Subgroup: Alteration on table olives from Morocco

**Introduction**
- Morocco is a traditional producer of olives. According to EU- and customer’s requirements Morocco has to improve production and processing of olives, because of problems in shelf life, sensory properties and safety.

**Objectives**
- Find reasons for alterations on table olives
- Identify critical points for the eating quality, determine measurements for process control to reduce quality alteration and find possibilities for improvement

**Results**
- Alterations on table olives: gas-pocket, putrid and butyric fermentations, zapatería, softening, spots, cyanosis, etc.
- Main microorganisms involved in spoilage: Clostridium and Propionibacterium
- Fermentation process is to control: pH, free acidity and salt concentration

**Table 1: Overview of different table olive styles and their control of safety (Nout and Rombouts 2000, p. 701)**

<table>
<thead>
<tr>
<th>Type</th>
<th>Production</th>
<th>pH</th>
<th>Salt concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish-style (green) olives</td>
<td>In glass jars/plastic pouches; No pasteurisation</td>
<td>3.5-4.0 with 0.5-0.75% w/v free acidity (lactic acid)</td>
<td>5-8% w/v</td>
</tr>
<tr>
<td>Green olives</td>
<td>Pasteurisation</td>
<td>4.0-4.2</td>
<td>5.5% w/v</td>
</tr>
<tr>
<td>Treated black olives in brine</td>
<td>Sterilised</td>
<td>varies from 5-8</td>
<td>2.5-5.0% w/v</td>
</tr>
<tr>
<td>Natural black olives</td>
<td>Cannot be sterilised for reasons of texture loss</td>
<td>below 4.6</td>
<td>7-8% w/v</td>
</tr>
</tbody>
</table>

**Conclusion**
- Basis of poor quality of table olives is inadequate control of spontaneous fermentation process, which has to be well controlled.
- To standardise the production and the final quality of table olives, the usage of starter culture is recommended.

Subgroup: Nitrofurans in Shrimps from Asian countries

**Introduction**
Shrimp farming is an important economic sector in Asian countries. Thailand, Indonesia, Vietnam and Philippines dominate the production of cultured shrimp for Japan, the USA and EU markets. In recent years the shrimps imports into EU from South Asian countries are at risk of ban due to the presence of nitrofurans (synthetic broad-spectrum antibiotics, carcinogenic and mutagenic characteristics – since 1993 prohibited in EU), which are still frequently used in animal production.

**Objectives**
- Analysis of shrimp farming in Asian counties
- Reasons for the application of nitrofurans
- Improvement of the management of shrimp farming and preventive disease control in aquaculture

**Methods**
- Literature research: reasons for nitrofurans application, ways of contamination of shrimps and detection methods for nitrofurans

**Results**
- Nitrofurans' application aim is prevention of disease outbreaks
- Reasons for diseases in aquaculture: stress as consequence of high pond density, monoculture, high temperature, poor water quality and inadequate nutrition
- Nitrofurans are permitted in some countries, and/or in countries where it is banned, regulations prohibiting their use may not be reinforced.
- Better pond management prevents disease outbreaks (– reduction or avoidance of chemical treatments).

**Conclusion**
- Parent nitrofurans in Shrimps are not detectable, because of its instability, but the detection of residual molecules is possible.

References: