



# Practical Wine Analysis for Home Winemakers

With handouts you can use today

Oct. 17, 2013



## Why measurements?

- What have I got?
- Where will I need to go?
- Is it finished?
- Adjustments?
- Will this wine last?



## Practical analysis for home winemakers

- In the vineyard
  - Refractometer (sugar)
  - pH meter (pH)
- In the Lab
  - Brix
  - Total Acidity (TA)
  - pH
  - SO<sub>2</sub> (limited)
  - Malolactic

# Your Enology Lab (minimum)



## Sugar Measurement

- 0-32 Brix Hydrometer w/thermometer
  - Hydrometer jar

## TA Measurement

- Buret 0-25 ml
  - Small funnel (to fit buret opening)
  - Stand & Clamp
  - 0.1N Sodium Hydroxide (NaOH) 250ml per season
  - Phenolphthalein (1%) w/dropper
  - Distilled Water
- 5ml pipette
  - Volumetric
  - Serological
- Beaker (250 ml)



## Your Enology Lab (better)

As before, Plus:

- Sugar
  - +/- 5 Brix hydrometer
    - 19-31 Brix
    - 5-19 Brix

TA measurement

- pH meter (portable or bench top)
  - pH buffer standards: 7.01 + 4.01
  - Probe storage solution

# SO<sub>2</sub>



- 10% Stock Solution
  - Syringe
  - Graduated cylinder
  - Addition chart
  - Molecular chart
    - Importance of pH
- Aeration Oxidation set-up
- Vinmetrica meter
- Titrets
  - White wine OK
  - Red Wine inaccurate

## Malolactic Testing



- Solvents
- Filter Paper
- Standards
- Container



## Lab Ware & Stuff

- .1g Balance
- Balance for larger measures
- 1 L flask
  - Different size beakers etc.
- 500 ml graduated cylinder
- Precision thermometer
  - Floating thermometer
- Lab Notebook
  - Reference sheets in plastic 3 ring binder
- Calculator



## Resources



- Books
  - Techniques In Home Winemaking by Daniel Pambianchi
  - Home Winemaking: Step By Step by Jon Iverson
- Supplies
  - Local Winemaking Store
  - MoreWine.com
  - Napa Fermentation Supply
  - Cynmar (labware etc.)
    - [www.cynmar.com](http://www.cynmar.com)
- SWGGA
  - Wine Making Spreadsheet
    - SO2 vs. pH Table
    - SO2 Calculator
    - SO2 Addition
- Internet Winemaker Calculator
  - <http://www.winebusiness.com/tools/> (from Wine Business Magazine)