

MOLASSES

- Uncrystallized sugar,
Water soluble minerals and
Other water soluble parts are collected in
molasses
- 70-75% DM,
- 50-55% sugar,
- 8-10% CP
 - Most of it NPN
- ME 2300 kcal/kg for ruminants

MOLASSES

- Most of crude ash K (3.6%)
- P ↓
- Various micro elements especially Co ↑
- Vitamins
niacine and panthotenic acid ↑

MOLASSES

- In Feed manufacturing industry
- Prevent dusting,
- Enrich in energy in feed especially pellet feed manufacturing
- used to give better and more durable form to pellets
- For this purpose molasses
- 8-10% for ruminant concentrate feeds
- 2-5% for poultry feeds

FERMENTATION INDUSTRY BYPRODUCTS

Starch or sugar in products containing starch or sugar (cereals, potato and fruits)

Converted to alcohol via fermentation with microorganisms

The remainder after the manufacturing of alcohol and alcoholic beverage is called fermentation byproducts

BEER INDUSTRY BYPRODUCTS

Beer

wheat

barley

Also maize, rice, sorghum

ARPA



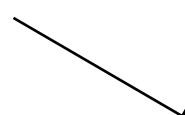
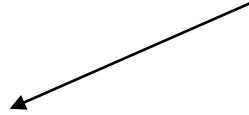
Temizleme



Çillendirme (2-3 gün, 17-18oC su) diastaz ↑



Kurutma



Malt

Malt Çili



Öğütme

Malt

↓
Öğütme

Su ile ısıtma ← Mısır, pirinç gibi tane yemler (60-75oC)

← Şerbetçi Otu

→ Kaynatma (100oC 90 dak)

↓
Şerbet

↓
Çözünmeyen Malt
(Malt Posası)

↓
Şerbetçi Otu
Artıkları

↓
Soğutma

← Bira Mayası

↓
Fermentasyon (Saccharomyces)

↓
Bira

→ Bira Mayası

Malt Pulp

Wet malt pulp 20-25%DM

Malt pulp

wet

dry

silage

High digestibility

CF 15-20% as energy and protein sources

- CP = 26% (90% DM)
- RDP 60%
- (RDP 80% in barley)
- ME: 2300 kcal/kg for poultry
- ME : 2300 kcal/kg (in 90% DM) for ruminant

BREWERS YEAST

- CF 1%
- Crude ash 6%
- ME: 2400 kcal/kg for poultry
- ME : 2800 kcal/kg for ruminant