

# Notes from the New Jersey Chardonnay Workshop Nov 18, 2015 @ Working Dog Winery

Hemant Gohil
County Agent III
Co-operative Extension of Rutgers University





#### Which chardonnay clones do you have?

- Clone-95, 96 are known for uniform fruit set under cooler bloom conditions, Rich, fine and well balanced wine.
- <u>Clone 809, 76</u> have highly aromatic fruit flavor, orange blossom aroma with musque undertone and does well with cold tank fermentation (Beneduce).
- Clone 75, 78 are more vigorous but high yielding clones with very good quality wines.
- <u>Clone 17</u> produces consistently high quality wines with an excellent green apple flavor, and full bodied, roundish and fleshy characters. Good with Malolactic fermentation, shows off new wood characters (Bellview).



## Dijon clones are comparable to California clones and more cold tolerant

Table 1. Yield components of Chardonnay clones, LIHREC vineyard, Sept. 25 & 26, 2013

	1. Tiera components of			Crop weight			Cluster wt.			Berry no./cluster		
Clone	Clusters/vine			lbs./vine			lbs./cluster			Berry no./cluster		
	3309	101-14	Own	3309	101-14	Own	3309	101-14	Own	3309	101-14	Own
5	19.9	20.3	21.8	8.3	9.1	9.0	0.41	0.45	0.41	•	138.8	143.8
15	27.1	25.6	25.1	8.5	7.4	6.5	0.31	0.29	0.26	117.9	110.7	113.2
17	27.1	28.0	24.1	8.6	8.5	5.8	0.32	0.30	0.24	103.9	100.1	83.1
75	26.6	•	21.9	8.6	•	6.6	0.32	•	0.31	126.1	•	•
76	23.5	•	•	7.6	•	•	0.32	•	•	124.7	•	•
78	22.7	•	25.0	7.5	•	5.8	0.33	•	0.23	101.7	•	٠
95	27.9	•	20.8	8.7	•	5.1	0.31	•	0.25	119.3	•	٠
96	21.3	•	19.5	8.5	•	7.3	0.40	•	0.37	131.8	•	•
809	27.8	•	•	7.3	•	•	0.26	•	•	98.0	•	•
GS	•	25.9	•	•	5.5	•	•	0.21	•	•	90.3	•
Significance @ .05	<0.0001	0.0004	ns	0.0489	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	ns	0.0014	-

Table 2. Fruit ripening parameters of Chardonnay clones, LIHREC vineyard, Sept. 25 & 26, 2013

	C3309			MG 101-14				Own-rooted				
		TA,		Berry		TA,		Berry		TA,		Berry
Clone	Brix	g/l	pН	wtg	Brix	g/l	pН	wtg	Brix	g/l	pН	wtg
5	21.5	9.5	3.24	1.72	21.7	9.5	3.27	1.80	21.3	9.8	3.27	1.90
15	22.1	8.3	3.26	1.61	22.4	8.6	3.29	1.54	21.8	7.8	3.30	1.55
17	21.4	8.4	3.3	1.76	21.3	9.0	3.32	1.80	21.5	7.7	3.32	1.87
75	21.6	8.7	3.02	1.57	•	•	•	•	•	•	•	•
76	22.0	8.7	3.04	1.60	•	•	•	•	•	•	•	•
78	22.4	7.5	3.06	1.90	•	•	•	•	•	•	•	•
95	21.6	8.3	3.07	1.59	•	•	•	•	•	•	•	•
96	21.7	7.2	3.11	1.84	•	•	•	•		•	•	
809	22.3	7.2	3.36	1.63	•	•	•	•	•	•	•	•
GS	•	•	•	•	22.3	7.7	3.32	1.56	•	•	•	•

Beneduce

22.5 7.9

3.33

GS - field selection from a local vineyard, sometimes called the 'tropical fruit' clone.



#### Which root-stocks you have?

Earlier plantings in NJ

More suited to dry soil

Like 3309 but less vigorous

High tolerance to Nematodes

Riparia Gloire Less vigorous than 3309 and 101-14 and

Ripens earlier

Very high tolerance to acidic soil and active lime

Own Rooted Insurance against cold damage



## Harvest parameters?

Harvest yields: 2.5 - 3.8 tons/acre

**Brix**: 21.5 - 23.5

<u>TA</u>: 7 - 8 (g/L)

pH: 3.3 - 3.6



### Which yeast strains did you use?

Winery	Yeast used	Comment
Alba	CY 3079, D47, D254	In a separate oak barrels at room temperature
Auburn	DV10	Reduce bitterness during fermentation
Bellview	DV10	Clean, neutral yeast for primary fermentation
Cape May	DV47, Cross Evolution	High aromatic mouth feel in white varieties
Hawk Haven	Elixir, Cross Evolution and BM	To judge the complexity
Heritage	Montrachet	Excellent barrel and tank fermentation, tolerate SO <sub>2</sub>
Unionville	5-10 different strains	To bring out different flavor, aromas and textures
Working Dog	CY 3079 and W15	Works well for cold tank fermentation

#### Oak? which type?

• French

Hungarian and French or Hungarian and American

Neutral Oak

• Stainless steel and Barrel



## Did you cold settled?

- In cold settling, berries are allowed to settle in a vat for 2-3 days at 40-50 °F
  - Whole cluster press
  - Racked the juice

- If no temperature control, crack open the door at night
- In white wines, heavy lees is a bad thing and should be racked at the earliest (Darren Hesington, Cape May Winery)



#### Did you perform Malolactic fermentation (MLF)?

No MLF: Crisp acidity with a longer aftertaste

Able to pair better with food (Beneduce and Unionville).

100% MLF: Smooth and buttery character.

Working Dog (DP-1) and Bellview (VP 41)

one of the most favorite in tasting rooms.

30-70% MLF: Most of the wine makers preferred the complexity.

'Hanson # CH35' (Cape May) with fast fermentation kinetics is

one of the most reliable MLF strain.





#### Thank You

