

Alternative Yeasts Plus: New Products and Techniques

WineMaker GaragisteCon

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It's about to be that time of year again...

 SCOTT
LABORATORIES



2022
WINEMAKING
HANDBOOK
PREMIUM PRODUCTS FOR WINEMAKING

VINEYARD
YEAST
NUTRIENTS
ML FERMENTATION
OAK & TANNINS
ENZYMES
FINING & STABILITY
MICRO CONTROL
FRUIT & MEAD



HANDBOOK 2022

PRODUCTS
SERVICES

SUPPLIES

enartis
Inspiring innovation.

New Tools for Fermentation

The Short List

- New Saccharomyces Products
- New non-Saccharomyces Products
- Tools for Initiating Indigenous Fermentations

What's New in *Saccharomyces*?

- Hybrid Strains
- Multi-Strain Preparations

Hybrid Strains

Anchor Exotics

- *Saccharomyces cerevisiae* hybridized with other *Saccharomyces* species
 - Paradoxus (Mosaic)
 - Cariocanus (Novello)
- Increased aromatic complexity and intensity
- Rounder mouthfeel
- Some malic acid consumption
- Limits vegetal aromas
- Ability to stop via temperature crash



Multi-Strain Preparations

Anchor Alchemy

- Combination of aromatic converters and releasers
- Proportioned to drive styles
- 2 for reds, 2 for whites



What's new in non-Saccharomyces yeasts?

- Torulaspora
- Metschnikowia
- Lachancea

Factors to Consider for Non-Saccharomyces Fermentations

- Juice/Must cleanliness
- Juice/Must temperature
- Total SO₂
- Purpose of Inoculation
 - Organoleptic (flavor, texture, aroma)
 - Bioprotectant (Appassimento, cold soak, antioxidant)

Torulaspora delbrueckii

- One of the first commercial non-Saccharomyces species available
- Excellent glycerol, ester precursor production
- Great for high-Brix musts
- May be active to as high as 9-10% ABV before shutting down
 - Application for dessert wines



Metschnikowia pulcherrima

- Produces glycerol for mouthfeel
- Amplifies terpene and thiol precursors
- Scavenges oxygen and copper ions to prevent oxidation of juice
- Inoculate 24 hrs prior to inoculation with *Saccharomyces*



Metschnikowia fruticola

- Non-fermentative
- Outcompetes native yeasts and bacteria
- May be used for cold soaks or grape drying
 - Can even be rehydrated and sprayed on fruit prior to harvest



What About the Wild Stuff?

Chitosan for Indigenous Ferments

- Interacts with and precipitates wild, non-Saccharomyces yeasts and bacteria
- Allows for little or no SO₂ use in juice or must
- May be resuspended to eliminate contaminating microorganisms if present

STABILIZING AGENT

STABILIZZANTI

Enartis**Stab**

MICRO

Improving the Success of Indigenous Fermentations

Pied de cuve Method

- Wine's answer to the sourdough starter
- Can help accumulate biomass for quick and successful inoculation
- Tools like Chitosan may be used to fine-tune culture
- How it's done (at least the way I do it):
 - Harvest and press a small amount of fruit 7-10 days prior to main harvest
 - Add foraged materials that may contain wild yeasts to juice
 - Allow fermentation to start for a few days
 - Fine with Chitosan to limit bacteria, non-Saccharomyces populations
 - After main harvest/processing, add some unfermented juice back to starter culture and use starter culture to inoculate juice or must

Thank You!

Any questions? E-mail me: phil@montezumawinery.com