



GMO ANALYSIS IN TURKEY

Ali ALMA

Ministry of Agriculture and Rural affairs

South Eastern European Meeting On
GMO Analysis Sofia
18-19 Nov. 2008

CONTENT

- Structure of Ministry of Agriculture
- Capacity of GMO analysis
 - Equipment
 - Analysis
 - Accreditation
- Biosafety framework

MINISTRY OF AGRICULTURE AND RURAL AFFAIRS

GENERAL DIRECTORATE OF PROTECTION AND CONTROL (GDPC)

GDPC is competent authority responsible from import, export and production of food and feed and official controls of them as well.

Main objectives;

- Sufficient control
- Efficient inspection
- Good quality input
- Safe food

GENERAL DIRECTORATE OF PROTECTION AND CONTROL

DEPARTMENTS

- **FOOD CONTROL SERVICES**
- **CONTROL, PRODUCTION AND REGISTRATION OF FOOD SERVICES**
- **FEED CONTROL AND REGISTRATION SERVICES**
- **PLANT HEALTH AND QUARANTINE SERVICES**
- **WORKING FIELDS AND DUTIES ANIMAL HEALTH AND QUARANTINE SERVICES**
- **VETERINARY PUBLIC HEALTH SERVICES**
- **DRUG-EQUIPMENT SERVICES**
- **ENVIRONMENT AND DISASTER SERVICES**
- **FISHERY PRODUCTS SERVICES**

Food Control Laboratories -MARA

- **39 Provincial Control Laboratories**
- **1 Food Control and Central Research Institute**
- **1 National Food Reference Laboratory (Under Construction)**

- **Authorised laboratories**
 - **27 private laboratories**

GMO LABS- MARA

- **Ankara Provincial Control laboratory**
- **Adana Provincial Control laboratory**
- **Bursa Food Control and Central Research Institute**



Ankara Provincial Control Laboratory (APCL) is in charge of carrying out the analyses demanded by;

- Official agencies**

- Private persons or companies**

for the purpose of inspection, import, export, special request and production license in foodstuff and feedstuff

ANKARA PCL

LAB UNITS

- Mycotoxin
- Physical analysis
- Chemical analysis
- Packing Materials
- Additives
- Dioxin
- Residue
- Calibration
- Mineral
- Feed
- Microbiology
- **GMO**

ANKARA PCL

GMO LAB

Processed or unprocessed food and feed (analysis)

Research Projects

Method Validation

Accreditation Studies

Training

Contribution to Legislative studies

Participation to ENGL (observer)

EQUIPMENT



- Real Time PCR(LC 1.5,LC 480)
- PCR
- Vertical and horizontal Electrophoresis systems
- Centrifuges
- Lab. mill
- Biosafety cabinet (class II)
- Other...

Analysis

Qualitative

Screening: 35S p NOS t

Event specific (RR Soya,Bt 176, Bt11,
MON810, T25,GA21)

Quantative

(RR Soya,Bt 176,Bt11 MON810,T25)

Proficiency Testing

- Bt 176
- Bt 11
- MON810
- T25

Accreditation

ISO 17025 accredited by TURKAK in May 2008

35Sp NOS t RT PCR

RR Soya (Quantative) RT PCR

Bt 176 (Quantative) RT PCR



THANK YOU FOR ATTENTION!