



Orchard-Based Cider Dryness Scale

Why Do We Need a Cider Dryness Scale?

- Produce an honest, consistent, reliable framework for consumer expectations of what will be experienced when trying a cider
- Create a market advantage by facilitating a common language for use by makers, writers, educators, merchants
- Eliminate misinformation and consumer bewilderment about what “dry” really is in ciders
- Expand cider market by educating consumers about cider’s sensory diversity
- Minimize “talk dry and sell sweet” misrepresentation, and “talk dry and drink sweet” confusion



Cider Dryness Scale Foundations: International Riesling Foundation

- Launched in 2008 during a period of intense sales growth for Riesling category; acknowledged by producers to have made category growth sustainable at ~10.5% annually
- Spearheaded by producers wanting to pin an industry standard to the characteristics inherent in a key and specific agricultural product
- Adopted by wine makers around the world and of varied sizes , from small family farms to the world's largest Riesling producer, Chateau St. Michelle
- IRF-funded Wine Council market research reflects embrace of scale by trade and consumers

IRF/Cider Dryness Scale: Differences and Commonalities

- Both are objective, quantifiable scales
- Both quantify the ratio of Residual Sugar to Total Acidity
- Both are built on well-established understanding of how sugar and acid interact in your mouth
- Both focus exclusively on characteristics naturally intrinsic to the grapes and pome fruits that define the respective wine or cider
- The Cider Scale adjusts RS/TA scores to factor the impact of polyphenol (tannin) on the perception of dryness; IRF doesn't include tannins, because Riesling juice doesn't contain significant tannins.

Rationale for Inclusion of Tannins

- Tannins are the bitter and astringent components in pome fruit. Where the cider has tannins, tannins are relevant to the ciders perceived dryness.
- (And wood barrels, and red wine or skin-contact white wine, tea leaves, persimmons, and some other fruits and vegetables...)
- Ciders that have little tannin content can still use the scale, but will see no adjustment to the RS/TA ratio.
- Tannins interact with sugar and acid in the mouth in a way that is well-understood as reducing the perception of sweetness
- Tannins content imparts the sensory experience of drying, and reduces the sensory experience of sweetness

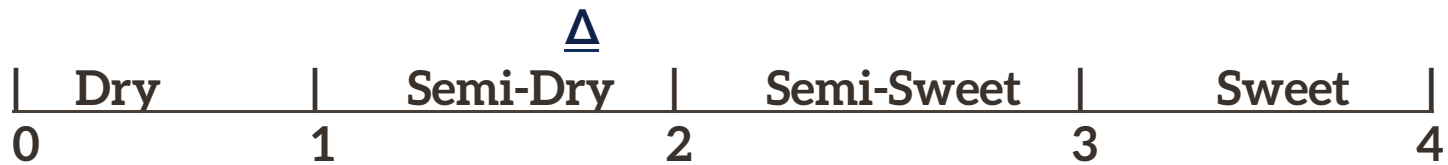
What's In Scope for the “Orchard-Based Cider Dryness Scale”?

- Not a flavor wheel, or a qualitative statement, or a three dimensional model inclusive of characteristics contributed by ingredients outside of pome fruit.
- More refined and quantified way of reflecting the sensory perception of sweet and dry than simple Brix or subjective impression

What is the “Orchard-Based Cider Dryness Scale”?

- A scale that reflects perceived dryness in four values:
 - **Dry, Semi-Dry, Semi-Sweet, Sweet**
- Uses ratio of RS/TA and adjusts for tannin content
- Considers only constituent chemical ingredients (sugars, acids and tannins) that naturally occur in apples and pears
- Intended for use on labels for Heritage and Modern styles, including wood-aged Heritage and Modern styles
- Aligns consumer expectations with cider characteristics using well-understood flavor chemistry

How Does the Scale Work?



Hypothetical cider with 16 g/L of RS, and 8 g/L of TA (as malic acid) results in a numerical ratio of 2

However, this cider also has substantial tannins content of 800 g/L

So its position on the scale is adjusted slightly towards the dry end of the graph

Adjusting for Total Tannins

Preliminary scaling thresholds – this is a point of flexibility, to be refined with additional cider-specific research

- < 500 ppm, the numerical RS/TA ratio remains unadjusted
- 500 to 750 ppm, the RS/TA ratio is reduced by $\frac{1}{4}$ of a unit
- 750 to 1000 ppm, the RS/TA ratio is reduced by $\frac{1}{2}$ of a unit
- >1000 ppm, the RS/TA ratio is reduced by $\frac{3}{4}$ of a unit

Next Steps

- Work with labs to establish a specific Orchard-Based Cider Dryness Scale panel test
- Publish guidelines and designed scale
- Accept and approve use on heritage and modern cider labels on a cider-by-cider basis
- Launch a consumer-focused campaign promoting the scale
- Champion the scale's use, defend it from abuse
- Participate in conversation about this scale as a building block for other definitions, measurements and consumer education initiatives in cooperation with other alliances