



# VIRTUAL REGIONAL WORKSHOP ON BIVALVE MOLLUSCS SANITATION

9, 10, 11 December 2020

BIVALVE MOLLUSC SANITATION PRACTICES IN TURK

### **TURKEY**

General Directorate for Fisheries and Aquaculture,
Ministry of Agriculture and Forestry of the Republic of Turkey

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# Competent Authority (CA) in Turkey For BM

- CA is Ministry of Agriculture and Forestry in Turkey.
- General Directorate of Food and Control is the main General Directorate in collaboration with General Directorate of Fisheries and Aquaculture and other related Authorities.
- « Veterinary Services, Phytosanitary, Food And Feed Law and Fishery Law » is the main legislation for BM
- Secondary legislation also applies (Regulation, Decree, Instruction etc.)
- «Implementation Instructions Regarding the Determination, Classification, Opening and Closing of the Product Catching and Sampling of Bivalve Molluscs Production Areas Obtained Through Fishing or Gathering or Aquaculture» provides main Instructions for controls, monitoring or other activities regarding BM

# Controls, Monitoring or Other Activities

- Identification of BM Production Areas,
  - Coordinates,
  - Sampling Points etc.
  - Sample Analysing Parameters and Frequency
- Monitoring and Sanitary Survey,
  - Listing Industrial and Agricultural Contaminant Resources and Animal Origin Pollutants, and
  - Monitoring Parameters in the Context of Instructions.
  - Meteorological and Bathymetric Information (tide and current changes etc.).
  - ❖ Population and Urbanization Information (discharge and purification).
  - Water Parameters and Observations.

# Controls, Monitoring Or Other Activities

- Assessment of Monitoring and Sanitary Survey Results (Desk Work),
  - Assessment with all information including the requirements of other ministries
    - Tourism,
    - Maritime,
    - Security,
    - Urbanisation etc.
- Classification of Production Areas and Aquaculture Areas,
  - ✓ Class A
  - ✓ Class B
  - ✓ Class C
- Approval of Purification Centre or Relaying Areas,
- Permission for Aquaculture Activities for BM,
- Announcement of Classification of Production Areas to the related parties,
  - Fishermen, gatherer, producer, provinces, Labs, Borders.



# Production or Harvesting Areas BM for Fishing

BM Production areas are being opened and closed according to Fishing Decree for sustainability purposes

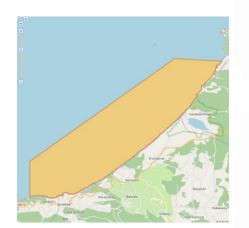






Production areas are identified with coordinates, sampling points, species and, class A or B are monitored and controlled









# Labs and Institutes Responsible for Control and Monitoring BM Areas

| Analysis                           | Sample                         | Sampling Frequency                   |               | İzmir** |            | İstanbul** |            | National Ref. Lab |            | Kocaeli** |            | Balıkesir** |            | Çanakkale** |            | Ankara** |                    | Giresun** |            | Bursa GYAME |            |  |
|------------------------------------|--------------------------------|--------------------------------------|---------------|---------|------------|------------|------------|-------------------|------------|-----------|------------|-------------|------------|-------------|------------|----------|--------------------|-----------|------------|-------------|------------|--|
|                                    |                                | Open<br>season                       | Banned season |         | Accredited |            | Accredited |                   | Accredited |           | Accredited |             | Accredited |             | Accredited |          | Accredited         |           | Accredited |             | Accredited |  |
| Toxic algae                        | Sea Water                      | Weekly                               | biweekly      | +       |            |            |            |                   |            |           |            |             |            |             |            |          |                    |           |            |             |            |  |
| E. coli                            | Product                        | Biweekly                             | biweekly      | +       | +          | +          | +          | +                 |            | +         | +          | +           | +          | +           | +          | +        | +                  | +         | +          | +           | +          |  |
| Salmonella                         | Product                        | A class production<br>areas biweekly | X             | +       | +          | +          | +          | +                 | +          | +         | +          | +           | +          | +           | +          | +        | +                  | +         | +          | +           | +          |  |
| V. cholera,<br>V. parahaemolyticus | Product                        | Twice a year                         | X             | +       | +          | +          | +          |                   |            | +         | +          |             |            | +           |            | +        | +                  |           |            | +           | +          |  |
| Coagulase positive staphylococci   | Product                        | Twice a year *                       | X             | +       | +          | +          | +          | +                 |            | +         | +          | +           | +          | +           |            | +        | +                  | +         | +          | +           | +          |  |
| E. coli ( 0157)                    | Ready to<br>Consume<br>Product | Twice a year                         | X             | +       | +          | +          | +          | +                 |            | +         | +          |             |            | +           |            | +        | +                  |           |            | +           | +          |  |
| PSP                                | Product                        | Weekly                               | Weekly        | +       | +          | +          | +          |                   |            |           |            |             |            |             |            |          |                    |           |            |             |            |  |
| ASP                                | Product                        | Weekly                               | Weekly        | +       | +          | +          | +          |                   |            |           |            |             |            |             |            |          |                    |           |            |             |            |  |
| Okadoic Acid                       | Product                        | Weekly                               | Weekly        | +       | +          | +          | +          |                   |            |           |            |             |            |             |            |          |                    |           |            |             |            |  |
| Yesso oxins                        | Product                        | Weekly                               | Weekly        | +       | +          | +          | +          |                   |            |           |            |             |            |             |            |          |                    |           |            |             |            |  |
| Azaspir Acids                      | Product                        | Weekly                               | Weekly        | +       | +          | +          | +          |                   |            |           |            |             |            |             |            |          |                    |           |            |             |            |  |
| Lead                               | Product                        | Twice a year                         | once a year   | +       | +          | +          | +          |                   |            | +         |            |             |            | +           |            |          |                    |           |            |             |            |  |
| Cadmium                            | Product                        | Twice a year                         | once a year   | +       | +          | +          | +          |                   |            | +         |            |             |            | +           |            |          |                    |           |            |             |            |  |
| Mercury                            | Product                        | Twice a year                         | once a year   | +       | +          | +          | +          |                   |            | +         |            |             |            | +           |            |          |                    |           |            |             |            |  |
| Dioxins                            | Product                        | х                                    | once a year   |         |            | +          | +          | +                 |            |           |            |             |            |             |            |          |                    |           |            |             |            |  |
| РАН                                | Product                        | Monthly                              | Monthly       |         |            | +          | +          |                   |            |           |            |             |            |             |            |          |                    |           |            |             |            |  |
|                                    |                                |                                      |               |         |            |            |            |                   |            |           |            |             |            |             |            |          | No. of Contract of | -         |            |             |            |  |

# Consumption and Marketing



- In accordance with national and international legislation;
- BM products are safely consumed in the domestic market as well as exported to many countries worldwide

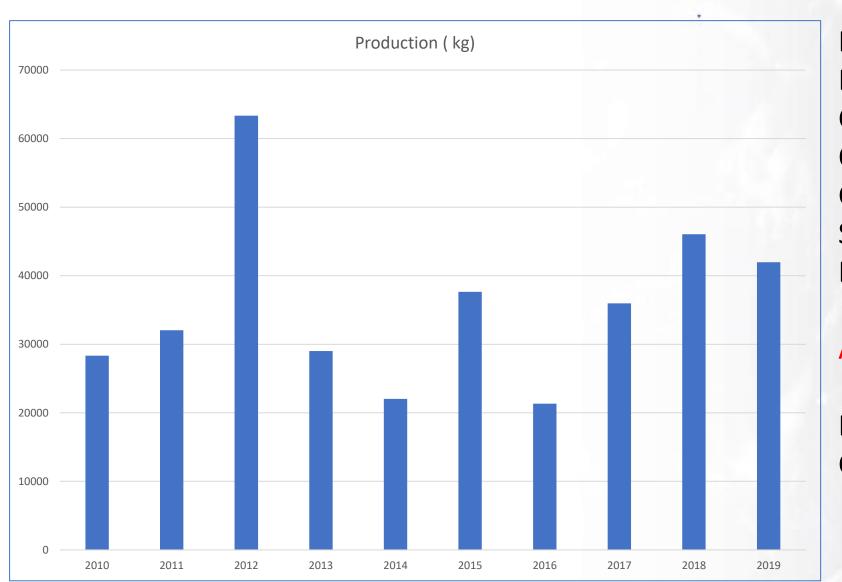








# **BM Production By Years**



Black mussel,
Bearded mussel,
Clams,
Oyster,
Cockle,
Scallop,
Baby clams,

#### Aquaculture

Black mussel Cockle





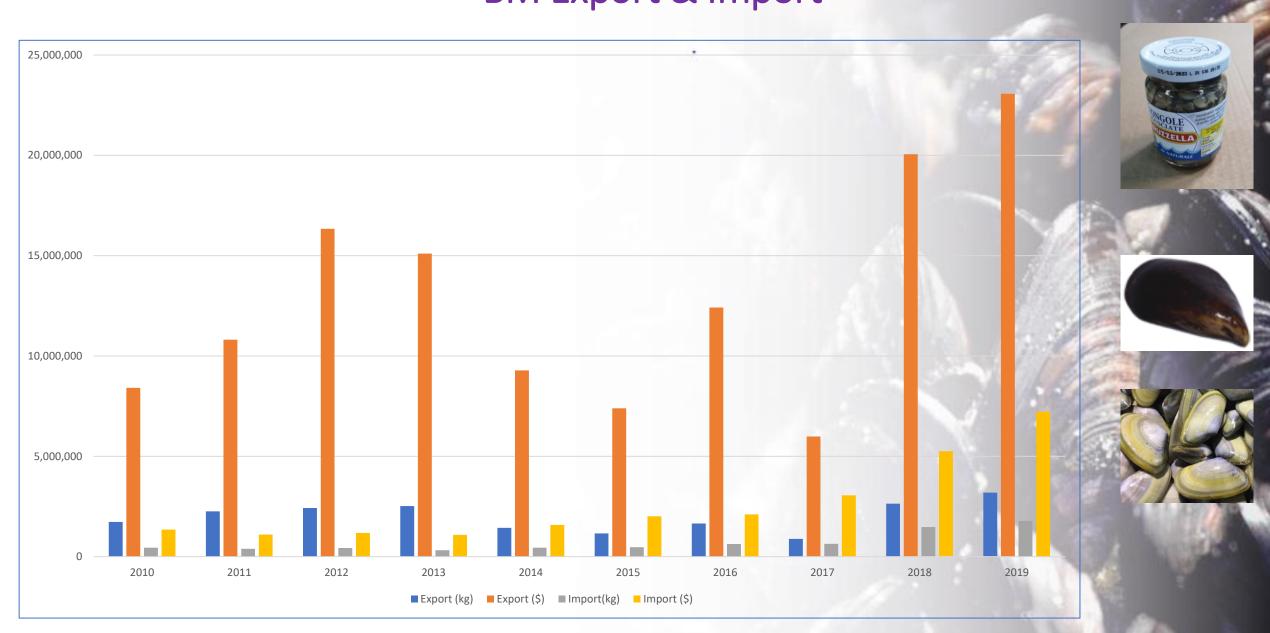








# **BM Export & Import**



#### Public Awareness and Risk Communication

- All production areas and Production are under control of the Ministry through Central and Local Authorities,
- Areas are being closed or opened according to monitoring results,
- Fishing, harvesting or gathering are stopped by announcing to all stakeholders
- Based on their classification, a special document is issued for all products put on the market, showing that they are suitable for human consumption.
- All exporting companies have a recall system in case of need or emergency.
- Controls are carried out at every stage of marketing ( harvesting, transporting, processing and marketing etc.)

