΟΣ	ΒΟΥΓΙΟΥΚΟ	41,24	%	
ΡΗ ΥΔΑΤΟΚΟΡΕΣΜΟΥ	ΡΗΜΕΤΡΙΑ	7,54	%	
ΑΓΩΓΙΜΟΤΗΤΑ	ΗΛΕΚΤΡΟΜΕΤΡΙΑ	390	μS / cm-1	
ΟΡΓΑΝΙΚΗ ΟΥΣΙΑ	WALKEY BLACK	0,73	%	
ΟΛΙΚΟ ΑΝΘΡΑΚΙΚΟ ΑΣΒΕΣΤΙΟ -CaCO ₃	BERNARD	ΙΧΝΗ	%	
ΕΝΕΡΓΟ ΑΝΘΡΑΚΙΚΟ ΑΣΒΕΣΤΙΟ	DROUINEAU-GALET	0	%	
ΑΦΟΜΟΙΩΣΙΜΟΣ ΦΩΣΦΟΡΟΣ -P	OLSEN	2,12	mg/kg	45 mg/kg
ΝΙΤΡΙΚΟ ΑΖΩΤΟ -NO ₃	UV/VIS	1,85	mg/kg	
ΑΣΒΕΣΤΙΟ -Ca	(AAS ΟΞ. ΑΜΜΩΝΙΑ)	5221	mg/kg	
ΜΑΓΝΗΣΙΟ -Mg	(AAS ΟΞ. ΑΜΜΩΝΙΑ)	248,45	mg/kg	180 mg/kg
ΚΑΛΙΟ - K	(AAS ΟΞ. ΑΜΜΩΝΙΑ)	54,11	mg/kg	250 mg/kg
ΝΑΤΡΙΟ -Na	(AAS ΟΞ. ΑΜΜΩΝΙΑ)	86,16	mg/kg	
ΒΟΡΙΟ -B	UV/VIS	0,63	mg/kg	1 mg/kg
ΨΕΥΔΑΡΓΥΡΟΣ -Zn	AAS DTPA	0,10	mg/kg	
ΣΙΔΗΡΟΣ -Fe	AAS DTPA	8,97	mg/kg	
ΜΑΓΓΑΝΙΟ -Mn	AAS DTPA	3,11	mg/kg	
ΧΑΛΚΟΣ -Cu	AAS DTPA	4,58	mg/kg	

Ο ΑΝΑΛΥΤΗΣ

Ο ΔΙΕΥΘΥΝΤΗΣ

[illegible]

General Director
Tzimas Sotiris

ΙΟΑΝΝΙΝΑ : ΒΙ.Π.Ε. ΤΚ: 45500 ΤΘ: 190, ΤΗΛ: 2651057878 ΦΑΞ 57879, Κ.ΦΡΟΝΤΖΟΥ 5 45444, ΤΗΛΦΑΞ :2651035144 ΑΡΤΑ: ΓΕΦΥΡΑ ΑΡΤΑΣ 68 47100, ΤΗΛ:2681021150, ΦΑΞ :21152

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*ΑΠΑΓΟΡΕΥΕΤΑΙ Η ΜΕΜΟΝΟΜΕΝΗ ΑΝΑΠΑΡΑΓΩΓΗ ΤΗΣ ΕΚΘΕΣΗΣ ΔΟΚΙΜΗΣ ΧΩΡΙΣ ΤΗΝ ΓΡΑΠΤΗ ΕΓΚΡΙΣΗ ΤΗΣ BIOLAB
*ΤΑ ΑΠΟΤΕΛΕΣΜΑΤΑ ΣΧΕΤΙΖΟΝΤΑΙ ΜΟΝΟ ΜΕ ΤΑ ΣΥΓΚΕΡΙΜΕΝΑ ΑΝΤΙΚΕΙΜΕΝΑ ΠΟΥ ΥΠΟΒΛΗΘΗΚΑΝ ΣΕ ΔΟΚΙΜΗ



ΑΡ. ΠΙΣΤΟΠΟΙΗΤΙΚΟΥ..... 16549

ΣΕΛΙΔΑ 2 ΑΠΟ 2

ΚΩΔΙΚΟΣ ΔΕΙΓΜΑΤΟΣ 152608 ΕΩΣ 152609

ΠΙΣΤΟΠΟΙΗΤΙΚΟ ΕΚΘΕΣΗΣ ΔΟΚΙΜΗΣ

ΕΙΔΟΣ ΔΕΙΓΜΑΤΟΣ: **ΕΔΑΦΟΣ**

ΚΩΔΙΚΟΣ ΔΕΙΓΜΑΤΟΣ: 152609

ΠΟΣΟΤΗΤΑ: 1 kg

ΣΤΟΙΧΕΙΑ ΔΕΙΓΜΑΤΟΣ: 3-60cm

ΕΚΤΕΛΕΣΘΕΙΣΕΣ ΔΟΚΙΜΕΣ	ΜΕΘΟΔΟΣ	ΑΠΟΤΕΛΕΣΜΑ	ΜΟΝΑΔΑ ΜΕΤΡΗΣΗΣ	ΟΡΙΟ
ΜΗΧΑΝΙΚΗ ΣΥΣΤΑΣΗ	Calculated	CL-		
ΑΡΓΙΛΟΣ	ΒΟΥΓΙΟΥΚΟ	38.92	%	
ΙΛΥΣ	ΒΟΥΓΙΟΥΚΟ	37.64	%	
ΑΜΜΟΣ	ΒΟΥΓΙΟΥΚΟ	23.44	%	
ΡΗΥΔΑΤΟΚΟΡΕΣΜΟΥ	ΡΗΜΕΤΡΙΑ	7.98	%	
ΑΓΩΓΙΜΟΤΗΤΑ	ΗΛΕΚΤΡΟΜΕΤΡΙΑ	454	μS / cm-1	
ΟΡΓΑΝΙΚΗ ΟΥΣΙΑ	WALKEY BLACK	2.01	%	
ΟΛΙΚΟ ΑΝΘΡΑΚΙΚΟ ΑΙΒΕΣΤΙΟ -CaCO ₃	BERNARD	21.73	%	
ΕΝΕΡΓΟ ΑΝΘΡΑΚΙΚΟ ΑΙΒΕΣΤΙΟ	DROUINEAU-GALET	7.87	%	
ΑΦΟΜΟΙΩΣΙΜΟΣ ΦΩΣΦΟΡΟΣ -P	OLSEN	1.17	mg/kg	45 mg/kg
ΝΙΤΡΙΚΟ ΑΖΩΤΟ -NO ₃	UV/VIS	3.65	mg/kg	
ΑΙΒΕΣΤΙΟ -Ca	(AAS ΟΕ, ΑΜΜΩΝΙΑ)	6341	mg/kg	
ΜΑΓΝΗΣΙΟ -Mg	(AAS ΟΕ, ΑΜΜΩΝΙΑ)	221.03	mg/kg	180 mg/kg
ΚΑΛΙΟ - K	(AAS ΟΕ, ΑΜΜΩΝΙΑ)	330.27	mg/kg	250 mg/kg
ΝΑΤΡΙΟ -Na	(AAS ΟΕ, ΑΜΜΩΝΙΑ)	113.87	mg/kg	
ΒΟΡΙΟ -B	UV/VIS	0.52	mg/kg	1 mg/kg
ΨΕΥΔΑΡΓΥΡΟΣ -Zn	AAS DTPA	0.49	mg/kg	
ΣΙΔΗΡΟΣ -Fe	AAS DTPA	11.29	mg/kg	
ΜΑΓΓΑΝΙΟ -Mn	AAS DTPA	4.56	mg/kg	
ΧΑΛΚΟΣ -Cu	AAS DTPA	5.36	mg/kg	

ΗΜΕΡΟΜΗΝΙΑ ΕΚΔΟΣΗΣ 18/10/2012

Ο ΑΝΑΛΥΤΗΣ

Ο ΔΙΕΥΘΥΝΤΗΣ

ΤΣΙΜΠΑΚΗΣ ΣΤΑΥΡΟΣ
ΕΡΓΑΣΤΗΡΙΟ ΕΡΕΥΝΑΣ & ΑΝΑΛΥΣΕΩΝ
ΑΓΡΟΝΟΜΙΚΕΣ ΕΡΕΥΝΕΣ
ΕΡΓΑ ΠΡΑΞΕΩΝ ΑΝΤΙΠΡΟΧΩΝΕΙΣ
ΣΥΜΒΟΥΛΕΥΤΙΚΕΣ ΔΙΕΥΣΕΙΣ - ΜΕΛΕΤΕΣ
ΕΡΓΑ ΓΕΩΡΓΙΑ ΑΡΤΑΣ 68
ΥΠΟΚΙΝΑ ΒΙΛΕ ΠΑΝΚΡΑΤΙΟΥ
ΥΠΟΚΙΝΑ Χ. ΦΡΟΝΤΙΟΥ 5
Α.Φ.Μ.: 09590707

General Director
Tzimas Sotiris

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ΘΕΣΣΑΛΟΝΙΚΗ: ΛΕΩΦ.Κ.ΚΑΡΑΜΑΝΛΗ 122,Τ.ΔΙΑΒΑΤΑ Κ 57068, ΤΗΛ 2310 784712 ΦΑΞ : 2310784713, http://www.bioblab.com.gr, email: iso17025@bioblab.gr

ANNEX II: LEAVES ANALYSIS

Producer 01

*ΑΠΑΓΟΡΕΥΕΤΑΙ Η ΜΕΜΟΝΟΜΕΝΗ ΑΝΑΠΑΡΑΓΩΓΗ ΤΗΣ ΕΚΘΕΣΗΣ ΔΟΚΙΜΗΣ ΧΩΡΙΣ ΤΗΝ ΓΡΑΠΤΗ ΕΓΚΡΙΣΗ ΤΗΣ ΒΙΟΛΑΒ
*ΤΑ ΑΠΟΤΕΛΕΣΜΑΤΑ ΣΧΕΤΙΖΟΝΤΑΙ ΜΟΝΟ ΜΕ ΤΑ ΣΥΓΚΡΙΜΕΝΑ ΑΝΤΙΚΕΙΜΕΝΑ ΠΟΥ ΥΠΟΒΛΗΘΗΚΑΝ ΣΕ ΔΟΚΙΜΗ



ΑΡ. ΠΙΣΤΟΠΟΙΗΤΙΚΟΥ..... 16548

ΣΕΛΙΔΑ 1 ΑΠΟ 1

ΚΩΔΙΚΟΣ ΔΕΙΓΜΑΤΟΣ 152607 ΕΩΣ 152607

ΠΙΣΤΟΠΟΙΗΤΙΚΟ ΕΚΘΕΣΗΣ ΔΟΚΙΜΗΣ

ΕΠΩΝΥΜΙΑ: ΤΕΙ ΗΠΕΙΡΟΥ

ΔΕΙΓΜΑΤΟΛΗΨΙΑ ΑΠΟ: ΠΕΛΑΤΗ

ΔΙΕΥΘΥΝΣΗ: ΚΩΣΤΑΚΙΟΙ ΑΡΤΑΣ

ΚΑΤΑΣΤΑΣΗ ΔΕΙΓΜΑΤΟΣ: ΚΑΝΟΝΙΚΗ

ΤΗΛΕΦΩΝΟ: 2681050000

ΦΑΞ:

ΗΜΕΡΟΜΗΝΙΑ ΔΕΙΓΜΑΤΟΛΗΨΙΑΣ: 15/10/2012 ΗΜΕΡΟΜΗΝΙΑ ΕΝΑΡΞΗΣ ΔΟΚΙΜΗΣ: 15/10/2012

ΗΜΕΡΟΜΗΝΙΑ ΠΑΡΑΛΑΒΗΣ ΔΕΙΓΜΑΤΟΣ: 15/10/2012 ΗΜΕΡΟΜΗΝΙΑ ΟΛΟΚΛΗΡΩΣΗΣ ΔΟΚΙΜΗΣ: 22/10/2012

ΤΟΠΟΘΕΣΙΑ ΕΚΤΕΛΕΣΗΣ ΔΟΚΙΜΗΣ: ΑΡΤΑ

ΕΙΔΟΣ ΔΕΙΓΜΑΤΟΣ: ΦΥΛΛΑ

ΚΩΔΙΚΟΣ ΔΕΙΓΜΑΤΟΣ: 152607

ΠΟΣΟΤΗΤΑ:

ΣΤΟΙΧΕΙΑ ΔΕΙΓΜΑΤΟΣ: ΠΑΡΣΙΕΣ-ΛΟΥΡΟΣ -ΕΛΙΕΣ

ΕΚΤΕΛΕΣΘΕΙΣΕΣ ΔΟΚΙΜΕΣ	ΜΕΘΟΔΟΣ	ΑΠΟΤΕΛΕΣΜΑ	ΜΟΝΑΔΑ ΜΕΤΡΗΣΗΣ	ΟΡΙΟ
N - ΑΖΩΤΟ	Kjeldahl	1,17	%	
P - ΦΩΣΦΟΡΟΣ	APHA 4500 P.E (APHA, Standard Methods 21th Ed. 2005)	1048	mg/kg	
K - ΚΑΛΙΟ	In house based APHA 3113 A&B AAS	1,15	%	
Mg - ΜΑΓΝΗΣΙΟ	In house method based on Standard Methods of examination 3113 A- B AAS Method	0,12	%	
Ca -ΑΣΒΕΣΤΙΟ	In house based APHA 3113 A&B AAS	2,53	%	
Na - ΝΑΤΡΙΟ	In house method based on Standard Methods of examination 3113 A- B AAS Method	0,02	%	
ΨΕΥΔΑΡΓΥΡΟΣ - Zn	In house based APHA 3113 A&B AAS	10,98	mg/kg	
Cu - ΧΑΛΚΟΣ	In house method based on Standard Methods of examination 3113 A- B AAS Method	14,33		
Mn - ΜΑΓΓΑΝΙΟ	In house method based on Standard Methods of examination 3113 A- B AAS Method	13,34	mg/kg	
B - ΒΟΡΙΟ	UV/VIS	39,12	mg/kg	
Fe -ΣΙΔΗΡΟΣ	AAS	46,26	mg/kg	

ΗΜΕΡΟΜΗΝΙΑ ΕΚΔΟΣΗΣ 22/10/2012

Ο ΑΝΑΛΥΤΗΣ

Ο ΔΙΕΥΘΥΝΤΗΣ

ΥΠΟΓΡΑΦΗ ΑΝΑΛΥΤΗ

ΤΖΙΝΑΣ ΓΕΩΡΓΙΟΣ Ε.Ε.
ΕΡΓΑΣΤΗΡΙΟ ΕΛΕΓΧΟΥ & ΑΝΑΛΥΣΕΩΝ
ΕΡΓΑ ΠΡΟΣΤΑΣΙΑΣ ΑΝΤΙΠΡΟΧΗΘΕΙΣ
ΣΥΜΒΟΥΛΕΥΤΙΚΕΣ ΥΠΗΡΕΣΙΕΣ - ΜΕΛΕΤΕΣ
ΓΕΩΡΓΙΑ ΑΡΤΑΣ 68 ΤΗΛ: 26510 21150 Fax: 21152
ΠΟΚ/ΜΑ: ΒΙ.ΠΕ. ΙΩΑΝΝΙΝΑ ΤΗΛ: 26510 57878 Fax: 57879
ΠΟΚ/ΜΑ:Κ. ΦΡΟΝΤΖΟΥ 5 ΙΩΑΝΝΙΝΑ ΤΗΛ: 26510 34144
Α.Φ.Μ.: 059992071

General Director
Tzinas Soliris

ΙΩΑΝΝΙΝΑ: ΒΙ.ΠΕ. ΤΚ: 45500 ΤΘ: 190, ΤΗΛ: 2651057878 ΦΑΞ 57879, Κ.ΦΡΟΝΤΖΟΥ 5 45444, ΤΗΛΦΑΞ :2651035144 ΑΡΤΑ: ΓΕΩΡΓΙΑ ΑΡΤΑΣ 68 47100, ΤΗΛ:2681021150, ΦΑΞ:21152

ΘΕΣΣΑΛΟΝΙΚΗ: ΛΕΩΦ.Κ. ΚΑΡΑΜΑΝΛΗ 122,Τ: ΔΙΑΒΑΤΑ Κ 57008, ΤΗΛ 2310 784712 ΦΑΞ : 2310784713, http://www.biolab.com.gr, email : iso17025@nol.gr

*ΑΠΑΓΟΡΕΥΕΤΑΙ Η ΜΕΜΟΝΟΜΕΝΗ ΑΝΑΠΑΡΑΓΩΓΗ ΤΗΣ ΕΚΘΕΣΗΣ ΔΟΚΙΜΗΣ ΧΩΡΙΣ ΤΗΝ ΓΡΑΠΤΗ ΕΓΚΡΙΣΗ ΤΗΣ BIOLAB
*ΤΑ ΑΠΟΤΕΛΕΣΜΑΤΑ ΣΧΕΤΙΖΟΝΤΑΙ ΜΟΝΟ ΜΕ ΤΑ ΣΥΓΚΕΚΡΙΜΕΝΑ ΑΝΤΙΚΕΙΜΕΝΑ ΠΟΥ ΥΠΟΒΛΗΘΗΚΑΝ ΣΕ ΔΟΚΙΜΗ



BioLab
EPIRUS

ΑΡ. ΠΙΣΤΟΠΟΙΗΤΙΚΟΥ..... **16653**

ΣΕΛΙΔΑ 1 ΑΠΟ 1

ΚΩΔΙΚΟΣ ΔΕΙΓΜΑΤΟΣ 153031 ΕΩΣ 153031

ΠΙΣΤΟΠΟΙΗΤΙΚΟ ΕΚΘΕΣΗΣ ΔΟΚΙΜΗΣ

ΕΠΩΝΥΜΙΑ: ΤΕΙ ΗΠΕΙΡΟΥ
ΔΙΕΥΘΥΝΣΗ: ΚΩΣΤΑΚΙΟΣ ΑΡΤΑΣ
ΤΗΛΕΦΩΝΟ: 2681050000

ΔΕΙΓΜΑΤΟΛΗΨΙΑ ΑΠΟ: ΠΕΛΑΘΗ
ΚΑΤΑΣΤΑΣΗ ΔΕΙΓΜΑΤΟΣ: ΚΑΝΟΝΙΚΗ
ΘΕΣΗ ΑΓΡΟΤΕΜΑΧΙΟΥ: ΠΡΟΧΩΜΑΤΑ - ΠΕΤΑ
ΟΝΟΜΑ ΠΑΡΑΣΤΕΥΟΥ: ΑΛΕΞΗ ΑΝΝΑ

ΗΜΕΡΟΜΗΝΙΑ ΔΕΙΓΜΑΤΟΛΗΨΙΑΣ: 26/10/2012 ΗΜΕΡΟΜΗΝΙΑ ΕΝΑΡΞΗΣ ΔΟΚΙΜΗΣ: 26/10/2012
ΗΜΕΡΟΜΗΝΙΑ ΠΑΡΑΛΑΒΗΣ ΔΕΙΓΜΑΤΟΣ: 26/10/2012 ΗΜΕΡΟΜΗΝΙΑ ΟΛΟΚΛΗΡΩΣΗΣ ΔΟΚΙΜΗΣ: 31/10/2012
ΤΟΠΟΘΕΣΙΑ ΕΚΤΕΛΕΣΗΣ ΔΟΚΙΜΗΣ: ΑΡΤΑ

ΕΙΔΟΣ ΔΕΙΓΜΑΤΟΣ: ΨΥΛΛΑ
ΚΩΔΙΚΟΣ ΔΕΙΓΜΑΤΟΣ: 153031

ΠΙΣΤΟΤΗΤΑ:

ΣΤΟΙΧΕΙΑ ΔΕΙΓΜΑΤΟΣ:

ΕΚΤΕΛΕΣΘΕΙΣΕΣ ΔΟΚΙΜΕΣ	ΜΕΘΟΔΟΣ	ΑΠΟΤΕΛΕΣΜΑ	ΜΟΝΑΔΑ ΜΕΤΡΗΣΗΣ	ΟΡΙΟ
N - ΑΖΩΤΟ	Kjeldahl	1,13	%	
P - ΦΩΣΦΟΡΟΣ	APHA 4500 P.E (APHA, Standard Methods 21th Ed. 2005)	0,11	%	
K - ΚΑΛΙΟ	In house based APHA 3113 A&B AAS	0,79	%	
Mg - ΜΑΓΝΗΣΙΟ	In house method based on Standard Methods of examination 3113 A- B AAS Method	0,14	%	
Ca - ΑΙΣΘΕΤΙΟ	In house based APHA 3113 A&B AAS	2,01	%	
Na - ΝΑΤΡΙΟ	In house method based on Standard Methods of examination 3113 A- B AAS Method	0,01	%	
ΨΕΥΔΑΡΓΥΡΟΣ - Zn	In house based APHA 3113 A&B AAS	12,25	mg/kg	
Cu - ΧΑΛΚΟΣ	In house method based on Standard Methods of examination 3113 A- B AAS Method	9,18	mg/kg	
Mn - ΜΑΓΓΑΝΙΟ	In house method based on Standard Methods of examination 3113 A- B AAS Method	25,81	mg/kg	
B - ΒΟΡΙΟ	UV/VIS	28,58	mg/kg	
Fe - ΣΙΔΗΡΟΣ	AAS	60,39	mg/kg	

ΗΜΕΡΟΜΗΝΙΑ ΕΚΔΟΣΗΣ 31/10/2012

Ο ΑΝΑΛΥΤΗΣ

ΕΠΙΣΤΗΜΟΝΙΚΟ ΕΡΓΑΣΤΗΡΙΟ ΑΝΑΛΥΣΕΩΝ
ΑΓΡΟΤΕΜΑΤΩΝ
• ΕΡΓΑ ΠΡΑΞΙΝΟΥ ΑΝΤΙΠΡΟΣΩΠΕΙΣ
• ΣΥΜΒΟΥΛΕΥΤΙΚΕΣ ΠΡΟΤΙΕΣ - ΜΕΛΕΤΕΣ
ΕΔΡΑ: ΓΕΩΥΡΑ ΑΡΤΑΣ 68 ΤΗΛ: 26810 21150 FAX: 21152
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Α.Φ.Μ.: 090550074

Ο ΔΙΕΥΘΥΝΤΗΣ

Director
Tzimas Sotirios

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