

CROP CURRENTS

January 18, 2002

PESTICIDE SAFETY TRAINING in Spanish

Classes for Pesticide Handlers

Pesticide Handlers are anyone who applies, mixes, loads, flags, or otherwise handles pesticides. Employers must provide a pesticide safety training every year for their handlers before they begin work with pesticides. Each participant will receive an official UCCE Pesticide Safety Training Record.

- Tuesday, **February 19**, 2002
8:30-10:30 pm
Sugihara Nursery
550 Brookside Dr., Richmond
- Friday, **February 15**, 2002
1:00 –3:00 pm
Delta Community Center
730 Third Street, Brentwood
- Wednesday, **March 7**, 2002
8:00 –10:00 am
Delta Community Center
730 Third Street, Brentwood

Classes for Field Workers

Field Workers are employees who work in fields or nurseries where pesticides have been applied but do not handle pesticides themselves. Employers must provide a pesticide safety training every 5 years for their field workers. Each participant will receive a blue EPA Worker Training Verification Card.

- Tuesday, **February 19**, 2002
11:00 am – 12:30 pm
Sugihara Nursery
550 Brookside Dr., Richmond
- Tuesday, **February 19**, 2002
1:30 –3:00 pm
Sugihara Nursery
550 Brookside Dr., Richmond
- Tuesday, **April 2**, 2002
8:00-9:30 am
Delta Community Services Center
730 Third Street, Brentwood

If your employee(s) cannot attend one of these scheduled classes, any certified commercial applicator (PCA, PCO, QAC, QAL) or private applicator may legally provide the training.

Sponsored By: University of California Cooperative Extension
Contra Costa County Agriculture Department

To Register: Call UC Cooperative Extension at 646-6540 before the class to provide the number of people from your operation who will be attending so we can prepare materials for participants. The class is FREE and open to all.

WEATHER REPORT

The water situation looks good. We had higher than normal rainfall in November and December and have received 2/3 of the normal rainfall for the entire season as of mid January.

The temperatures are of greater concern. We have received only about half of the “normal” chill hours for this time of year. A certain amount of winter chill is needed for deciduous fruit trees to break dormancy and grow normally. Without a sufficient amount of chill trees may drop buds, break fewer buds, break buds late, and/or have an uneven and prolonged bud break. All these can reduce pollination, set, yields and harvest uniformity.

Various methods are used to calculate winter chill but they are only estimates and none can take into account all the factors that influence dormancy and bud break. Perhaps the most widely used method is the accumulation of hours below 45⁰F. This is what was used in the tables below. Moisture, light, variety and rootstock can modify these chill requirements. High rainfall, fog and temperatures

between 45-54 ⁰F (like we had in December!) will all contribute to chilling and can advance budbreak.

Several materials have been tried to offset low chill effects: dormant oil, CAN-17 plus a surfactant or oil, and Dormex. Testing has been limited and results have been variable. The materials are more effective if applied after about 2/3 of the chill has already been satisfied. **Dormex** has shown the most promise but costs about \$200/A, can damage buds, is only registered on a grapes, kiwi, cherry and apple, and is a Category I material. In cherries, **CAN-17** (25%) has shown promise when applied with 2-4% oil, 2% Armobreak, or 2% Agridex but there is limited experience in other fruit and there may be legal issues with this application. If you want try Dormex or CAN-17, make sure the material is registered for your use and check with me, your PCA, or some one knowledgeable about the product to minimize the potential for damage. **Dormant oil** is perhaps the safest option with the widest application to a variety of crops but may show a less dramatic effect than other materials. It is best applied on moist trees, toward the end of the chill accumulation period (Feb 15 to Mar 15, depending on species/variety).

ACCUMUALTED CHILL HOURS – BRENTWOOD, CA

MONTH	2001-2002	2000-2001	1999-2000	1998-1999	1997-1998	1996-1997	1995-1996	1994-1995	1993-1994	AVG
November	74	281	101	123	41	128	96	277	212	148
December	240	631	451	589	422	376	309	753	655	492
January	374*	1013	640	1007	652	691	579	879	995	807
February		1226	715	1209	756	821	688	966+	1215+	903

Notes: * through January 17,2002 ; + through February 23rd, 1994 & 1995

CHILL REQUIREMENT (<45 F)

Species	Chill Hours	Chill Days
Almond	200-350	8-14
Apricot	700-1000	29-41
Apple	1200-1500	50-62
Cherry	850-1300	46-54
Fig	few hours	
Kiwifruit	450-700	19-29
Peach and Nectarine	1000-1200	42-50
Pear, Asian	1200-1500	50-62
Pear, European	1200-1500	50-62
Persimmon	less than 100	
Plums, European	700-1100	29-46
Plums, Japanese	700-1000	29-42
Walnuts	500-1500	21-62

BRENTWOOD RAINFALL (inches)

Month	2001-2002	Average
October	0.2	0.7
November	2.2	1.1
December	5.7	1.7
January	0.7*	3.0
February		2.8
Mar		1.5
April		0.7
May		0.7
June		0.3
July		0.1
August		0.1
September		0.3
TOTAL	8.8	13.0

* through January 17, 2002