

Muscadine Sampling and Testing

Why Sample and Test?

To determine an optimal harvest time and provide fruit to buyers or your own winery that is of optimal quality and ripeness.

When to sample

- Sample two to three weeks before expected harvest date
- Sample again one week before expected harvest date.
- Ideally, sample once more shortly before harvest, up to 48 hours.
- Send samples no later than Wednesday, freeze samples if you need to hold them longer.

You should ideally have at least three sets of data.

How to sample

- Determine the specific plots (area/variety) you wish to sample.
- Take a 100-berry blind sampling, all over the vineyard plot from different areas of the canopy
- Collect in plastic bag. Label each bag with a personal sample ID (for example: Carlos 4 Acres, or Noble Block 2)
- Squeeze berries until thoroughly juiced. Don't worry about hard green berries, they won't press later anyway.

Testing with a hand-held refractometer

- In the field, simply walk through vineyard, blindly grab a usable berry from the vine and squeeze juice onto refractometer. This is just a vague indication of ripeness, not to be used in final decision making process.
- If you have pulled a formal sample to send for Oeno-Foss analysis, test the sample on your own refractometer as well, and record the results.
- Follow the instructions that came with your refractometer

Preparing grapes for OenoFoss testing/analysis

- Put in the grapes in plastic bag and mash them to release the juice. If you wish, strain it through cheesecloth. The juice does not need to be clear.
- Pour 50-100 mil (about 1/4 - 1/2 cup) of juice in the container provided by the project or a similar tightly lidded container. The container needs to be clean but does not need to be sterile. If freezing, be sure to leave enough space for expansion.
- Label the container with your name and the date. If sending more than one sample, add your sample ID (you will also put that on the form you send)
- Fill out a form for each sample
- Chill the sample if not delivering immediately.
- If sending sample by UPS or if any other significant delay, freeze the container asap.

Sending your samples

- Hand-delivery to Windsor Run Cellars will get the quickest results. Consider carpooling samples with other growers.
- Place your sample container in a ziplock bag.
- Wrap your container in bubble wrap or other insulating materials
- Box your sample and send via UPS Ground or any other service that will get your sample there next day. (UPS Ground is generally one-day throughout North Carolina)
- Ship to: **Chuck Johnson, Windsor Run Cellars, 6531 Windsor Rd., Hamptonville, NC 27020** (phone 336-970-3431, email Chuck@Windsorrun.com)

- If shipping, email Chuck to alert him that your sample is on the way and send the tracking number.

Payment for OenoFoss testing

- NCMGA will cover the analysis costs for samples for each commercial NC winegrower participating in the M-QEP Program. The number of samples that the project will be able to cover has not yet been determined.
- NC growers who wish to have additional samples tested, or growers outside NC who wish to have samples tested will be charged \$40/per sample.
- If paying for samples, enclose a check made out to Chuck Johnson for cost of the analysis for your samples.



This document was created as a resource for the Muscadine Winegrowers and Winemakers Quality Enhancement Program (M-QEP). This program was funded through a grant from the NC Wine and Grape Council.

OENOFOSS SAMPLE FORM

Enclose this form for each sample. Keep a copy for your records.

Name _____

Vineyard name: _____

Mailing address: _____

Email: _____

Phone number: _____

Date sampled: _____

Grape variety: _____

Your personal sample ID: _____

(For example, Carlos-Block 1)

___ This is an M-QEP sample (cost covered by NCMGA)

___ I am paying for testing this sample.

Notes/comment:

For administrative use:

Sample number: _____

Date received: _____

Date processed: _____

Date results reported: _____

Notes:

More about Refractometers

Want a digital Brix Refractometer?

These are easier to read, but more expensive. This is one recommended by Penny Perkins-Veazie:



Milwaukee MA871 Digital Brix Refractometer

RANGE: 0 to 85% Brix

RESOLUTION: 0.1% | 0.1°C (0.1°F)

ACCURACY: $\pm 0.2\%$ Brix | $\pm 0.3^\circ\text{C}$ | $\pm 0.5^\circ\text{F}$

Available from [Milwaukee Instruments](https://milwaukeeinstruments.com)

<https://milwaukeeinstruments.com/products/refractometers/> -

\$149.00, free shipping

Buying your own handheld Brix Refractometer?

Here's what we are getting for people through this project:

Brix Refractometer with ATC, Brix 0-32, Hydrometer in Wine Making, Homebrew Kit (0~32%)

Sold by Aichose on Amazon, here, for \$18:

https://www.amazon.com/dp/B01LW4HHRC/ref=as_li_ss_tl?SubscriptionId=AKIAJO7E5OLQ67NVPFZA&ascsubtag=335719640-2-835118306.1621473143&tag=shopperz_origin3-20



A few other recommended products:

<https://www.piwine.com/acid-testing-kit-deluxe.html> 95.99

Ph meter <https://www.piwine.com/ph-atc-portable-meter.html> 104.99