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ANOTHER ONE BITES THE DUST!

At the time of writing this article (mid-October) it appears the 2005 California processing tomato crop is, essentially, “in the can”. It has been a challenging year and, in some regards, a disappointing one. This is a good time to *briefly review* the 2005 California tomato season.

Based on the tables, it is clear that 2005 was wetter than the previous four-year average. Much of the rain came in March, when field activities are getting into high gear for the local early tomato crop. We received about 50 percent more precipitation during the seven month monitoring period, which caused planting delays and, in some cases, delays in other field operations. There was almost twice the number of days receiving rain in 2005, compared to the average. We escaped an unseasonable rain event in August that negatively impacted processing tomato areas to the south.

The air temperature data is not as striking. For the first four months, we had below average maximum air temperatures, which resulted in less heat-units received and, hence, delayed maturity. Averages for the season, however, were fairly close to the previous four-year average. The average maximum and/or minimum air temperatures do not tell the whole story. Not reported are the number of days the maximum air temperature exceeded 100 °F. There were 21 days above this benchmark in 2005, compared to the average of 16 the previous four years. Also to be considered is when in the plant growth cycle these high temperatures were received and the number of consecutive days exceeding 100°F. In general, the high temperatures in May and June were lower than “average”, but July and August exceeded the average, which impacted the mid-season maturity crop more than the early maturity one. Ten of the fourteen days during the period July 13-26 exceeded 100 °F.

The “end result” statewide was a 9.1 million ton crop (10/1/05), off 12.5 percent from the intended 10.4 million ton target. This is not a bad situation for the industry, as a whole, but may be bad news for individual growers who missed their projected income by 12.5 %! How did the Lower Sacramento Valley production areas of Colusa and Sutter Counties fare in 2005? That story is partially told in Table 2.

TABLE 1. COLUSA COUNTY WEATHER DATA, 2001-05 (FROM AUTOMATED WEATHER STATION AT NICKELS ESTATE, ARBUCKLE)

<u>MONTH</u>	<u>PRECIPITATION (INCHES)</u>				<u>AIR TEMPERATURES (°F)</u>			
	<u>Amount</u>		<u># days</u>		<u>max</u>		<u>min</u>	
	<u>'05</u>	<u>'01-'04</u>	<u>'05</u>	<u>'01-'04</u>	<u>'05</u>	<u>'01-'04</u>	<u>'05</u>	<u>'01-'04</u>
March	2.73	1.46	11	5	68	70	45	44
April	0.76	1.08	6	6	71	72	44	44
May	1.71	0.64	6	2.5	78	84	52	53
June	0.34	0.02	3	0.7	84	91	56	58
July	0.00	0.00	0	0	98	95	63	59
August	0.00	0.42	0	0.5	97	94	59	58
September	0.01	0.05	1	0.5	87	91	53	57
<u>TOTAL</u>	<u>5.55</u>	<u>3.67</u>	<u>27</u>	<u>15.2</u>				
<u>AVERAGE</u>					<u>83.3</u>	<u>85.2</u>	<u>53.1</u>	<u>53.2</u>

Table 2. California and selected County processing tomato statistics for 2005 (10/1/05)

	<u>COLUSA</u>	<u>SUTTER</u>	<u>STATEWIDE</u>
CONTRACTED ACRES (%)	18,400 (6.9)	5600 (2.1)	265,000 (100)
# TONS DELIVERED (%)	679,000 (7.5)	186,000 (2.0)	9,109,000 (100)
AVERAGE COLOR	26.4	25.0	25.0
AVERAGE SOLIDS (%)	5.27	5.46	5.44
AVERAGE pH	4.41	4.39	4.41

The table indicates that Colusa had a slightly higher percentage of the percent of the delivered crop, versus the percent contracted. The implications are that they had higher fruit yields than the state average, which is not documented at this time. Sutter County has been losing tomato acreage over the past several years. Not reported here is the rising importance of Southern San Joaquin Valley production areas, such as Kings, Tulare and Merced Counties, that have been absorbing this “lost acreage”. Kings, this year, passed Colusa in production, ranking fourth in the state, behind Fresno, Yolo and San Joaquin Counties.

Colusa’s strength in the market is related to the proximity of two local processors. These factories depend on local suppliers, to keep trucking costs down and fruit transit deterioration to a minimum. The data shows our vulnerability, however. The Colusa values for average color and soluble solids are considerably below state averages and are a cause for concern. Although Sutter County’s quality is improved, there are other production issues, coupled with distances to processors, that come into bearing.

**2005 COLUSA COUNTY EARLY MATURITY PROCESSING TOMATO VARIETY
FIELD TEST RESULTS**

One of the ongoing aspects of the processing tomato Farm Advisors applied research program is variety evaluations. Colusa County conducted an early-maturity field test in 2005, reported below. The test included eleven replicated entries and was conducted in a commercial tomato field in the

Maxwell area. It was direct-seeded, with emergence in late-March. Harvest was on July 27. The field was well-maintained and was not impacted by the weather-related problems discussed earlier.

TABLE 3. RESULTS OF 2005 COLUSA COUNTY PROCESSING TOMATO VARIETY FIELD TEST.

<i>Variety</i>	<i>pH</i>	<i>Color</i>	<i>Solids Yield (%)</i>	<i>Brix-Yield (tons/a)</i>	<i>Yield (tons/a)</i>
BOS66508	4.46	25.0	5.6	2.95	52.6
H9280	4.45	26.3	5.1	2.66	52.1
U250	4.49	26.3	5.3	2.75	51.9
HMX2823	4.48	25.7	5.7	2.91	51.0
H9997	4.51	23.6	5.4	2.73	50.5
H5003	4.51	23.3	6.2	3.06	49.4
APT410	4.47	23.7	5.8	2.80	48.3
Hypeel 45	4.43	25.5	6.0	2.90	48.3
HA3523	4.55	24.7	5.3	2.53	47.7
PS740	4.37	24.7	5.7	2.68	47.0
U446	4.44	25.0	5.6	2.26	40.3
Average	4.47	24.9	5.6	2.75	49.0