

Veterinary Laboratory of Ioannina

NRL-Campylobacter -Greece

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ΙΩΑΝΝΙΝΑ: ΤΟ ΠΕΤΡΑΔΙ ΤΗΣ ΗΠΕΙΡΟΥ

Ιδανικός ανοιξιάτικος προορισμός με μακραίωνη ιστορία, παραδοσιακή αρχιτεκτονική, πολιτιστικό πλούτο, γαστρονομικές συγκινήσεις και πανέμορφη φύση.

Ioannina: Lakeside magic

Traditional architecture, a wealth of history, cultural riches and stunning natural attractions make this city in Epirus an ideal springtime destination.

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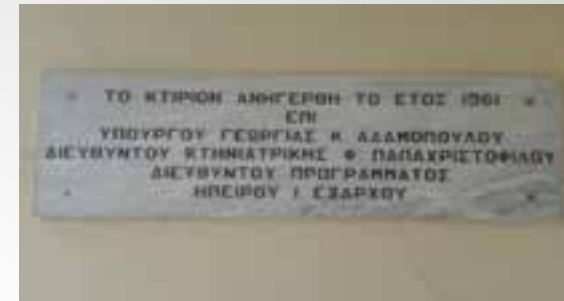


To create this beautiful city, we looked to Ioannina with a view of the lake in Lake Pamfili and



Veterinary Laboratory of Ioannina

- ✓ It was founded in 1961.
- ✓ It is part of a network of laboratories belonging to the Ministry of Rural Development and Food.
- ✓ A total of 11 Laboratories and 2 Veterinary Centers (in Athens and in Thessaloniki) are located in the Greek territory



Veterinary Laboratory of Ioannina

Personnel in the last 4 years

- ▶ 6 veterinarians
- ▶ No technicians
- ▶ No auxiliary staff
- ▶ No administrative staff



Veterinary Laboratory of Ioannina

Personnel

- ▶ 2 veterinarians are involved in the National program of eradication the brucellosis in bovines, sheep and goats and in the National program of eradication the enzootic bovine leucosis
- ▶ 2 veterinarians are involved in the National program of monitoring the spongiform encephalopathies
- ▶ 2 veterinarians are involved in the National programs of control the avian salmonellosis, and monitoring the antimicrobial resistance and the antibiotic residues in food. They also perform microbiological analysis of food of animal origin according to the EE 2073/2005. Finally, as our lab has been designated as the new NRL *Campylobacter* they have implemented all relevant experiments for the verification of the ISO 10272-1 and 10272-2

Veterinary Laboratory of Ioannina

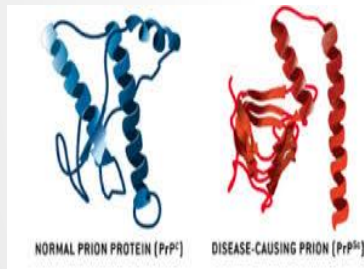
Personnel

- ▶ As there is no administrative staff and technicians in our lab, the vets are also involved in all issues related to managing the lab's finances, document management, preparation of culture media and waste management



Veterinary Laboratory of Ioannina

- ✓ Since 2008 the lab is accredited to 16 tests (microbiological and biological) in veterinary samples (serum, blood, milk, cerebral tissue, animal feces and samples from the primary production) and in food of animal origin



Hellenic Accreditation System



Annex F1/9 to the Certificate No. 488-3

SCOPE of ACCREDITATION

of the
Veterinary Laboratory of Ioannina
of the
Ministry of Rural Development and Food

Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
Microbiological Testing		
1. Food and animal feeding stuff	1. Detection of <i>Salmonella</i> spp. (ex svs typhi, paratyphi)	ISO 6579-1 :2017
	2. Detection of <i>Listeria monocytogenes</i>	ISO 11290-1:2017
	3. Enumeration of <i>Listeria monocytogenes</i>	ISO 11290-2:2017
	4. Enumeration of coagulase positive staphylococci	ISO 6888-2:1999
	5. Enumeration of β -glucuronidase positive <i>Escherichia coli</i>	ISO 16649-2:2001
	6. Enumeration of the total aerobic microorganism at 30 oC	ISO 4833-1 :2013
	7. Detection and enumeration of enterobacteriaceae	ISO 21528-2:2017
2. Animal faeces and environmental samples from the primary production stage	1. Detection of <i>Salmonella</i> spp. (ex svs typhi, paratyphi)	ISO 6579-1 :2017
3. Animal and poultry tissues	1. Detection of antimicrobial agents (quinolones, cephalosporins, penicillins, macrolides, tetracyclines, aminoglycosides, sulfonamides)	In house method based on LMV/RMV/BIO/P TC/LS/AN Version 06/17-10-2006 Guidance of Community Reference Laboratory ANSES

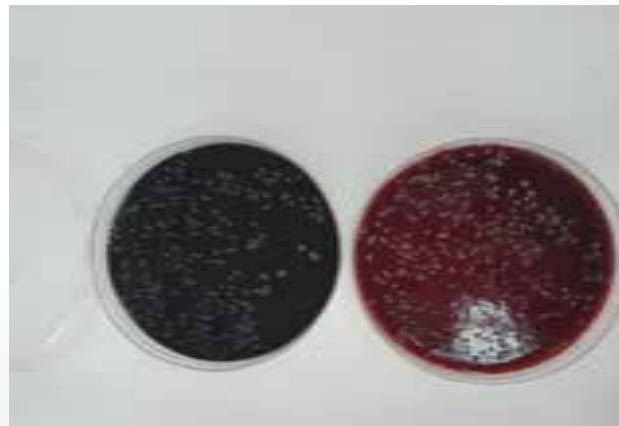
Materials/Products tested	Types of test/Properties measured	Applied methods/Techniques used
4. Digestion residues from biogas plants – compost from composting plants	1. Detection of <i>Salmonella</i> spp. (ex svs typhi, paratyphi)	Based on ISO 6579-1:2017 for the purpose of Commission Regulation (EC) No 1069/2009 and implementing Regulation (EU) No 142/2011
	2. Enumeration of β -glucuronidase positive <i>Escherichia coli</i>	Based on ISO 16649-2:2001 for the purpose of Commission Regulation (EC) No 1069/2009 and implementing Regulation (EU) No 142/2011
Biological Testing		
1. Nervous tissue (obex) of bovine, ovine and caprine origin	1. Detection of the protein PrP ^{Sc}	Immuno-enzymatic technique (TeSeE BIO- RAD rapid test) according to the Commission Regulation (EC) No 999/2001
2. Blood serum samples of domestic or wild ruminants, equine, swine, camelids, carnivores and human origin	1. Detection of antibodies against <i>Breucella abortus/melitensis/suis</i>	Rose Bengal Test (R.B.) according to the Commission Regulation 535/2002/EC amending Annex C of the Directive 64/432/EEC and the Decision 2000/330/EC
	2. Detection of antibodies against <i>Breucella abortus/melitensis/suis</i>	Complement Fixation Test (C.F.T.) according to the Commission Regulation 535/2002/EC amending Annex C of the Directive 64/432/EEC and the Decision 2000/330/EC
3. Blood serum samples of bovine	1. Detection of antibodies against Bovine Leucosis Virus	ELISA Test according to the Commission Directive 64/432/EC, the Decision 2009/976/EE and the OIE Manual of Diagnostic Tests and Vaccines for Terrestrial Animals 2012
4. Milk samples of domestic or wild ruminants	1. Detection of antibodies against <i>Breucella abortus/melitensis/suis</i>	ELISA Test according to the Commission Regulation 535/2002/EC amending Annex C of the Directive 64/432/EEC and the Decision 2000/330/EC

Veterinary Laboratory of Ioannina

- ▶ we hope to extend the scope of accreditation in other two tests:

Detection and enumeration of *Campylobacter*

- ▶ we have completed recently the verification of the two related ISO, according to the ISO16140-3, which is under development, and we attend the assessment from our National Body of Accreditation (ESYD) in November



Veterinary Laboratory of Ioannina

Department of biological testing

Program of eradication the brucellosis in bovines, sheep and goats

Program of monitoring the enzootic bovine leucosis

Program of monitoring the BSE

Program of monitoring the scrapie in small ruminants

Department of microbiological testing of samples

Microbiological testing of food of animal origin

Program of monitoring the antibiotic residues in food

Program of control the avian salmonellosis

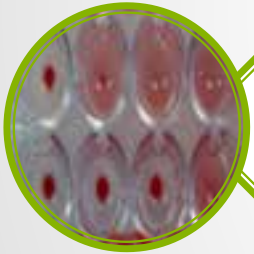
Program of monitoring the antimicrobial resistance according to the EU Decision 2013/652/EU

Veterinary Laboratory of Ioannina

Department of biological testing



Participation in the National Programs of eradication the brucellosis in bovines, sheep and goats and the enzootic bovine leucosis



The Rose Bengal testing, the Complement Fixation testing (CFT) and ELISA are performed to detect the *Brucella melitensis* and *abortus* antibodies in blood and milk samples, according to the EU legislation and the National program



ELISA testing and Agar Gel Immunodiffusion Test (AGIT) are performed to detect the specific antibodies in blood samples, according to the related legislation for the eradication the enzootic bovine leucosis.

National Program of eradication the brucellosis in bovines, sheep and goats



Veterinary Laboratory of Ioannina

Department of biological testing



Participation in the National program of monitoring and eradication of BSE in bovines and scrapie in small ruminants

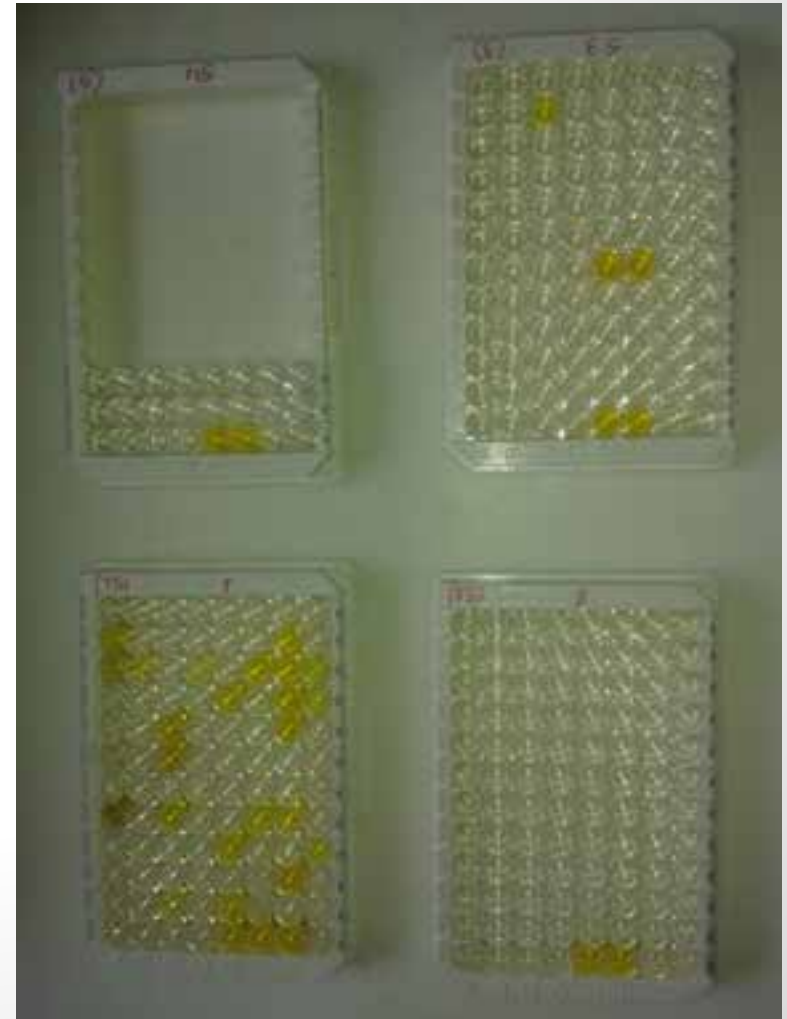


The laboratory of Ioannina is one of the four state laboratories in the Greek territory which are approved to examine samples for the purpose of the mentioned program



The analyzes are performed in a laboratory of biosecurity level 3, according to the relevant legislation. Screening test (ELISA) is performed and the positive samples are sent to the NRL BSE Scrapie for confirmation

Department of biological testing
National program of monitoring and eradication of BSE in bovines and
scrapie in small ruminants



Department of biological testing
National program of monitoring and eradication of BSE in bovines and scrapie in small ruminants



Department of biological testing
National program of monitoring and eradication of BSE in bovines and
scrapie in small ruminants



Veterinary Laboratory of Ioannina

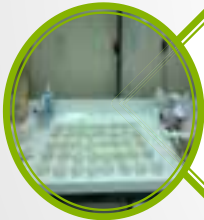
Department of microbiological analysis of food and samples from the primary production



Laboratory of official controls of food of animal origin (microbiological testing)



Participation in the National Avian Salmonellosis Control Program in the primary production

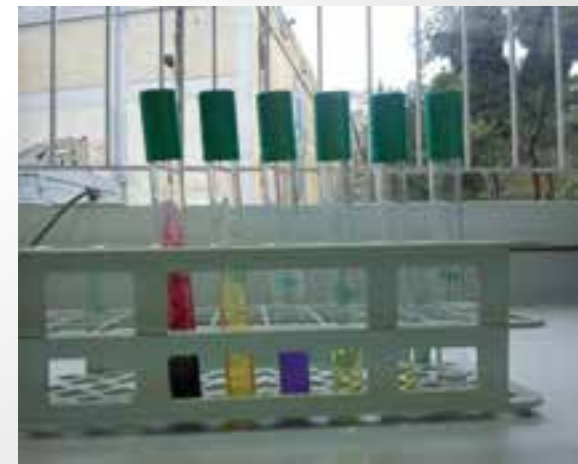


Participation in the National residues Control Program . Monitoring the presence of antimicrobials (B₁) residues in meat with a screening method (STAR PROTOCOL). Every screening positive sample is sent to the NRL for confirmation



Participation in the National program of monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria (2013/652/EU)

Department of microbiological testing



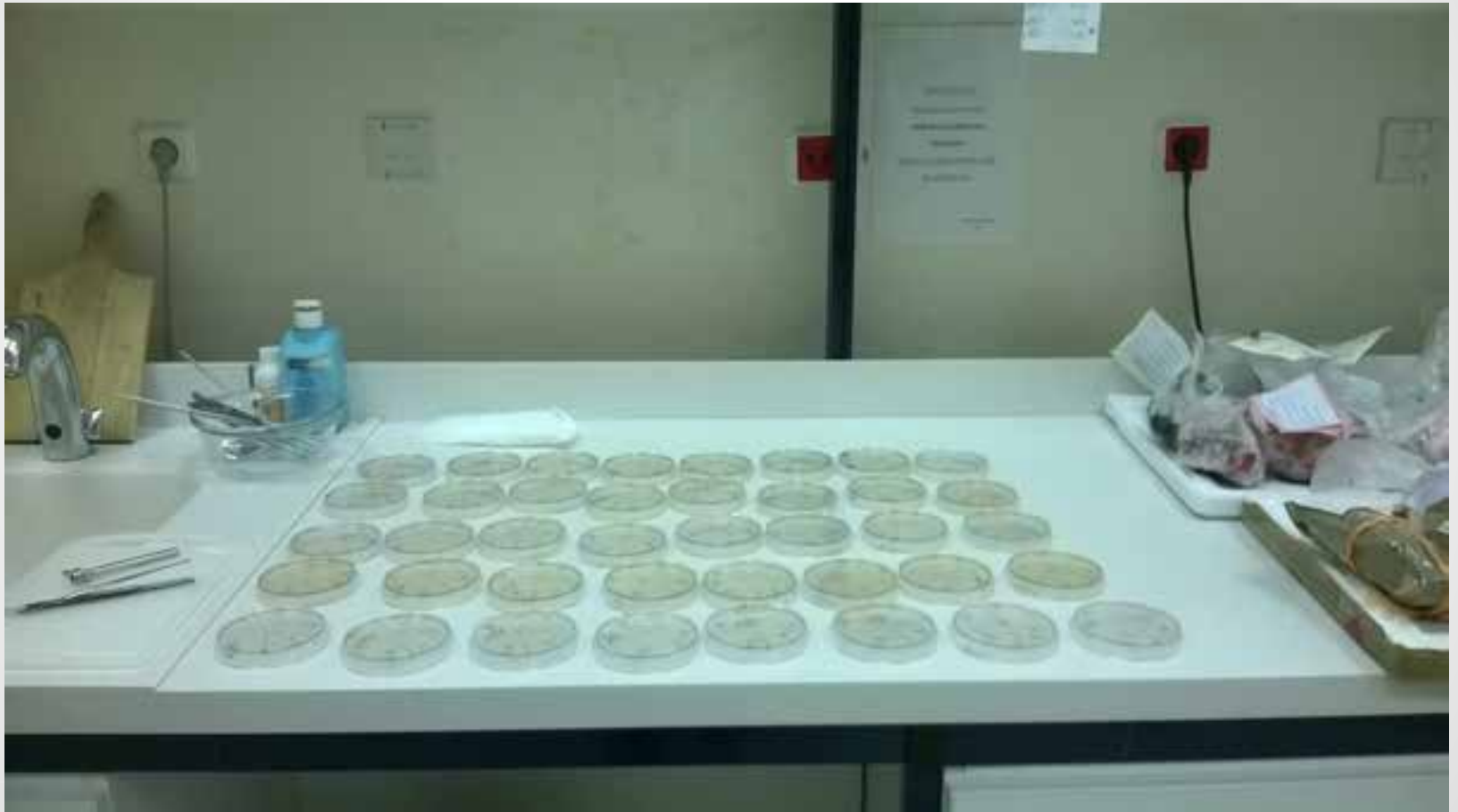
Department of microbiological testing



STAR PROTOCOL testing



STAR PROTOCOL testing



Department of microbiological testing

Control of avian salmonellosis



The laboratory of Ioannina is one of the three state laboratories in the Greek territory that receives samples from the primary production (environmental samples, stools, poultry swabs)



Many poultry farms (broilers and breeding hens) are located in the region of Ioannina (we perform over 1000 analyzes according to ISO 6579-1:2017 per year)

National Salmonellosis Control Program



Participation in the National program of monitoring and reporting of antimicrobial resistance in zoonotic and commensal bacteria



Since 2014 the laboratory of Ioannina receives samples (fresh meat and caecal content) in the context of the related legislation. It is one of the three state laboratories in the Greek territory that participates in this program and one of the two that receives caecal samples.



The strains *C. jejuni*, indicator commensal *E. Coli*, ESBL -/ AmpC-/ carbapenemase-producing *E. coli* are sent to the National Laboratory of Antimicrobial Resistance for antimicrobial susceptibility test. We, also, send all *Salmonella* serotypes isolated in the purpose of implementation of National Salmonellosis Control Program in the primary production



For the purpose of this program we have examined, till now over 600 samples (fresh meat and caecal samples from broilers and fattening pigs)

Veterinary Laboratory of Ioannina

Aims:



- ▶ To extend the scope of accreditation, including the ISO 10272-1 and 10272-2
- ▶ As we were informed by the Central Authority that they intend to fund our lab in order to acquire equipment related to molecular techniques (PCR or other), to participate in appropriate training courses
- ▶ To receive and analyze more and more samples in the context of detection or enumeration of campylobacter (!)



Ancient Theatre of Dodoni- Region of Epirus -Greece