

Analysis: Harvest Bins vs Picking Lugs (2014)

Grace Estate

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Purpose: To compare harvesting in bin v. lug containers in terms of time cost during harvest.

Methods: Time cost of each container was assessed based on time required to load, pick, unload, and clean 3 bins as compared to 60 lugs.

Results: Assuming that the drive from the field to the winery is the same with lugs as bin; then the time delay involved in using lugs is due almost entirely to the loading and unloading process. Over a 10-hour day this time delay can lead to a 20% reduction in grapes harvested (wt.).

		Activity	Persons/ Activity	Time (minutes)	Lugs/ hour	Tons/ hour	Tons/ 10hrPick	Percent Lugs<Bins	Percent Bins>Lugs
Viognier	Bins	Load trailer	2	0.52					
		Drive to field	1	1.39					
		Pick 60 lugs	7.3	23.34					
		Return to winery	1	2.93					
		Total		28.18	127.7	1.7	17.0	20.6	25.9
	Lugs	Load/drop lugs in field	7.3	2.73					
		Pick 60 lugs	7.3	23.19					
		Load lugs/return to scale	7.3	9.52					
		Total		35.44	101.8	1.35	13.5		
Vidal	Bins	Load trailer	2	1.37					
		Drive to field	1	2.58					
		Pick 60 lugs	6	11.72					
		Return to winery	2	7.9					
		Total		23.57	152.8	2.04	20.4	19.6	24.4
	Lugs	Load/drop lugs in field	6	3.03					
		Pick 60 lugs	6	11.52					
		Load lugs/return to scale	6	14.8					
		Total		29.35	122.7	1.64	16.4		