THE PRODUCTION OF LAMBRUSCO WINES

Pointing out the phase of second fermentation and the production of organic wine
GENERAL FLOW CHART

CRUSHING

MACERATION

RACKING/PRESSING

FERMENTATION

SWEET MUST

RACKING

CONSERVATION

BLEND

2ND FERMENTATION IN BOTTLE

2ND FERMENTATION IN TANK

COLD STABILIZATION

BOTTLING
PRODUCTION OF WINE AND MUST

BASE SWEET
- COLD MACERATION
- RACKING OF THE MUST
- FILTRATION AND CENTRIFUGATION
- REFRIGERATION
- GRAPE MUST or "filtered sweet"

GRAPE CRUSHING AND DESTEMMING
- COLD MACERATION

DRY BASE
- MACERATION WITH 2ND FERMENTATION

RACKING
- SLOW FERMENTATION
- RACKING
- BOTTLING

YEAST
SPECIAL FEATURES IN THE PRODUCTION OF LAMBRUSCO WINES

- 70% of mechanical harvesting
- Short (1 or 2 days) or very short (12 hours) maceration for high presence of anthocyanins and procyanidins.
- Longer maceration (3 or 4 days) for some varieties (Lambrusco Grasparossa) with more structured tannin or for bodier wine (accompanied by start of fermentation or délestage)
- Fermentation preferably on clean must settling or filtration and centrifugation at a controlled temperature of 18-20 °C
- Using selected yeast Saccharomyces cerevisiae with little hydrophilic cell walls so as not to impoverish wines of their anthocyanins
- The malolactic fermentation is avoided in order to preserve the freshness of the wine
PRODUCTION OF SWEET BASE

- For DOC wines, the sweet bases utilized during the second fermentation in pressure controlled tank (presa di spuma) and during the sweetening derive from the same grapes. They are:
  - Filtered sweet (see diagram above) stored at 0°C
  - Concentrated musts (20-30%) hot under vacuum
  - Preserved musts «mosti muti» (stored at room temperature with high levels of sulphur: 1.600-2.000ppm) desulphurized with desulphurization vacuum

It also uses rectified concentrated must produced outside the cellar
SECOND FERMENTATION

• **Second fermentation in tank** (Charmat method) for light-sparkling and sparkling fragrant wines characterized by primary and secondary aromas.

• **Second fermentation in bottles without degorgement** (ancestral method) produced with the characteristic turbidity but softer and more structured with the dominant note of the reduction caused by the yeast more structured, aromas less fresh but more complex. Intended for light-sparkling wines.

• **Second fermentation in bottles with degorgement** (classic method) product more elegant with creamy foam, wine softer and structured with hints of bread crust and richer fragrances, with secondary aromas and spicy. Generally intended for sparkling wines.
LAMBRUSCO ON PUPITRE
SECOND FERMENTATION IN BOTTLE WITH DEGORGEMENT

- Second fermentation (presa di spuma) in bottle hold in stacks at a temperature of 12-15°C
- Aging for 20-24 months in order to get a more structured products
- Stand on pupitre upside down
- Disgorgement freezing the neck of the bottle
- Possible compensation with the wine base in different sugar content
METODO CHARMAT
FERMENTAZIONE IN AUTOCLAVE

Sugar—Yeast
Base wine
Second fermentation in tank
Filtration & centrifugation isobaric
Filtration & centrifugation isobaric
Refrigeration in tank
Cork and packing
Isobaric bottling
FEATURES FOR LAMBRUSCO WINES
FROM SECOND FERMENTATION IN TANK

• Sweetening with filtered sweet
• Second fermentation from must
• Temperature of fermentation 12-15°C
• Duration 2 weeks light-sparkling and 1 month for sparkling wines
• Without maturation on lees
• Products particularly rich and fragrant
  - Temperature 10-12°C
  - Aging on the lees for 1-3 months
FEATURES FOR LAMBRUSCO WINES FROM SECOND FERMENTATION IN BOTTLE

- Re-fermentation of product with residual sugar obtained from best wine base and with an important percentage of malic acid to prevent the development of lactic fermentation
- Bottling followed by second fermentation (presa di spuma) in February/March
- Using yeast with good propensity for cell lysis
- Temperature of fermentation 12-15°C
- Stop in stacks and maturation from 2 up to 4 months
- Placement of standing bottles for the compaction of the lees at the bottom of the bottle (at least of 1 month)
• Made from organic grapes
• Preferibly harvested into picking box
• Use of ingredients and additives of biological origin where present (see list)
• Prefering the use of wild yeasts
• Limitations sulphur use (ig: max 100mg/l dry red wine against 120 mg/l)
CHART:
ingredients allowed including concentrated must, rectified concentrated must, cells of sucrose and yeast have to be all organic

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<td>VEGETABLE PROTEIN OBTAINED FROM WHEAT OR PEAS, E-GEL-FISH, ALBUMIN FROM EGG-WHITE, TANNIN</td>
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<td>GUM ACACIA (GUM ARABIC)</td>
<td>TARTARIC END COLOR STABILIZATION</td>
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<tr>
<td>TANNIN</td>
<td>MORE TANNIN</td>
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</tbody>
</table>
PROCEDURES ALLOWED WITH LIMITATIONS

WITH LIMITATIONS

• For heat treatment the temperature may not exceed 70 °C

• for centrifugation and filtration, with or without an inert filtering agent, the pore size can not be less than 0.2 micrometers
PROHIBITED PRACTICES

PROHIBITED

• partial concentration through cooling;
• elimination of sulphur dioxide by physical processes;
• electrodialysis treatment to ensure the tartaric stabilization of the wine;
• partial dealcoholisation of the wine
• treatment with cation exchangers to ensure the tartaric stabilization of wine
• It's delightfully refreshing, with a sparkle-enlivened bouquet that can vary from fruity with pleasant vinous overtones to floral with hints of violets and heather

• On the palate it is zesty, with nice fruit flavors and a clean finish