Crain Walnut Shelling, Inc.

2008 CALIFORNIA ENGLISH WALNUT CROP

CY 2008 Edition 2.

Crop Development Report

Monday, April 28, 2008

In response to last week's frost reports, I toured the major California walnut growing regions to discuss the dynamics with local growers and assess the potential damage. The killing frost occurred in the Sacramento Valley and North Coastal regions including Lake County on Sunday morning, April 20th, and in the San Joaquin Valley and South Coastal growing regions on Monday morning April 21st.

On both mornings, the temperatures started out at reasonable levels but then dropped quickly as the winds stopped before day break. The daytime high temperatures of both the preceding days were 20º Fahrenheit lower than earlier in the week, which allowed for the freezing possibility. The low temperatures hit after the historic end of frost season, which is traditionally considered to be April 15th in California, and the dew points were below the level of freezing, combining to create the two frost events which are referred to as a "Black Frost".

A Black Frost comparable to this last occurred in 1982 in the Sacramento Valley, and 1978 in the San Joaquin Valley, so it is not a regular occurrence. This event, as well as those of 1982 and 1978, damaged walnuts, prunes, table and wine grapes, stone fruit and many other specialty crops. Almonds are not heavily impacted by Black Frost due to the fact that most almond orchards located in frost prone regions are equipped with various frost protection mechanisms.

Although it is still very early to see just how much of the walnut crop nut set was affected, there is extreme wide spread damage to more sensitive crops such as stone fruit and grapes. The majority of the walnut orchards that were damaged are located in the Sacramento Valley, North Coastal area of Lake County and the Northern half of the San Joaquin Valley. There was little damage to walnuts in the Lower San Joaquin Valley in Kings and Tulare Counties, but this area did have extensive damage to grapes and stone fruit.

My tour concluded that most of the walnut damage occurred to the Chandler, Howard and Tulare varieties, with the most severe damage to trees 6 years old and younger. These trees were apparently at a very temperature sensitive time of development when the frost occurred. Older trees of the same varieties did not sustain near as much damage.

We have prepared some photos of walnut trees with different severity levels of damage. In the most severe photos, the trees will suffer a complete crop loss and some longer term damage to wood that will take a couple of years to grow back. The lesser damaged trees will suffer minor losses, with the possibility that the later nut sets on the inside of the trees might somewhat compensate for the burnt terminal shoots.

As I stated earlier, it is still very early to ascertain the total state-wide walnut crop damage, but at this point, I would say that it will be 5-10% of the total crop potential on a state-wide weighted average. This does not mean that the 2008 California walnut crop will be a short crop, but only that it will be perhaps 5-10% smaller than perhaps its full potential as a result of this event.

The weather is stable now and daytime temperatures have risen to the point where we should not have any more risk of freezing this year. The portion of the trees that were not affected by the frost are continuing to pollinate and we still have several weeks of pollination left before the crop is set.

We will have another report for you as soon as we can start to see the damaged nuts fall to the ground, and develop a feel for the size of the remaining crop. If you have any questions, please feel free to call.

Best Regards,
Chuck Crain

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