



This is the critical month when all of the work you've done, all the footsteps in the vineyard and all the "good" luck you've had, pays off. If we get it right we pass great grapes on to the winemaker. Their job is merely to "not screw it up", and the result is great wine.

We are growing bird candy, the grapes are enticing birds to be seed delivery systems. The grape seeds are only useful when they reach physiological maturity, so the grapes wait to be most tasty when the seeds are ready. We are looking for that same state of ripeness.

### Measuring your Grapes

You should already be measuring your grapes. Make sure your tools & supplies are on hand and working properly. Calibrate your pH meter, clean and test your refractometer (use distilled water and a 25% sugar solution). Make sure you have fresh sodium hydroxide (0.1 normal). Clean all your work surfaces and containers.

Sample each block of your grapes to get an AVERAGE reading across the whole block. Sample end to end and on both sides of the rows to account for differences of sunshine. I like to zig-zag down one row and up another (not right next to it). Week after week I change rows so that eventually most of the block gets tested.

Sample grapes from all parts of the cluster, they ripen at different speeds but you will pick them all: top, middle, bottom, front and back. Sample bunches that are in sunshine and bunches that are in the shade. Don't only pick the prettiest clusters. After ~ 100 grapes are in the zip lock bag - make juice - crush them with a pestle or glass jar.

1. test the Brix (percent of sugar)
2. test the pH - if the sugar is nearly good then,
3. test the titratable acid (TA), this test is time consuming so I don't do this until it matters.

Use the attached chart to determine the target numbers in coordination with your winemaker. This chart is visualization of work done by Linda Bisson at UC Davis:

***Brix x (pH squared) between 220 to 260***

and

***Brix / TA between 30 and 32 (37 to 38 for late harvest)***

BRIX * pH2	3	3.1	3.2	3.3	3.4	3.5	3.6	3.7
26	234	239	250	253	261	278	277	256
25.5	236	245	261	276	295	312	320	349
25	228	249	264	272	289	306	324	342
24.5	221	235	251	267	283	300	318	335
24	216	231	246	261	277	294	311	329
23.5	212	226	241	256	272	288	305	322
23	207	221	236	250	266	282	298	315
22.5	203	216	230	245	260	276	292	308
22	198	211	226	240	254	270	285	301
21.5	194	207	220	234	248	263	279	294
21	189	202	215	229	243	257	272	287
20.5	185	197	210	222	237	251	266	281
20	180	192	205	218	231	246	259	274

  

BRIX / TA	35	39	45	50	55	60	65	1.00
26	40	37	35	33	31	29	27	26
25.5	39	36	34	32	30	28	27	26
25	38	36	33	31	29	28	26	25
24.5	38	35	33	31	29	27	26	25
24	37	34	32	30	28	27	25	24
23.5	36	34	31	29	28	26	25	24
23	35	33	31	29	27	26	24	23
22.5	35	32	30	28	26	25	24	23
22	34	31	29	28	26	24	23	22
21.5	33	31	29	27	25	24	23	22
21	32	30	28	26	25	23	22	21
20.5	32	29	27	26	24	23	22	21
20	31	29	27	25	24	22	21	20

## Grape Sensory Evaluation

You should not only decide by the numbers. There are many flavors, tannins and acids that indicate physiological maturity for the grapes that need to move in concert with the chemical tests. Here are a few easy to detect. The important thing to do is write it down so you can see the movement over time and compare one year to the next.

- > What is the flavor of the juice? - ignoring the sweetness of the sugar, are their varietal flavors, are there flavors of grass or green vegetable, does anything taste burned or raisened?
- > How pale or bright is the color? - does the color come out quickly or only after kneading the grapes, is the color clear, is it bright like a really good rose"?
- > how many of the seeds are fully dark brown? - only fully brown seeds are good enough for bird food.
- > Are the seeds chewy or crunchy? - crunchy seeds are mature, they crush easily between your teeth, chewy seeds get stuck in your teeth and are not yet mature.
- > Are the skins stringy or chewable? - the skins should break apart easily, if they are stringy they are not yet mature, flavors and colors are not fully synthesized.
- > Do the seeds have harsh tannins? - when chewing the seeds, do they release tannins that make the top of your mouth dry, are those tannins astringent on your tongue? If so they are not mature.
- > Are smooth tannins present in the skins? - late in the ripening process tannins move into the skins, these tannins are long-chain molecules that dry the top of your mouth and give smoothness to the wine. Look for this late change.

## The Ramona Advantage

Long warm days, cool cloudy nights, low humidity and high-altitude sunshine give us a great advantage in Ramona. When all of these things come together we should be able to deliver balanced, ripe, mature grapes to the crush pad.

In California the commercial winemaker cannot add sweetening agents to the juice to raise the

Brix or enhance the alcohol. The winemaker can add acid if necessary. Well balanced grapes, like we normally produce, don't need either and they taste bright and natural.

This year, right at harvest time, we have an extended heat wave. Hot days turn off grape chemistry, overly warm nights threaten acid levels and intense sunshine can desiccate without ripening. Testing and sensory evaluation are particularly important when development gets out of balance. As we rush through this harvest season, let us know what you find in the vineyard and in the fermentation tank.

We only go through one session of grapegrowing and winemaking per year. That's not much of a life long experience\*. Sharing between all of us enhances and multiplies that experience - it makes us all better faster.

Share on...

- *Lum Eisenman famously says that 'he has only made wine 60 times in his whole life, and hardly knows anything about it'.*