



August 2000

Reducing Fruit Doubling and Open Sutures in Peaches and Nectarines

Kevin R. Day

Some orchards annually seem to suffer from excessive numbers of fruit doubles and open sutures. Research headed by Scott Johnson has shown that mid-August water stress plays a key role in contributing to the formation of these fruit abnormalities.

These problems are more common in early and mid-season varieties which are usually not heavily irrigated after harvest. Late-season varieties, which are generally well-irrigated in August, rarely have many open sutures or double fruits. Plums, regardless of season of maturity, rarely have doubles or open sutures.

If you have been struggling with either of these fruit problems make sure that trees are not suffering from irrigation stress in mid-August. U.C. research has shown that a single, well-timed irrigation can drastically reduce the number of malformed fruit. In most field situations a safe strategy would be to apply a deep irrigation in mid-August and then again about 10 to 20 days later as soil moisture and weather conditions warrant. If you have been having problems with these fruit defects and would like to discuss the problem in further detail, please contact me at my office, (559) 733-6485.

August - September Checklist

- ✓ **Fall Irrigation** - On the same note, care should be taken not to overirrigate in the fall. As the days grow shorter and cooler, trees are using less water. For an orchard using an average 38 to 40 inches of water per year, only 4 or 5 of that is used after mid-September.

Reducing applied water can also be effective in helping wood harden off. There is some evidence to suggest that trees that go into dormancy early are less susceptible to bacterial canker. Additionally, and most importantly, phytophthora root rot can be aggravated by excessive fall irrigation. Unless the fall is unusually hot, most orchards can benefit from reducing applied water after mid-September.

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Meeting Announcement

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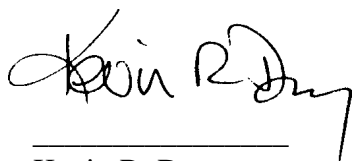
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✓ **Nitrogen Fertilization** - In the May-June 1998 issue of *Orchard Notes*, I presented a summary of research comparing: 1) fall fertilization, 2) spring fertilization, and 3) split fertilization with ½ applied in fall and ½ in spring. The results of this trial, done at U.C. Davis, indicated that there was no difference in tree or fruit performance between fertilizer application timing. As I stated then, I prefer the split strategy since it allows for a greater degree of customization of the overall fertilizer program. Most of the fertilizer can be applied in the fall, with supplemental fertilization performed in the spring after fruit set and general tree condition is better known. If you'd like a copy of the original article please call us at the office.

✓ **Summer Pruning** - A great deal of fruit wood shading can occur in the late summer and early fall. Keep a close eye on trees, and if shoot weakening is occurring, be prepared to do some supplemental clearing of the lower fruiting wood and the inside of the tree. Oftentimes, it is better to prune in the late summer period because the risk of stimulating unnecessary (and sometimes harmful) regrowth is almost nil. This practice can be especially beneficial on very vigorous early and mid-season varieties that may not have been summer pruned for quite some time.

New Sample Cost Studies Available

We have just finished updating the sample costs of production for "Friar Plums" and "July/August Ripening Peaches and Nectarines" for the year 2000. These are available for approximately \$2.00 each to cover the cost of duplication. If you would like copies of these, please stop by our office or call (559) 733-6363.



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**University of California Cooperative Extension and the
Kearney Agricultural Center**

Present

Variety Display and Research Update Seminars

August 22, 2000

**Kearney Agricultural Center
9240 S. Riverbend Avenue, Parlier**

Featuring

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| 8:00 - 9:00 a.m. | Variety display by stone fruit nurseries, breeders and the USDA |
| 9:00 - 10:00 | Research update and discussion |
| 9:10 - 9:30 | Orchard Fumigation and Replant Strategies
<i>Mike McKenry, UC Nematologist</i> |
| 9:30 - 9:50 | Fruit Doubling and Tree Water Stress
<i>Kevin Day, UCCE Tree Fruit Advisor</i> |
| 9:50 - 10:00 | Potassium Fertilization
<i>Bob Beede, UCCE Tree Fruit Advisor</i> |

For more information call:

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