California Cling Peach Advisory Board
2009 Annual Report

Project Titles: Regional Testing of New Cling Peach Selections

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Over 50 advanced selections have been evaluated in replicated regional trials since the early 1990s resulting in the release of 6 UCD processing peach varieties: *Riegels, Rizzi, Hesse, Late Ross, Goodwin,* and *Lilleland.* Currently, 20 advanced breeding selections are in early to mid stages of regional grower trials with plantings in approximately 60 locations. In 2009, 19 regional test planting sites were initiated in the Ballico, Ceres, Escalon, Kingsburg, Live Oaks, Modesto, Sacramento, Waterford, Marysville and Yuba City areas, primarily to accelerate the testing of mechanical-harvest amenable and fruit brown-rot resistant selections mainly in the *Ultra-Early* and *Extra-Late* maturity periods. In 2008 there were approximately1,500 trees of experimental UCD processing peach selections in regional evaluation blocks. In the last 2 years over 3,000 additional trees have been planted in our efforts to accelerate the evaluation and release of improved processing peach varieties to the California industry. Experimentals now coming into production include, approx.150 trees each (100 on *Nemaguard*, 50 on *Lovell*) of *Ultra-Early #1, Ultra-Early #3, Extra-Early #1, Extra-Early #2, Early#4, Early#5, Late#2, Extra-Late#1, Extra-Late#2 & Extra-Late#3,* with a smaller number of trees of *Ultra-Early #2, Ultra-Early #4, Late#3, Late#4,* and *Extra-Late#3* approaching full production. [Regional selection designations are based on the *Maturity period* -followed by a number indicating sequence of release for grower testing]. In 2007, we put out the first regional test plantings of *Extra-Late#4, Extra-Late#5, Extra-Late#6,* and *Extra-Late#7,* which represent novel selections developed to facilitate mechanical harvest. Several hundred additional trees of these Extra-*Late* selections were planted in 2009. An experimental selection [*Compact #1*] having a more compact tree habit for facilitating mechanical orchard management (thin/prune/harvest) was planted at the Kearney Ag. Center (KAC) and 100 trees each of *Compact #2* and *Compact #3* were planted with cooperating grower evaluators. (Tree size is controlled by scion variety and so can be grown on standard regionally adapted rootstocks). Over 1,500 additional *Early* to *Extra-Late* maturity selections have been propagated in 2009 for 2010 grower plantings, including *Early#6* which shows promise as a firm, productive cultivar with freedom from red-pit staining in the *Dixon* time period. Over 1,500 additional UCD experimental processing peach trees are currently being propagated by commercial nurseries for regional planting in 2010/11.

We have developed plot maps of advanced UCD selections in regional testing which have come into production, and replicated 2009 samples of each selection have been processed at the UCD pilot processing plant at Cruess Hall (though not yet from all regions). Cut-out samples have been evaluated in January, 2010 and samples were presented for industry evaluation at the 2010 Annual Processing Peach Conference. Opportunities for processor cut-outs are being explored, as are possible field tours of regional experimental plantings as they come into full bearing.

UCD processing peach selections which have been accelerated in 2009 to large-scale regional testing include selections Extra-Early #1, Early#6, and Late#4. All appear to have good commercial processing quality and yield potential. In addition, all show the capacity to retain good fruit quality while hanging on the tree for up to three weeks after full-ripe date. [The harvest maturity of the selections complements selections in previously planted grower trials for experimental 'long-keeper' capable peaches ripening in the *Ultra-Early* maturity period (i.e. before Loadel) and the *Extra-Late* maturity period]. The 'long-keeper' capacity for maintaining good fruit integrity on the tree over extended periods after full fruit-ripe date would allow once-over harvest (either by hand or mechanically) where all fruit would pass maturity grade. In addition, the extended period of fruit attachment to the tree would allow continued increase in fruit mass and so final harvest yield.

Fig. 1. Shoot sections of Compact#1 (left) vs. normal (right) showing reduction in internode length

Finally, several advanced breeding selections in the *Early* and *Late* maturity season have been shown to express high levels of fruit brown rot resistance in 2009 controlled inoculation studies in Rick Bostock's Plant Pathology lab. If confirmed in future lab and field testing, these selections would be moved into Regional Grower Testing and would complement selections showing improved resistance which ripen in the *Ultra-Early* and *Extra-Late* maturity periods and which are already in Regional Grower Testing. Criteria for evaluating field resistance to fruit brown rot under commercial culture and harvest/transport conditions are being developed in collaboration with Drs. Bostock and Adaskaveg. In addition, criteria for characterizing tree architecture and bearing habit, particularly for the structurally novel compact tree types, is being developed. In particular, growers need guidelines in the initial tree training and subsequent handling of the novel compact tree types.

Compact peach genotypes will develop into trees that are typically 1/2 to 2/3 standard size. The trait is controlled by a single gene which, when homozygous (i.e. both parents contribute the compact form), will result in a dwarf tree similar to the freestone peach 'Bonanza'. When only a single compact gene form (allele) is inherited, plants will develop into more normal looking trees but with a shorter stature. The developmental basis for this compact tree form is the

Fig. 2. Shoot regrowth in Compact#2 following heading.

Fig. 3. Compact#3 trained to a perpendicular-V

Fig. 4. Row of Compact#3 during dormant season training to Perpendicular-V.

shortening of the internode distance between leaves on a shoot (Figures 1 and 2). Consequently, while final tree size can be only one half that of standard trees, they often retain a similar number of leaves, potential axillary (lateral) branches, and even flower buds (as detailed in the 2008 report). However, the high leaf density can shade-out the development of subsequent lateral branches, and eventually less productive, blind wood development can be a problem, (as with selection Compact#1). Compact#2 and Compact#3 were selected to minimize the blind-wood condition, but the short internode length still results in short bushy plants when first transplanted (Figure 4 and 5). The bushy nature results because the normal suppression of lateral shoot growth from the main shoot apex or growing point is relatively weak in compact-types. While this is an advantage in bearing trees, as it encourages multiple fruiting hangers (Figure 2), it is a problem in initial tree development as it makes tree training more difficult. Nonetheless, training is essentially the same as standard trees, though with greater attention given to the location and arrangement of shoots being promoted as scaffolds (Figures 4 and 6). Shoots below the scaffold branches should be cut back, leaving sufficient foliage to prevent sunburn. Because of the smaller tree size in Compacts, greater attention must be given to both the number of shoots retained, their potential vigor, and their orientation (Figures 4 and 6). Shoot growth within the growing season is considerably more limited than the aggressive shoot proliferation common with peach on good Central Valley soils, and in many ways is more similar to young apricot trees. Thus, it is important that strong

Fig. 5. Compact#2 (right) vs. standard trees (left) of the same age.

growth is achieved in the first years after planting in order to establish a productive tree architecture. A perpendicular-V has proven very effective in high planting densities (Figures 3 and 4), while with wider planting distances a Quad-V may be more effective in filling row space with productive wood (Figure 6). Early, productive scaffold development is particularly important if the grower desires to use the compact-tree form to minimize later pruning and thinning, and/or develop a sustainable fruiting-wall required by many mechanical harvest schemes. This is because by minimizing pruning cuts, the grower also limits his opportunities for quickly replacing his fruit bearing wood. Ultimately, the grower will need to control/limit the amount of shoot development in compact tree-types through the judicious balancing of crop load and water and fertilizer inputs (Figure 7). Because the grower is optimizing rather than maximizing his bearing wood, Orchard productivity will be lower than traditional systems. Properly managed, however, orchard pruning, thinning, and harvest costs could be dramatically reduced without a loss in crop quality.

Fig. 6. Compact#2 during summer training to Quad-V

Fig. 7. Standard peach trees (left) and Compact trees (right) prior to dormant pruning in early pruning study. Minimal pruning of Compacts is currently recommended.

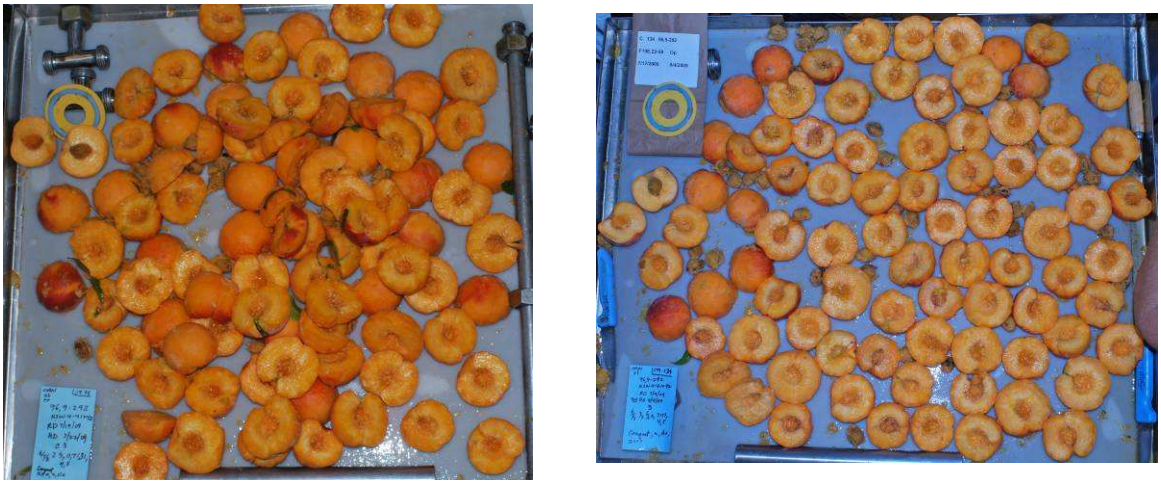


Fig. 8. Compact#2 at tree-ripe stage (left) and harvested 14 days later from the same tree (right). [Image at right was taken using a camera flash resulting in some reflective 'white-out' effect from fruit and background.

Because the Compact-series was initially developed with mechanical harvest as an ultimate goal, considerable selection attention was focused on attaining good fruit quality, not just at the tree-ripe stage but for a week or more following initial ripening. Since it would be very difficult to develop a peach tree where all fruit ripen at the same time, our strategy has been to develop trees where the first ripening fruit are able to hang on the tree without a loss in quality until the last fruit is ripe and ready for harvest. Such a once-or-harvest is essential for mechanical harvest and offers sizable cost savings for hand harvest. Fruit harvested in 2009 from Compact#2 (a Dixon-Andross season selection) at the full-ripe stage is shown in Figure 8. A darker, yellow-gold flesh

Fig. 9. Compact#3 at tree-ripe stage (left) and harvested 18 days later from the same tree (right). Notice light red-brown pit cavity imprinting on full-ripe fruit and more pronounced imprinting on 14 day-over fruit. Also note some 18 day fruit beginning to deteriorate.

color has been selected as an aid in once-over-harvest (since the precocious flesh coloring will allow fruit still having green on skin areas to pass color grading and produce a good quality canned product, see appendix), and because this trait appears to confer resistance to fruit bruising after mechanical trauma. Fruit harvested from the same tree 14 days after the initial harvest is also shown in Figure 8. Both fruit appearance in fruit firmness (Figure 10) are maintained despite the prolonged time fruit was left hanging on the tree.

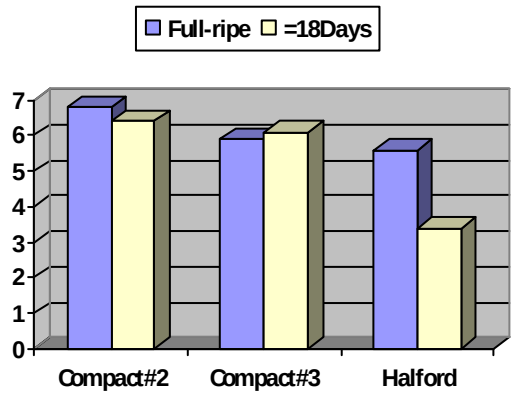
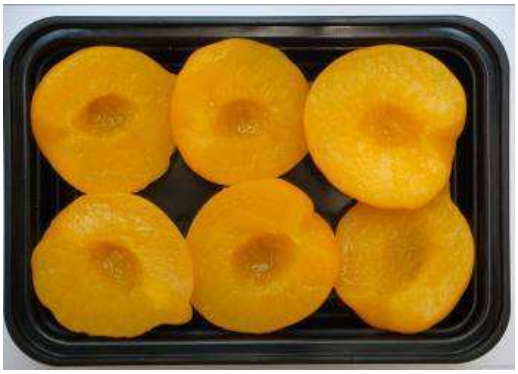


Fig. 10. Inner fruit fleh pressure (lbs.) for Compact#2, Compact#3 and Halford at full-ripe and 14 days after

The later season selection Compact#3 (ripening with Everts but harvestable until after Halford) also possesses good fruit shape, size and flesh color, but with the color being a more traditional golden-yellow (Figure 9). The pit cavity is particularly attractive as it is highlighted by a faint red-brown imprinting. After two weeks hanging on the tree, fruit from the same tree continued to show good processing quality, though some tissue breakdown/browning is apparent in a small number of fruit (Figure 9). Firmness, as measured at the inner pit-cavity of halved fruit appears to be maintained over the 14 day period, despite the apparent bruising of some tissue. The imprinting at the pit cavity has become more pronounced in its red-color. No staining or bleeding of red anthocyanins is apparent in either the late harvest or c products (see appendix).

Appendix A. Description of promising 2009 processed selections currently in regional grower tests.



ULTRA EARLY#1. Fruit ripens 7-10 d before Loadel. Very early ripening fruit are similar in size and shape to Carson but with firmness comparable to Loadel . Flesh color yellow to orange-gold. Low flesh bruising even when overripe. No red pigmentation is observable in the skin or pit. Fruit flesh color precociously before skin and so allow some early pick without loss in color quality. Fruit tip beaking of 2 cm or greater may be present after warm springs as in 2008. Trees are vigorous and productive for the season. Some split pits (1-5%) and early fruit drop in 2006, 2008, 2009. Tree allocation and site: 35 Sacramento Valley, 50 San Joaquin Valley.

EXTRA EARLY#1. Fruit ripens between Carson and Dixon and because it hangs well on the tree can be harvested up to Andross. At early KAC planting, a few trees had approx. 3 d later maturity indicating a possible problem with uniformity of ripening among trees. Not observed in 2007 -2009, however. Fruit has good size, firmness and symmetry with a medium sized, somewhat ragged pit cavity. Flesh color is golden-yellow similar to Goodwin, occasionally showing traces of green pigmentation on shoulders. Flesh shows low bruising/browning potential. Skin is yellow-gold with up to 40% showing stippled red blush. Fruit drop, split pits, and pit fragments were infrequent in 2006-2008 with some drop at KAC and WEO in 2009. Fruit can be somewhat asymmetrical at the suture with one cheek slightly larger than the other. Fruit torque-pits readily. Slight pink in pit cavity in some 2008 and late 2009 samples but cooked out and absent in cans. Tree allocation and site: 38 Sacramento Valley, 70 San Joaquin Valley.

EARLY#4. Fruit ripens between Dixon & Andross. Fruit is only medium and size and slightly irregular in shape. Flesh is firm at the full ripe stage but can become soft particularly along the shoulders if overripe. Flesh color is a gold-yellow, with slight pink in pit possible when overripe. Flesh shows moderate potential for bruising with browning often present in watersoaked shoulders after injury. Skin color is yellow to golden with up to 30% covered with a red blush, with more intense red color with higher light exposure. Some split pits with associated pit fragments in 2007 and pit tip in 2009. Some preharvest fruit drop in 2007. Although not as high a quality as Extra-Early#1 or Late#5, the Dixon ripening season may offer this item some commercial potential. Tree allocation and site: 45 Sac, 50 San Joaquin Valley.

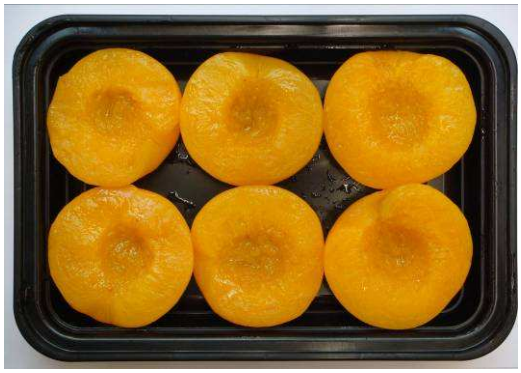
EARLY#5. Fruit ripens with to just after Andross. Fruit are medium large, being somewhat larger than EARLY#4 or Goodwin. The pit cavity is larger with a somewhat ragged appearance. Some pit fragments and split pits (~3%) but less than Andross. Flesh color is a golden yellow, similar to Andross with a golden yellow skin with up to 30% red blush. Fruit are firmer than EARLY#4 with some softening occurring on shoulders and at the suture as the fruit become overripe. Fruit tend to hang well on tree without significant loss in quality though pit cavities will gain a some reddening by 10 – 14 d after full-ripe. In hotter regions such as the southern San Joaquin, some fruit flesh may develop a reddish stain when 5+ d overripe. Some fruit drop and brown rot observed in 2007 -2009. Flesh shows low bruising/browning potential.Tree allocation and site: 55 Sacramento Valley, 51 San Joaquin Valley.

EARLY #6. Recently advanced selection derived from South African germplasm and combining the long-keeper potential of Late#4 with a more traditional golden-yellow flesh color, and a maturity time within the crucial Dixon-Andross season . This selection has consistently shown superior fruit productivity, size, color and harvest and post-harvest firmness over a multi-year test period. Fruit is large, uniformly round and firm even when overripe. Fruit show no red blush on the skin and, more importantly, no red stain development in the fruit pit cavity even up to two weeks passed the full-ripe date. Fruit ripen just before Dixon and because of the ability of ripe fruit to hang on the tree for extended periods can be harvested with or up to Andross. The tree is productive with low pre-harvest drop and moderate to good levels of field-resistance to fruit brown-rot.

LATE#2. Fruit ripen with to just after Halford & Starn in 2009 but ripened a week after Halford in 2007 and after Starn in 2008. Fruit are large with a medium sized and somewhat ragged pit. Flesh is uniform golden yellow with clean to slightly pink pit . Fruit skin is a golden yellow with less than 20% red blush. Fruit shape is oval to somewhat angular. Flesh is usually moderately firm but softness was observed in some Sacramento Valley smples in 2009. Some water soaking sometimes occurs near the skin surface. Water-soaked areas are susceptible to bruising if damaged. Some pit splits, and brown rot observed in 2007 - 2009 with heavy preharvest drop in 2008-2009. The tree is very productive with bearing what common even on older wood and often sizes even in clusters. Tree allocation and site: 38 Sacramento Valley 52 San Joaquin Valley.

LATE#4. Fruit typically ripens between Dr. Davis and Monaco but will hold on tree until after Halford. Fruit are large with a medium sized and somewhat ragged pit. Flesh is uniform yellow-gold to orange-gold with a clean pit . Fruit skin is an orange-gold with no red blush. Fruit shape is oval. Flesh is firm even with increasing age. Trees are very productive and amenable to mechanical harvest. Low flesh bruising. Low fruit brown rot. Some, but low levels of split pit, drop and brown-rot observed in 2008. Tree allocation and site: 10 Sacramento Valley 50 San Joaquin Valley.

Compact#1. The tree is productive and compact, being approximately 1/2 standard height. Fruit are of very good quality with a good (on-tree) holding ability allowing over one week delay in harvest if necessary. Fruit flesh is uniform yellow as is the skin which is free of red pigmentation. A few elongated pit tips were present in 2007 thru 2009. Because of high leaf density from shorter internodes, secondary branching is reduced resulting in blind wood which can later sunburn if not managed. Some fruit brown-rot and preharvest drop observed in 2008. Split pits (<2%) observed in 2007.
Tree allocation and site: 12 Sacramento Valley 12 San Joaquin Valley.



Compact#2. The tree is productive and compact, being approximately 1/2 to 2/3 standard height. Fruit ripen with Dixon and will hold on the tree until Andross time. Fruit are medium size, of very good quality with a good (on-tree) holding ability allowing in one to two week delay in harvest if necessary. Fruit flesh is uniform yellow-gold to orange-yellow and is usually free of red pigmentation even when overripe though some red observed in 2008. Skin is yellow-gold with up to 30% red blush. Trees are productive with little blind wood and low preharvest drop. Amenable to mechanical harvest. Low flesh bruising/browning. Moderate to low fruit brown rot. Tree allocation and site: 10 Sacramento Valley 20 San Joaquin Valley.

Compact#3. The tree is very productive and compact, being approximately 2/3 standard height. Fruit are of very good quality with a good (on-tree) holding ability allowing in one to two week delay in harvest if necessary. Fruit ripen with Monaco to Halford but will hold on the tree until Corona. Fruit flesh is uniform yellow as is the skin which is free of red pigmentation. The fruit pit cavity is free of red-staining, though 10d over and older fruit will often show a slight brown pit- imprinting, which after canning can appear as a slight pink imprinting in the pit. Trees are very productive with little blind wood. Amenable to mechanical harvest. Low flesh bruising. Low fruit brown rot. Tree allocation and site: 100 trees 10 San Joaquin Valley.

EXTRA LATE#1. Fruit ripens with to just after Corona. Fruit are medium to large in size with a moderately small pit. Flesh color is uniform yellow gold with no red pigmentation in the pit cavity. Skin color is a uniform yellow without red pigmentation. Fruit are medium firm, yet maintain better firmness and fruit texture than the adjacent Corona plantings. Pit cavities are relatively free from split pits and fragments. Low flesh bruising. Potential but some bruised fruit browning observed in 2009. Some fruit drop as well as brown rot fruit were observed in 2007 - 2009. Tree allocation and site: 41 Sacramento Valley 50 San Joaquin Valley.

EXTRA LATE#2. Fruit ripened with to after Sullivan#4. Fruit are medium in size with a medium sized and sometimes ragged pit cavity. Some split pits (4%), pit fragments, pit tips and early fruit drop were apparent in 2006 – 2009 with increased levels seen in 2007. Fruit show improved firmness relative to Starn and Corona, though some water soaking in softening occurs with over ripening particular on the shoulders into suture area. Fruit color is a yellow gold to orange-gold and can be distinctly darker than commercial cultivars in this maturity period. Fruit show some resistance to brown rot and sour rot in lab assays though brown rot on field fruit was observed in 2007 & 2008. Tree allocation and site: 49 Sacramento Valley, 50 San Joaquin Valley.

Extra Late#4. Fruit ripen up with to just after Corona. Fruit are of good quality with a good (on-tree) holding of 4 weeks or more, allowing delayed harvest if necessary. Fruit is uniform and symmetrical, has high soluble-solids, medium in size and with a small, clean pit cavity. Fruit flesh is firm and easily pitted, but occasionally maintains a greenish tinge when processed as in 2009 (bottom image) which can give the canned fruit a more orange hue though not as dark as Kakamas. Fruit sizes can be irregular from the same tree. Fruit color is yellow gold with no red pigmentation in the pit cavity, flesh or skin. Pit cavity is medium large and somewhat ragged. Flesh is very firmn which is maintained for three weeks after fruit ripening allowing delayed harvest. Fruit show improved resistance to bruising and to brown-rot infection in the lab though some brown drop and fruit drop observed in the field in 2007 and 2009. Processed fruit possess good flavor, color and firmness but sometimes with a slightly detectable tannic aftertaste. Tree allocation and site: 200 Sacramento Valley, 200 San Joaquin Valley.

Extra Late#5. This selection is a sib-line to (and so very similar to) Extra Late#4. Fruit ripen up with Starn and Sullivan#4. Fruit is uniform and symmetrical, medium in size and with a small, clean pit cavity. Fruit size tends to be more uniform in shape than sib-lines though with a more pronounced flower bud breaking after warm springs. All Extra-Late sibs flower approx. 5 d before Ross. Fruit color is yellow gold with no red pigmentation in the pit cavity, flesh or skin. As with Extra-Late#4 (above) some fruit color was more orange in 2009 than previous years. Fruit flesh is firm and easily pitted, but occasionally maintains a greenish tinge when processed. Flesh firmness is maintained for three weeks after fruit ripening allowing delayed harvest. Fruit show high soluble-solids, improved resistance to bruising and to brown-rot infection. Processed fruit possess good flavor, color and firmness. Tree allocation and site: 200 Sacramento Valley, 200 San Joaquin Valley.

Extra Late#6. This selection is a sib-line to (and so very similar to) Extra Late#4-5. Fruit ripen up with to after Corona. Fruit is uniform and symmetrical, medium in size and with a small, clean pit cavity. Fruit sizes are uniform, but slightly smaller than other sib-lines. Fruit color is yellow gold with no red pigmentation in the pit cavity, flesh or skin. Fruit flesh is firm and easily pitted. Flesh firmness is maintained for three weeks after fruit ripening allowing delayed harvest. Fruit show high soluble-solids, improved resistance to brown-rot infection and may be resistant to plum pox virus. Processed fruit possess good flavor, color and firmness. In 2007 & 2009 this was the most uniform Extra-late selection in terms of fruit size, shape and color . Tree allocation and site: 200 Sacramento Valley, 200 San Joaquin Valley.

Extra Late#7. This selection is a sib-line to (and so very similar to) Extra Late#4-6. Fruit ripen just after Corona. Fruit is uniform and symmetrical, medium in size and with a small, clean pit cavity. Fruit color is yellow gold with no red pigmentation in the pit cavity, flesh or skin. Some fruit color was more orange in 2009 than previous years though part of the problem was a n insufficient lye-peel in processing. Fruit flesh is firm and easily pitted. Flesh firmness is maintained for three weeks after fruit ripening allowing delayed harvest Fruit show high soluble-solids, improved resistance to bruising, flesh browning and to brown-rot infection. EL#7 showed the best cold storage potential (8Plus weeks) of the EL selections infested in 2007 & 2008. Some brown rot observed in field in 2007 & 2008 but very high disease pressure was present due to late summer rains. All Extra-Late selections also showed some unusual insect damage in 2007 but the pest was not identified. Processed fruit possess good flavor, color and firmness but with a slightly detectable tannic essence. Trees are productive even with minimum thinning. Tree allocation and site: 200 Sacramento Valley, 200 San Joaquin Valley.

Table 1. Current Regional Trial Grower Site.

Seq.	Selection	Grower	No. of Trees	City
1	UltraEarly#1	Bob Quatrin	100	Kingsburg
1	UltraEarly#1	Jim Jackson	50	Kingsburg?
1	UltraEarly#1	Kearney Ag. Center	55	Parlier
1	UltraEarly#1	Wolfskill	2	Winters
1	UltraEarly#2	Kearney Ag. Center	5	Parlier
1	UltraEarly#2/	Wolfskill	1	Winters
1	UltraEarly#2/3?	Bob Quatrin	50	Kingsburg
1	UltraEarly#3	Bob Quatrin	50	Kingsburg
1	UltraEarly#3	Jim Jackson	50	Kingsburg?
1	UltraEarly#3	Kearney Ag. Center	100	Parlier
1	UltraEarly#3	Wolfskill	2	Winters
2	ExtraEarly#1	Jim Jackson	50	Kingsburg?
2	ExtraEarly#1	Kearney Ag. Center	100	Parlier
2	ExtraEarly#1	Paul Rai	50	Yuba City
2	ExtraEarly#2	Kearney Ag. Center	20	Parlier
2	ExtraEarly#2	Paul Rai	50	Yuba City
3	Early#4	Kearney Ag. Center	5	Parlier
3	Early#4	Richard McPherrin	80	Yuba City
3	Early#5	Kearney Ag. Center	5	Parlier
3	Early#5	Richard McPherrin	80	Yuba City
4	Late#2	Sarb & Kuldip Atwal	50	Olivehurst
4	Late#2	Kearney Ag. Center	5	Parlier
4	Late#2	Wolfskill	10	Winters
4	Late#2	Richard McPherrin	50	Yuba City
5	ExtraLate#1	Kearney Ag. Center	100	Parlier
5	ExtraLate#1	Wolfskill	7	Winters
5	ExtraLate#1	Pat McCay	50	
5	ExtraLate#2	Parminder Sarwat	30	Ballico
5	ExtraLate#2	Mike Nolan	30	Marysville
5	ExtraLate#2	Sarb & Kuldip Atwal	50	Olivehurst
5	ExtraLate#2	Kearney Ag. Center	15	Parlier
5	ExtraLate#2	Wolfskill	4	Winters
5	ExtraLate#2	Richard McPherrin	50	Yuba City
5	ExtraLate#4	Gus Obertier	70	Waterford
5	ExtraLate#4	Wolfskill	2	Winters
5	ExtraLate#5	Gus Obertier	70	Waterford
5	ExtraLate#5	Wolfskill	2	Winters
5	ExtraLate#6	Gus Obertier	70	Waterford
5	ExtraLate#6	Wolfskill	2	Winters
5	ExtraLate#7	Gus Obertier	70	Waterford
5	ExtraLate#7	Wolfskill	2	Winters

Table 1. Current Regional Trial Grower Site. (Cont.)

6	Compact#1	Kearney Ag. Center	15	Parlier
6	Compact#1	Wolfskill	2	Winters
6	Compact#2	Wolfskill	4	Winters
6	Compact#3	Davis	1	Winters
2009	Compact#2,	Pete Martini	100	Escalon
2009	Compact#3	Gary Schnitzler	96	Kingsburg
2009	Compact#3	Runjit Davit	100	Live Oaks
2009	Compact#3	Paul J. Van Konynenburg	100	Modesto
2009	ExtraEarly#1	Harvinder Kullar	108	Ballico
2009	ExtraEarly#1	Wil Sohal	45	Sacramento
2009	ExtraEarly#1	Sean Carberry	55	Yuba City
2009	ExtraLate#4	Paul J. Van Konynenburg	100	Modesto
2009	ExtraLate#4	Gus Obertier	130	
2009	ExtraLate#4	Sarb Johl	50	
2009	ExtraLate#5	Mohinder Ghag	104	Live Oaks
2009	ExtraLate#5	Paul J. Van Konynenburg	100	Modesto
2009	ExtraLate#6	Mohinder Ghag	113	Live Oaks
2009	ExtraLate#6	Paul J. Van Konynenburg	100	Modesto
2009	ExtraLate#7	Mohinder Ghag	114	Live Oaks
2009	ExtraLate#7	Paul J. Van Konynenburg	100	Modesto
2009	Late#4	Lou Boer	51	Ceres
2009	Late#4	Runjit Davit	90	Live Oaks
2009	Late#4	Gus Obertier	55	Waterford
2010	Early#6	Rajinder Chohan DWN	300	
2010	ExtraEarly#1	Rajinder Chohan DWN	300	
2010	ExtraLate#4	Eric Spycher FN	110	
2010	ExtraLate#5	Eric Spycher FN	110	
2010	ExtraLate#6	Eric Spycher FN	110	
2010	ExtraLate#7	Rajinder Chohan DWN	300	
2010	Late#4	Eric Spycher FN	180	