

SPECIAL APPLICATIONS OF AGRO-K PRODUCTS

Aid Recovery from Hail Damage

1. Foliar apply Calcium and Symspray one to two days after the hail
Mix in 50 gallons of water:
 - 1 quart of System-Cal
 - 2 quarts of Vigor Cal or 2 quarts of Cal-Magnesium
 - 8 oz. of Symspray 20X
2. Why Spray?
 - a. Calcium speeds the healing of torn leaf tissue and helps keep disease down.
 - b. Symspray helps reestablish and balance the natural hormone and growth regulators after the plants have been traumatized.
 - c. Gently stimulates the plants and recharges them to grow out of stress.

Reduce Frost Damage

1. Premeditative measures knowing you will get frost
Mix in 50 gallons of water:
 - 1 quart of System-Zn,
 - 2 quarts 3-18-18
 - 2 quarts KDL(Repeat in 2 weeks)
2. Frost is forecasted - Make an application 36- 24 hours before the frost.
Mix in 50 gallons of water:
 - 1 quart of System-Cal
 - 1 gallon of KDL
3. Post Frost Event:
Foliar with 50 gallons of water:
 - 1 quart of System-Cal
 - 2 quarts of Vigor-Cal
 - 8 oz. Symspray 20X

1 gal Mex
1 qt Sys-Cal
3 oz KDL

Chemical Drift or Over Application of a Herbicide

1. Immediately foliar apply 1 quart Symbex 4X; mix in 50 gallons of water. Repeat in 10 - 14 days if necessary.
2. Once plants start to re-grow, foliar with 50 gallons of water:
 - 1 quart of System-Cal
 - 8 oz. Symspray
 - 1 gallon of 9-24-3.

High Water Ph Causes Mixing Problems

1. Add 1 quart of System-Cal to 8 Ph to drop it to 6.5 or 6 per 100 gallons of water.
2. Add 1 quart of System-Zn to 8 Ph to drop it to 5 Ph per 100 gallon of water.
3. Always add the System Series product to the water first and next the calcium products to avoid mixing problems.





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Grower Report On The Use Of KDL For Fruit Trees, Spring 2011

Our temperatures in April were cooler than average here in SW Idaho. Full bloom on apricots was on the average about April 10 although it varied a bit from cultivar to cultivar. (This is unusually late. Historically, apricot full bloom here is said to occur on average about March 20.) On April 19, our morning low on the home site was 28F; on the 20th, 27F; on the 21st, 41F; on the 22nd, 27F (but in the orchard, which is at a lower elevation than the home site, an accurate temperature-recording device said 25.7F). I sprayed KDL at the rate of 3 oz/gallon, mixed with an equal part of household vinegar (3 oz/gal) to neutralize its alkalinity, on my apricot, peach, cherry, plum, and pear trees the evening of April 22. There was no phytotoxicity to leaves or blossoms evident in the days that followed, from applying KDL in this manner.

The low on the home site the morning of April 23 was 25F, but in the orchard it was 24F. By this time, most apricot trees were at or very close to petal-fall. (For commercial apricot cultivars at full bloom, a half-hour at 27F will cause mortality to 10% of the blossoms; a half-hour exposure to 22F will cause 90% mortality. The corresponding figures when the tender fruitlets are encased in the shuck [the spent flower parts] are 28F (10% mortality) and 24F (90% mortality). When naked and exposed, 28 and 25 are the corresponding 10% and 90% temperatures. This is what was found at Prosser, WA in research done in the 1980s, I believe, and which is contained in six Extension bulletins I have here from WSU.

From this, assuming 23F would be the 90% mortality temperature as petal-fall ends and shuck stage begins, it would appear that with no protection about 70 to 80% of the fruitlets should have been killed by the 24F temperature we had the morning of April 23. I was unsure whether or not KDL would afford any protection this late in the bloom stages but applied it anyhow.

The good news is that with the exception of the three most cold-hardy Canadian apricot cultivars (Debbie's Gold, Morden 604, and Westcot), which were well into shuck stage at this point), we had an excellent crop of apricots (my six Robada trees, in their 4th leaf, bore a total of 476 lb of fruit, after I thinned the apricots), a crop so large that I spent many hours thinning the fruits. (Brookcot and Precious, which are as hardy as the other Canadian apricots but bloom slightly later, had a full crop.) On the other apricot cultivars, it was impossible to find any evidence of damaged or dead fruitlets based on cutting open ovaries on the lowest fruits on the lowest trees in the orchard (worst-case scenario). My tentative conclusion is that the KDL probably raised the freezing point of the plant tissues from 24F to 29F, a temperature that would pose no danger to fruitlets. We had a good crop of cherries, peaches, plums, and pears as well. I did not apply KDL to my apple trees, but we had a very good crop of apples too.

(see back)