



In-A-Nutshell



Walnut Maturity and Harvest Status

Expect early leafing walnuts to mature (i.e., completion of packing tissue browning) around August 15 – 18th in the earliest parts of the county. This is about normal or maybe a day or two later than normal. Expect packing tissue to complete browning in mid-season varieties such as “Hartley” the first week in September and late-season varieties, e.g., “Chandler,” toward mid-September. Remember though, hull-split is more climate dependent. Hot, dry conditions delay it while rain or high humidity encourage hull-split. Normally hull-split will occur much more readily on well-watered trees, so watch your irrigation carefully prior to harvest – allowing trees to dry out during the hull-split process results in mushy hulls that eventually dry down around the shell to become stick-tites.

Codling Moth Update

As of this writing, 20 July, 1927 degree days had been accumulated since the initial biofix, April 25, according to the Visalia CIMIS station. The 1st flight ended between 6/13 and 6/16 (950 – 1050 day degrees) depending on location. With normal temperatures this 2nd flight is predicted to end in the Visalia area July 20 – 25. This means that with normal summer temperatures, a 3rd generation in

early August is certainly possible. Keep your traps well serviced and monitor them regularly to detect moth activity. If you observe “stings” in the hulls (larval entries), treatment is recommended.

Note: There is plenty of codling moth around this year. Such damage encourages navel orangeworm development in the orchard, ready to infest nuts at harvest. This will be a year where it will be very important to harvest as early as possible to avoid worm damage.

Water Use for the Rest of the Season Is Substantial (& Important)

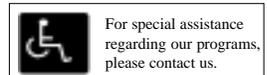
Full Water Use: Acre Inches Per Acre
Crop

Period	Walnuts/Pecans	Pistachios
Aug. 1-15	4.05	4.35
Aug. 15-31	4.00	4.00
Sept. 1-15	3.15	2.85
<u>Sept. 15-30</u>	<u>2.85</u>	<u>2.10</u>
Total	14.1"	13.3"

Note: Orchards having 50% or more canopy are considered at full water use. For orchards less than 50% canopy, multiply the % canopy (as a decimal) by 2 and then by the water use stated for the period above. Example, for a walnut orchard having 30% canopy (shaded orchard floor) Aug. 1 – 15:

$$.3 \times 2 \times 4.05 = 2.43" \text{ for the 15-day period.}$$

The University of California prohibits discrimination against or harassment of any person on the basis of race, color, national origin, religion, sex, physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (special disabled veteran, Vietnam-era veteran or any other veteran who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized). University Policy is intended to be consistent with the provision of applicable State and Federal laws. Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 1111 Franklin, 6th Floor, Oakland, CA 94607-5200 (510) 987-0096.



Avoid Freeze Damage to Young Walnuts - By Cutting Off Water in September

Young walnut trees can be injured by abrupt freezing temperatures in late fall/early winter. To avoid damage, cut off irrigation to such trees in early to mid-September to encourage the onset of dormancy. Irrigate these trees again lightly in early November so adequate soil moisture exists as they enter the winter months.

Note: Fall pruning young sensitive trees, especially while leaves remain on the trees, has been suggested to aggravate freeze damage. Wait until February or early March to prune your young vigorous trees.

* * * * *

Spider Mites Are Active Now

We are seeing spider mite development in walnuts and almonds now. Watch mites carefully in July and early August to determine need for treatment, especially in those orchards previously treated with organophosphate insecticides. We do not encourage treatment following August 15 because it is not very effective; the previously damaged leaves will fall anyway, regardless of treatment, days are shorter with cooler, more humid nights (conditions not optimal for mites), and usually mite predators are present. Note: the newer miticides require application before damaging populations occur. Treating heavy populations with these materials will be ineffective.

“Bot” in August – Pistachios

Symptoms to look for:

On Fruit and Fruit Clusters

- ❑ Black, round spots without red margins (red margins indicate *Alternaria* infections) on nuts. These will be blackened areas about 5 mm wide, usually on the apical part of fruit, with sap dripping over the fruit.
- ❑ Nuts in blighted clusters are beige to brown but a few are silvery gray.

On Leaves

- ❑ Large beige to brown lesions with chlorotic margins appear on leaves. Additional leaf infections are black longitudinal lines associated with the midrib or secondary veins on the under surface of the leaves. Black infected areas may develop on the bases of leaf or leaflet stems.
- ❑ Defoliation (first on male trees) may start by late August.

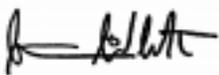
Recommendations:

- ❑ Apply Abound in orchards with confirmed disease.
- ❑ Prune out all blighted shoots and clusters 1 – 2 inches below margin.
- ❑ Irrigate carefully; avoid excess moisture and humidity.



July/August Checklist

- ✓ Schedule ethephon applications for walnuts. Ethephon should be applied when packing tissue in the nuts turns brown for early harvest or 10 – 14 days prior to normal harvest to maximize nut removal. Remember to: use the right rate for the variety you are spraying, ensure 100% coverage, spray at night or when temperatures are cool, and only apply it to unstressed trees.
- ✓ Boron deficiency - almonds. Sample almond hulls (not leaves) at harvest for boron (B) status. B levels less than 80 ppm signify deficiency. B deficiency can be corrected by applying 1 – 2 lbs of solubor/100 gallons of water (use 100 gallons of solution per acre). Note, 5 oz. of solubor per tree is also effective as a ground application for localized deficient areas.
- ✓ Take pistachio leaf samples in August for orchard nutrient status. Collect 4 – 10 fully expanded subterminal leaflets (not entire leaves) from nonfruiting branches on 10 – 20 trees in the orchard. Note, where foliar nutrient(s) have been applied. Analysis for that nutrient(s) will be invalid as surface contamination cannot be eliminated.
- ✓ Monitor “bugs” in pistachio. August and September are months when stinkbugs and leaf footed bugs infest pistachio orchards, reducing crop quality (kernel necrosis). Monitor orchards carefully for these “late season” pests to determine need for treatment.
- ✓ Nitrogen (N) fertilizers. Don’t apply N after harvest. Uptake is poor (temperatures are cooler and “just shaken” trees have gone through a fair amount of defoliation in addition to some probable root damage). The result, wasted money.
- ✓ Perennial weed control. An excellent time to control perennial weeds (Bermudagrass, Johnsongrass, etc.) with systemic herbicides is in the fall, prior to their dormancy. For best effect, the weeds should be actively growing so when the herbicide is applied, it will be taken into the roots and storage organs. Such weeds don’t often emerge in spring when treated the previous fall.
- ✓ Preemergence herbicides. October is the best fall month to apply preemergence herbicides on your borders for winter annual weed control. Remember, preemergence herbicides kill winter annual weeds as they germinate, so they must be incorporated (usually by rainfall or irrigation) to be effective. Try and plan your application prior to a rain event.



G. Steven Sibbett
Farm Advisor
(559) 733-6486

