



Brix testing on the tree

Posted by [Karen Brindle](#)

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[Karen Brindle](#)

[Brix testing on the tree](#)

November 15, 2018 08:54PM

Registered: 9 years ago

Posts: 103

How do you all test for ripeness? I've found this on Amazon, Atago 5455 PAL-Hikari 5 (Apple) Brix Meter, but having a hard time justifying \$800. It's important that we supply cider apples to the brewery that have maximum sugar. This device looks really handy because it does not require cutting a bunch of apples up and using iodine. Any thoughts?

[Vista Ridge Orchard](#)

Zone 8a in Washington

235 Cider and heritage apple trees, 72 varieties,

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[Mike Biltonen](#)

[Re: Brix testing on the tree](#)

November 15, 2018 09:19PM

Registered: 10 years ago

Posts: 298

There is no good single way to test for fruit ripeness.

Brix - can be measured with a refractometer like the Atago you're looking at.

Starch - iodine can be used to determine the degree of starch conversion to sugars.

Seed color - the darker the seeds, the "riper" the fruit.

Acidity - acidity drops as fruit gets riper, so if you measure and can follow through the ripening period, then you can get an idea of when the fruit getting towards full ripeness.

Ethylene - if you are lucky to have access to a gas chromatograph, you can take an air sample of the fruit core with a syringe, inject it in the GC and measure the amount of ethylene in the fruit. And like acidity, you can follow this through the ripening period. The higher the ethylene, the riper the fruit - simply stated.

Fruit color - sometimes darker, redder fruit is considered to be riper.

In reality, these used together are all good ways to determine ripeness. From a cider perspective, the use of brix, starch, and acidity are the best way to determine when fruit is ready/ripe. However, the best way is to taste the fruit!

[Mike Biltonen, Know Your Roots](#)

Zone 5b in New York

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[Claude Jolicoeur](#)

[Re: Brix testing on the tree](#)

November 15, 2018 10:05PM

Registered: 11 years ago

Posts: 226

Karen Brindle Wrote:

> How do you all test for ripeness? I've found this
> on Amazon, Atago 5455 PAL-Hikari 5 (Apple) Brix
> Meter, but having a hard time justifying \$800.

I must say this meter does look extremely handy as it permits to have the Brix without pressing a drop of juice out of the apple. But as you say the 800\$ is an issue.

Normal optical refractometer (i.e. those that are NOT digital) run for a much more reasonable cost (under 100\$). It requires that you also have a knife and a small garlic press to extract a drop of juice. Mind you, once you have picked the apple, you can then eat the rest of it, which will give you another indication on its ripeness, and you can finally inspect the seeds.

The other important thing is if those apples are destined to a cidery, they should be left to sweat for sometime before they are pressed. This sweating period normally takes care of the final ripening.

Claude

[Jolicoeur Orchard](#)

Zone 4 in Quebec

Author, [The New Cider Maker's Handbook](#)

[Reply](#) [Quote](#)

[Josh Willis](#)

[Re: Brix testing on the tree](#)

December 02, 2018 07:27PM

Registered: 6 years ago

Posts: 133

Here's a follow up question. How many apples per tree do you all sample before harvest?

Ideally, of course, each apple has the same growing conditions. And of course, that is a hilarious ideal (for my crazy trees, at least). So I tend to sample at least 2-3 fruit / tree, sometimes more. But I'm curious what other folks do.

Earthworks

Zone 7a in West-Central MD

Non-commercial, ~100 fruit trees, dwarf to MM106

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[Karen Brindle](#)

[Re: Brix testing on the tree](#)

December 19, 2018 11:36AM

Registered: 9 years ago

Posts: 103

Thank you for all the replies! Josh I've been using the taste and seed color so far and I select apples from the North side of the tree as I figure they are going to be a little behind with less sun exposure. The apples do sweat at our place and at the brewery, and we've not had any complaints about under ripe fruit. But I always strive to produce the best product we can and wish to narrow down the guess work.

[Vista Ridge Orchard](#)

Zone 8a in Washington

235 Cider and heritage apple trees, 72 varieties,

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