AIDS IN SETTING UP A CALENDAR OF OPERATIONS

Dormant Season

1. Pruning can begin after leaves are killed by frost. Usually pruning is done after leaves fall and up until buds swell in the spring.

2. Zinc Application - Swab pruning wounds within 3 hours after pruning. Pruning should be done before vines bleed.

3. Fertilization - Apply during winter months so that rains will move the nitrate-nitrogen into the root zone by the time growth begins.

4. Chemical Weed Control - Late fall or winter, prior to weed seed germination. If weeds are established, add a post-emergence spray.

5. Cultivation - Turn under weeds and prunings at end of dormant season.

Bud Swell

1. Dead-Arm Control - Apply captan spray from bud swell to 1 inch of shoot growth.

2. Check for Insects - Pests that attack buds and young shoots; example: cutworms, bud beetles.

3. Irrigation - Should not be determined by a calendar. Use a soil auger to determine soil moisture at lower depths to determine irrigation dates. Check soil moisture at regular intervals during growing season.

After Growth Starts

1. Check for Willamette mite, grape leafhopper, other insects.

2. Powdery mildew - Dust with sulfur when shoots are 6, 12, and 18 inches, followed by 10- to 14-day intervals until harvest.

3. Zinc sprays - When shoots are 12 to 15 inches long.

4. Gibberellic acid - Apply to loosen clusters of varieties that have tight, compacted clusters. Apply when average shoot length is 15 to 18 inches.

Bloom

1. Check for thrips, other insects.

2. Benomyl spray - Apply at the beginning of bloom (5%), for varieties that get summer botrytis rot.

Post Bloom

1. Thin Tokay table grapes as soon as berries set.

2. Check for grape leafhopper, grape leaf folder, omnivorous leaf roller.
Summer

1. Check for insects and mites at weekly intervals; example: grape mealybug, grape leafhopper, Pacific mite, Willamette mite, grape leaf folder. Control these insects if necessary.

2. Check soil for moisture; irrigate if needed.

Fall

Harvest when grapes have reached the desired maturity for best use.

SAMPLE CALENDAR OF OPERATIONS

"Mr. Moneymaker Vineyard"

<table>
<thead>
<tr>
<th>January</th>
<th>February</th>
<th>March</th>
<th>April</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prune Tokays</td>
<td>Prune wine grapes</td>
<td>Cultivate as soon as dry enough</td>
<td>Sulfur at 6-inch growth; sulfur at 15-inch growth</td>
</tr>
<tr>
<td>Shred brush</td>
<td></td>
<td>At bud swell Dead arm spray west 20 acres of Tokays</td>
<td>Check for Willamette mite Apply gibberellic acid to Zinfandels</td>
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<tr>
<td>Fertilize</td>
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<table>
<thead>
<tr>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sulfur; check for thrips; control leafhopper Apply benomyl to Chenin blanc</td>
<td>Thin Tokays Sulfur Check for insects.</td>
<td>Sulfur Check for insects</td>
<td>Prepare for harvest Check for insects</td>
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</tbody>
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<table>
<thead>
<tr>
<th>September</th>
<th>October</th>
<th>November</th>
<th>December</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pack Tokays</td>
<td>Pack Tokays</td>
<td>Vacation</td>
<td>Repair equipment Apply chemical weed control</td>
</tr>
<tr>
<td>Pick early wine varieties</td>
<td>Pick wine grapes</td>
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</tbody>
</table>

Check soil moisture at regular intervals during growing season. Irrigate when needed.

Check for insects at weekly intervals; use control when needed.

JJK:jrs

James J. Kessler
U.C. Farm Advisor