

## Carmine Indindoli's Cultural Calendar

DATE	EVENT	MISC.
	<b>Established vineyard events</b>	
	The Cultural Calendar begins as harvest ends	
Fall	Cover Crop planting; usually drilled in but can be Broadcasted (broadcasting puts seeds everywhere, Drilling puts seeds in the row middles). Seeds can be Purchased from Le Ballister's in Santa Rosa. An Organic soil builder can be used periodically; it adds Organic matter and some nitrogen. Permanent cover Crops can be used or an annual rye planted for soil Erosion control. Permanent cover crops are tough on young is used, allow at least 2 feet on either side of the young vine to be clear of vegetation. Best to plant after soil is loosened and just prior to the rainy season.	New organic herbicides: Scythe and Matran; (new in 2008 a product from Marrone propane flaming or steam scorching considered organic methods as well.
Dormant Dec 1st	The beginning of the pruning season. Vines should be Pruned after they go fully dormant. When the leaves fall this is the indicator of full dormancy. There are many theories about when is the best time to prune. Early pruning means early bud push. Some use early pruning to encourage late ripening varieties in the cooler areas to push earlier so as to mature earlier. Late pruning means late bud push. Some use this to delay spring bud push in frosty areas. <b>Train crew to look for Eutypa.</b> Late pruning done just after the rainy season ends can help when Eutypa is a problem (the rain spreads the spores onto the fresh pruning cuts). It is generally not good to prune when it is raining or if a rain is expected within a 12-hour period. If Eutypa is an issue you can paint Doc Falwell's tree seal mixed with boric acid on cut, B-Lock or Topsin-M	AQ10, a biofungicide for reducing overwintering mildew population; Lime-sulfur is also used.  Pre-prune as a means of preventing Eutypa; or delay pruning until February
Winter	Time for strip spraying. Best to get the material on before the weeds get going. Most weeds begin to really get going in late January after we have had lots of rain and the weather warms. Probably the best time to spray is in January when we get a dry spell.	Contact plus pre-emergent Herbicides
Early Spring (before bud push)	Dormant sprays. Apply any time after vines are pruned and after the pruning wounds heal. Do not apply if a rain is to come within 1 day. For Phomopsis control a delayed dormant spray of high concentration of lime-sulfur may be effective. This would be about 1-3 weeks prior to bud break, around Feb 15 <sup>th</sup> .	Mow the cover crop, timed for nitrogen release or when soil permits entry

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	<b>Fertilize Mid-Feb with Urea/triple 15 mix or organic</b>	Fertilize
Late spring (when buds push)	<p>The first sprays onto new tissue begin for most farmers at budbreak. Budbreak is noted when the bud shield opens and a whitish, fuzzy shoot emerges. Generally first sprays are for mildew prevention and for phomopsis (UC pest guidelines recommends wettable sulfur plus Dithane, or Sorvran, Abound, Pristine) Copper sprays may help with other early fungus issues: bunch stem necrosis and early botrytis. If it rains within 14 days of application the sprays should be repeated. If rain persists then the sprays need to be replaced especially for Phomopsis control. This is especially trying for farmers and it puts you to the test. Always check the satellite weather for indications of rain, it may save you a spray. UC pest management guidelines (in print on the web) have the recommended materials listed.</p> <p>In high mildew pressure areas or vineyards with last season mildew history early eradicator sprays with Stylet oil/Abound mix may be needed.</p>	<p>Mowing of the cover crop begins. It is timed for nitrogen released or when the soil permits entry.</p> <p>Disking or tilling follows within a few weeks.</p> <p>Spring grafting time.</p> <p>Thilouz Jet and Kumulus are organic wettable sulfur materials.</p>
Late spring (when green tissue appears)	<p>Suckering of the trunk, spurs and canes begins when the shoot growth reaches 2 to 4 inches. Your hands are the best tools. Wear leather or rubber gloves for the trunk suckering and vinyl, surgical gloves for the spur and cane suckering. Be very careful on the spurs and canes to select the proper shoot and try not to damage it when removing suckers.</p> <p>The second round of vine sprays begins for mildew and Phomopsis control, perhaps 10 to 14 days after the first sprays. Dr. Gubler at UC Davis recommends using a strobilin spray for the second Phomopsis spray ("Abound, Pristine, or Flint").</p> <p>Continue with vine sprays at the proper intervals. For sulfur only controls every 7 to 10 days. For the EBI (Rally, Rubigan, Procure, Elite) or strobies (Abound, Flint, Pristine) sprays every 14 days follow directions for the concentrations used. These materials Allow for longer between spray intervals</p> <p>Count flower primordial in blocks to determine flowering percent. Low percent can mean nutrient deficiency</p> <p>Canopy management begins.</p>	<p>Abound also has some controlling effect on mildew and Phomopsis</p> <p>SCALA is a new material that works to prevent rots.</p> <p>Liquid fertilizer through drip System.</p> <p>Other organic material: Serenade/Sonata/ Stylet Oil</p>

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Bloom time	<p>Pre-bloom: remove leaves on shoots start on trunk side of shoot up to and including first large leaf to facilitate botrytis sprays in susceptible varieties.</p> <p>Bloom time requires continuing of training and tying and may require on mature, fruit producing vines a Botrytis spray. Elevate and SCALA are new materials, Rovral, and Vanguard are two older materials. They are applied at 5% bloom and again after 14 days into bloom. They may be applied again after berries grow, but prior to bunch closer. Most needed on Chardonnay in the Russian River Valley. Petioles samples taken at mid to late bloom.</p> <p>Mildew and canopy management continues</p>	<p>T-budding time.</p> <p>Stylect oil is best, follow label precautions if sulfur was previously used.</p>
Post bloom	<p>Leaf pulling time. Remove leaves on the shady side of the canopy. Cluster thinning to balance crop level and reduce density of crowded clusters. Remove third clusters on shoots. Remove lower laterals on vigorous and large clustered varieties (Zin and Syrah).</p> <p>Mildew and canopy management continues.</p> <p>Count cluster formation percent on same vines with flowering counts. Low set percent can mean disease incidence</p>	<p>Inspect trunk for Crown Gall, treat if needed.</p> <p>To keep berry size as small as possible when a lot of fruit is removed thin about 3 to 4 weeks after bloom.</p>
Summer	Canopy and Mildew management continues	
Veraison	<p>Shoot elongation should stop. Deal with excess lateral growth and remove second crop clusters. Pristine or Quintec used for 3 week protection as last spray. Decision to stop mildew management to be made. Crop level estimates to be made. Bird net goes on.</p>	<p>Harvest is 6 to 8 weeks away. Fall budding time Approx. Sept. 1</p>

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Pre-Harvest	Begin sugar testing on a sampling basis. At 22 Brix test pH and acid as well (plot sugar percent on a graph). <b>Contact winemaker, review potential harvest dates.</b>	
Harvest	Pick and deliver grapes to winery. Collect yield data by block; collect cluster weights by block.  Plot all vineyard data collected on ongoing graph sheet by season	
Post harvest	Soil Sampling in selected blocks. Soil amendments to be applied before rains.  Review vineyard results with operations team, use information from vineyard and winery to help plan new season activities.  Begin new Cultural Calendar	